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## Table of Contents

e ISBN : 978-967-2072-44-7

e ISBN : 978-967-2072-44-7

e ISBN : 978-967-2072-44-7

**Talent Innovation and Technology and Organizational Behaviour**

**013-007**

# PERFECTLY ABLED VS SYSTEMICALLY DISABLED: UNDERSTANDING MULTIDIMENSIONAL IMPERATIVES ON PRODUCTIVITY AND EMPLOYABILITY OF PERSONS WITH DISABILITY WITHIN ORGANIZATIONAL MILIEU

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## ABSTRACT

Among common issues being extensively debated in disability macrocosm is the imperative notion of people with disabilities' productivity and employability within organizational milieu in sustainability development and digital transformation. The question universally being upstretched is whether they are capable of filling employment positions at multiple levels based on their 'perceived abilities'. This perceptual notion is a skewed credence due to the controvertible level of cognizance on the idea of 'ableness'. Therefore, this qualitative study will provide a deliberation on the dualism of "perfectly abled" against "systemically disabled" of individuals with some forms of disability, as this has been a common premise that strain them from entering the working environment based on structural calibration that creates challenges and inequality in opportunities. Thus, this study yearns to eradicate this common misconception by building cognizance on the epistemological concept of disability through emancipating public perception from the normativity of ableism and disablism. The discussion will be substantiated on the conceptual delineation of both productivity and employability, and how they traverse with the idea of disability. It later discusses the slippery slope fallacy of ableness of talented individuals with disabilities by scrutinizing into the disability matrix in organization settings that being amalgamated in both productivity and employability. This matrix is derived from multifaceted features contributing – from the existence of preconceived notions of disability, fear of the uncertainties, multidimensional lacking as well as ableism-prone policies or standards. These features can be discernably manifested from all organizational setting echelons, from the micro, mezzo up to macro level. By understanding this, the multidimensional imperative of whether talented individuals with disabilities are rightfully being assessed could be further elaborated. But it is of course not without limitations that may weigh down the process, from the level of awareness, readiness of organizational system to adapt, multifaceted constraints, and openness towards involvement. Though, these limitations should not be the prime justification to not handling these issues with more justifiable manner, as the adaptation not only allows these talented individuals with disabilities to be included in the workforce, but it also contributes towards nation's future economic growth based on inclusiveness.

Keywords: *persons with disability, organizational behavior, multidimensional perspective, employment, productivity*

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**012-013**

# THE FUTURE OF WORK: AN EMPIRICAL EXAMINATION OF JOB PERCEPTION OF GIG WORKERS

Rogerio Kiyoshi Hiramoto; Otavio Próspero Sanchez

## ABSTRACT

This article assessed the job perception of gig workers about the future of work. The study aimed to understand how gig workers perceived the technological changes and new forms of work.

The literature review provides a comprehensive overview of previous research on gig work, including studies on its prevalence, characteristics, and impact on workers. The authors note that while some studies have found positive outcomes for gig workers, such as increased flexibility and autonomy, others have highlighted negative aspects, such as job insecurity and lack of benefits.

The methodology section outlines the research design used in this study, which involved conducting an online survey with 361 gig workers from different industries thru MTurk (Amazon Mechanical Turk). The authors used this approach to explore the worker's perceptions in-depth.

The results section presents several key findings from the survey. One important theme that emerged was the importance of flexibility for gig workers. Many participants noted that they valued being able to set their schedules and choose which projects to take on. However, some also expressed concerns about the need for more stability and predictability of gig work engagements. Another important theme was the impact of technology on gig work. While some participants noted that technology had made it easier to find a task and communicate with clients, others expressed concerns about the potential of automation to replace human workers.

It provides insights into the world of gig work and its relationship with technology. Focusing on gig worker’s perceptions, it sheds light on the experiences of those often overlooked in discussions of the future of work. The authors’ findings suggest that while gig work can offer benefits such as flexibility and autonomy, it also comes with challenges, such as job insecurity and uncertainty. Additionally, technology has both positive and negative impacts on gig work, and its effects are likely to continue to shape the future of work for them.

This document contributes to the growing research on gig work and its relationship with technology. It highlights the importance of understanding their perceptions to design policies and practices that support their needs.

## INTRODUCTION

Information Technologies are rapidly evolving and changing the ways of working in several aspects (McKinsey&Company, 2017a, 2017b); in the same direction, employment conditions are being transformed globally (Lacity & Willcocks, 2015), and this has been creating alternative job arrangements between companies and workers. The World Economic Forum (2019) estimates that more than 50% of working Americans, roughly 145 million people, will fall within the independent workers' category (also called gig workers) by 2027. Another research from McKinsey Global Institute (2016) estimates that 20% to 30% of the working-age population from The United States and the United European (15 selected countries) are already gig workers.

The Economist (2019) estimates a gig work market of USD 50 bi a year, and to deal with those changes and growth, some companies are creating platforms to connect gig workers worldwide to enterprises that need their services, like MTURK (Amazon Mechanical Turk), MobileWorks and CrowdFlower (Deng, Joshi, & Galliers, 2016).

Considering the projected growth and market representativeness, it is important to better understand the behaviors, preferences, and capabilities of this new working population. The literature available does not explore the predominant point of view of gig workers. Beyond that, some studies available are limited only to the population from The United States of America. Then, there is a need to understand their motivations and drivers to enable the business leaders to conduct programs and actions to optimize the usage of this workforce in multiple activities, that could be from academic research to business-driven demands. Furthermore, there is limited knowledge of the perception of these workers to participate in this new business context.

This paper aims to provide to business leaders and companies with a deeper understanding of this growing workforce and enable them to consider gig workers as an alternative manpower source.

Aiming to achieve this research goal, a structured questionnaire was submitted to 442 gig workers throughout MTURK – Amazon Mechanical Turk (2019). It was chosen because it is the largest and most popular web service dedicated to gig work (Liang, Hong, Gu, & Peng, 2018). The assessment was built based on the Research Model Framework that analyzed demographic data, systems specifications, income, and positive and negative perceptions to measure the expectations of interacting with a gig work platform.

This research analyzed the gig workers from the MTURK platform performing activities from two different countries: The United States of America (208 users) and India (143 users). The users from the first group were chosen because it represents the largest population within the platform Amazon Mechanical Turk (2019), and the second one was chosen by convenience because it represented the second largest population who completed the survey. This might happen due to the time zone of the survey launch that coincided with their "regular" working hours.

The conclusions show a significant similarity in multiple aspects for both studied populations (The United States of America and India). However, curiously, gig workers from India reported making more money than their peers from The United States of America. Also, it was identified that those users who started their careers directly in the MTURK platform, as well as the Experienced Workers, are associated with higher income when compared to peer groups. Nevertheless, Gender and Higher Educational Level are not associated with a different distribution of the income received by gig workers.

Finally, in this paper, it was applied Sentiment Analysis techniques to measure the expectations of this working population. It was found that the users from The United States of America have a more positive expectation of the benefits to be achieved as a gig worker than Indians.

The remainder of this paper is organized as follows: First, it was performed a Literature Review that covers the current state of the research regarding the future of work and the advancement of Information Technology and gig workers. Secondly, a methodology was

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built to detailed explain the procedure used to perform the assessment and demonstrate the procedures executed and present the demographic data of the sample population. Finally, the findings identified in the survey were deeply explained through statistical instruments. Discussions and Conclusions are heading the possibilities and challenges for management teams, gig workers, and the MTURK platform in this new business environment.

## LITERATURE REVIEW

### The Future of Work

Over the last century, machines have replaced workers in many tasks; however, technology has created more jobs than it has displaced, and it brought higher labor productivity to many sectors by reducing the demand for workers for routine tasks (The World Bank, 2019). Technology has the potential to improve living standards since workers can work when and where they want (Ryder, 2018), but its effects are not manifesting themselves equally across the globe, even though there are other factors like economy, growth rates, unemployment, and societal changes that would influence the future of work.

The job creation process works society-wide, and the workers in some sectors benefit handsomely from technological progress, whereas those in others are displaced and have to retool to survive (The World Bank, 2019). The changes in business models, technology, and the global integration of economies are having profound impacts on an essential component of society: the work (Ryder, 2018). That change opens up possibilities for more worker cooperatives, self-employed Hodgson (2016), or gig workers.

Also, the new technologies are reducing communication costs, and firms are less vertically integrated, which enables managers to outsource more tasks to the market (Djankov & Saliola, 2018), including potentially transferring to gig workers, which are individuals who perform the tasks by a certain payment (Deng et al., 2016). Interestingly, an implication of growing knowledge intensity under capitalism is that a greater premium is based on education, knowledge, and knowledge-intensive skills Hodgson (2016). Consequently, unless there are successful efforts to provide adequate advanced education and training for everyone, then there is the possibility of a growing divide involving different levels of income and social inclusion — between those with and without such skills Hodgson (2016) also, payoffs to combinations of different skill types—indicative of adaptability — appear to be increasing (Djankov & Saliola, 2018).

### The Advancement of the Information Technology for Gig Workers

The "gig" work term was coined by the music industry in the 1930s, which refers to "*an engagement to play at a party for one evening*". Subsequently, this meaning evolved to include any kind of temporary work (Kurin, 2017). Currently, the gig worker has three key defining characteristics: 1) a high degree of autonomy; 2) payment by task, assignment, or sale; and 3) a short-term relationship between the worker and client (McKinsey Global Institute, 2016).

The improvements in Information Technology, such as the internet, cloud, big data, robotics, machine learning, and artificial intelligence, are rapidly changing the way on how people work and create value (McKinsey&Company, 2017b). At this point in time, as verified in the previous waves of industrial revolutions, the end-state of the employment conditions is hard to predict (Frey & Osborne, 2013). In fact, there is a study that estimates that 47% of the current The United States of America jobs are at risk of being automated (Frey & Osborne, 2013). In the same direction, Davenport (2017) suggests that due to technological improvements, some jobs might become commodities. Then an alternative approach to getting the work done might be required (Dissanayake, Zhang, & Gu, 2015).

The advancement of information technology is enabling organizations to avoid the hiring of full-time employees (Xuefei & Joshi, 2016) and establishing a per-task market, where individuals are claimed to be independent and self-regulated workers, only receiving general instructions from and supplying services to a contracting firm through a digital platform (Nica, 2018). These new work arrangements have the potential to significantly change the ways in how people interact with companies and make money (Xuefei & Joshi, 2016).

These workers do not have any type of protection from the government and/or from the companies that use their services (Tronsor, 2018) but, even though the literature recognizes that these workers appreciate work flexibility and independence (Kurin, 2017).

The gig workers do not spell the end for the traditional labor market, but it has created a condition that is primed for a new labor movement that is stronger than ever (Tronsor, 2018). Nevertheless, the use of gig workers can be successful in business contexts because tapping into a crowd allows organizations to benefit from a large number of people who bring diversity in ideas, knowledge, and experience (Wilson, Robson, & Botha, 2017).

To support this meaningful change, some tech enterprises are creating platforms for the collaboration process between gig workers and companies. A better example is MTURK: Amazon Mechanical Turk (2019) which is a web service that provides an on-demand, scalable, human workforce to complete tasks, and it has more than 500,000 registered workers worldwide. MTURK is one of the most popular websites designed for gig work (Schmidt & Jettinghoff, 2016). However, other platforms provide similar services like MobileWorks and CrowdFlower (Deng et al., 2016).

Digital platforms like these are transforming gig work, building on the ubiquity of mobile devices, the enormous pools of workers and customers they can reach, and the ability to harness rich real-time information to make more efficient matches (McKinsey Global Institute, 2016) and (Ashforda, Cazab, & Reidc, 2018).

At MTURK, the requesters can publish several types of work to be performed by gig workers anywhere in the world. There are features to select different types of individuals for specific tasks. The most common filters available in the tool are:

a) *Master Workers* is an undisclosed classification provided by MTURK. However, this relates to a more experienced and expert worker. For this paper, the *Experienced Worker* will replace that term.

b) *System Qualifications*: Some of them are:

i) HIT's (Human Intelligence Tasks) Approval Rate (which defines the percentage of work approved for that worker). For this paper, *Gig Task* will replace that term.

ii) Location: It is possible to select the country where the worker is based – also, of those based in The United States of America, it is possible to specify even the State;

iii) The Number of HITs Approved: This is a count of all HITs approved for that specific worker.

c) *Premium Qualifications*: There are additional criteria that could help the Requester to define the type of workers to be assigned to the *Gig Task*. Some examples of these options are Blogger, Generations (Baby Boomers, X, Y, Z), Employment condition, Job function, Education, and others.

This type of digital labor platform enables workers and companies to enter geographically inaccessible markets where there is less inequity or exclusion (Nica, 2018). This type of platform is increasing the number of projects and tasks posted on the platforms regularly (Sison & Lavilles, 2018). For instance, Volvo Cars Company is already taking this

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opportunity to improve its collaboration and obtain insights from external parties into their product development process (Andriole et al., 2018)

**METHODOLOGY**

The data collected in the research was split into some categories to facilitate understanding and data analysis. The key elements are:

*Demographic Data* captured some information from gig workers; however, this study will focus on the following:

a) *Nationality* (The United States of America or India) only.
b) *Gender* (Male or Female).
c) *Generations*: Baby Boomers (born from 1946 to 1965), X (born from 1965 to 1980), Y (born from 1981 to 1995), and Z (born after 1996), as defined by Deloitte (2015).
d) *Educational Level* (split by High School or below, Associate Degree, Bachelor's Degree, and Master's Degree & above).
e) *First Work Experience* that indicates if the MTURK was the first job performed by the individual.
f) *Annual Income* (in The United States of America Dollar) received from MTURK (split into some levels as: below 4,999, from 5,000 to 9,999, from 10,000 to 14,999, and above 15,000).

*Systems Specifications* that are composed by:

a) *Experienced Workers* (which indicates if a user achieved the highest level within the platform)
b) The number of *Gig Tasks*.

*Positive Factors* and *Negative Factors* came from previous studies (Deng et al., 2016), and they were captured thru the questionnaire, from items 4 to 39 and 40 to 44, respectively – details in Table 1 and Appendix 1.

**Research Design and Data Collection**

The researcher prepared a structured questionnaire based on Google Forms, an online platform used to create surveys. That document was pre-tested in the MTURK environment in four different cycles for eleven individuals. Then, the results were reviewed by the researcher and discussed with the Advisor. After each cycle, the text of some specific questions was adjusted to improve its comprehension, coverage, and potential to deliver better results. The final survey is in Appendix 1.

On February 22nd, 2019, the survey was formally published in MTURK for two different groups with a total of 300 slots for the reply, split as detailed below. The researcher decided by this division to ensure the data gathering from different places in the world, knowing the most percentage of the users would come from The United States of America, as reported by Amazon Mechanical Turk (2019).

**Group 1:** Survey dedicated to gig workers based on The United States of America only.
The 150 surveys were fully completed within 1 hour and 26 minutes, the average time to complete it was 9 minutes and 12 seconds, and the total cost of this survey was USD 105, divided by payment for the gig workers USD 75, and payment for MTURK USD 30.

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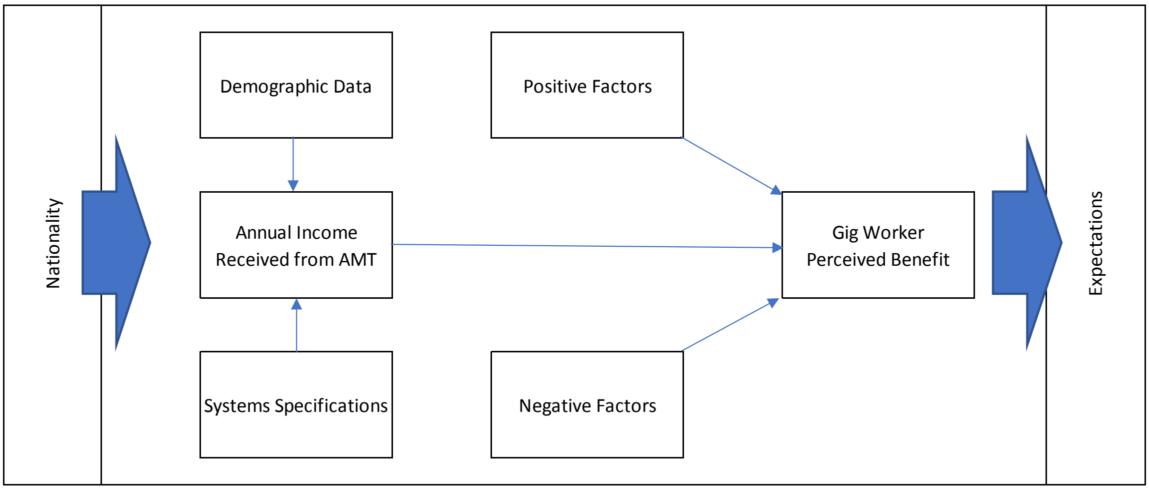
**Group 2:** Survey dedicated to gig workers NOT based on The United States of America. The 150 surveys were fully completed within 2 hours and 27 minutes, the average time to complete it was 10 minutes and 42 seconds, and the total cost of this survey was USD 105, divided by payment for the gig workers USD 75, and payment for MTURK USD 30.

The gig workers that fulfilled the questionnaire (Appendix 1), composed of 68 mandatory questions related to their profile and received a payment of USD 0.50 each.
Even though the researcher brought 300 pre-paid slots, there were 442 respondents in total. This happened because some users completed the survey; however, they did not push the button “Task Completed” in MTURK, and then the slot continued to be available for another gig worker. Then, additionally, 142 workers completed the survey and had to receive a complimentary payment beyond those 300 from the pre-paid slots.

## Data Analysis

It was prepared a Research Model Framework, Figure 1, to crosscheck the collected data throughout the survey. This Framework assumes that some conditions may influence the *Expectations* of the gig workers in that business environment. *Nationality* is the key driver of this assessment once the main goal of this study is to compare two different nationalities. *Demographic Data*, composed by Gender, Generation, and Educational Level, would be factors to affect the *Annual Income Received from MTURK*, as they are conditions for other working environments. In addition, *Systems Specifications* composed of Experienced Workers, First Work Experience, and Gig Tasks (number of tasks completed) were considered to assess the potential impact to the *Annual Income Received from MTURK.*
In parallel, the *Positive Factors* and *Negative Factors* were compared against the *Gig Worker Perceived Benefits of the MTURK* environment. The combination of these interactions impact the *Expectations* of the gig workers.

**Figure 1 – Research Model Framework**




In the following weeks, the data was downloaded from the platform to Excel and then the researcher and the Advisor started to analyze the responses. There was a need to perform a data cleansing in the responses to prepare them for further analysis in R, open software dedicated to statistics connected to Commander (RCmdr), a package with a user-friendly interface with some pre-programmed features.

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It was identified 52 records that applied to the task more than once. These responses were removed from the database to avoid wrong interpretations or misleading conclusions. Then, finally, the pool to be assessed was composed of 390 unique respondents.
Afterward, the data was analyzed, and it was identified that the majority of the users were based in The United States of America (208 or 53.3%), India (143 or 36.7%), and other countries (39 or 10%). As a result, the researcher decided to deep-dive the comparisons between The United States of America and Indian gig workers. This led to a final population for assessment of 351 unique users based on these two countries.

**Demographic data**

The data collected shows a slightly different population comparing the two major groups: people living in The United States of America or India. Table 1 detailed explains the differences between these two study groups.

**Table 1 – Demographic data from The United States of America and India workers**

| | | Survey (n=351) | | | | | |
|---|---|---|---|---|---|---|---|
| **Country** | | **The United States of America (n= 208)** | | | **India (n=143)** | | |
| **Variable** | | **Mean (SD)** | **Min.** | **Max.** | **Mean (SD)** | **Min.** | **Max.** |
| Age | | 38.4 (12.6) | 19 | 75 | 30.2 (7.1) | 21 | 68 |
| MTURK Tenure (Months) | | 20.8 (23.8) | 0 | 159 | 36.9 (29.9) | 1 | 140 |
| Weekly GIG TASKs | | 263 (392) | 7 | 2522 | 513 (482) | 2 | 2500 |
| Weekly Hours | | 22.3 (13.8) | 1 | 65 | 29.0 (17.1) | 1 | 63 |
| Gender (Female) | | 0.47 (0.41) | - | - | 0.41 (0.33) | - | - |
| Master (No) | | 0.72 (0.65) | - | - | 0.48 (0.40) | - | - |
| Education | High School | 43 (21%) | - | - | 1 (1%) | - | - |
| | Associate | 43 (21%) | - | - | 5 (3%) | - | - |
| | Bachelor | 76 (36%) | - | - | 105 (74%) | - | - |
| | Master+ | 46 (22%) | - | - | 32 (22%) | - | - |

In summary, the population living in India: is younger, the tenure with MTURK is 77,4% greater, performs 95% more GIG TASK's, works 30% more time, has a less equal distribution in terms of gender, and more people achieved the Experienced Worker status in the platform when compared to their peers from The United States of America.

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**Types of work performed in the MTURK**

The researcher took the opportunity to assess the type of work performed by the gig workers on the MTURK platform. To complete this review, it was used the guideline described in a previous article (Deng et al., 2016), and detailed in Table 2. The distribution order in both groups (users from The United States of America and India) is very similar, except the category Business Feedback and Categorization differ in the groups.

**Table 2 – Percentage of Gig Workers Performing the Seven Categories of gig tasks, split by The United State of America and India, based on (Deng et al., 2016)**

| Gig Task Category | The United States of America Percentage* of Respondents (n=208) | India Percentage* of Respondents (n=143) | Definition and Example |
|---|---|---|---|
| Academic Survey | 91% | 71% | Involves completing surveys and participating in scientific studies. |
| Business Feedback | 64% | 52% | Providing feedback to businesses, such as providing feedback on a company's website design or new products, |
| Categorization | 49% | 62% | Categorizing products or to check data accuracy in catalogs, |
| Data Processing | 45% | 56% | Refers to those micro-tasks on verifying data entry, collecting data or cleaning duplicate/incorrect data files. |
| Tagging | 42% | 29% | Including generating keywords for images, advertisements or websites for indexing and searching purposes. |
| Sentiment Analysis | 37% | 33% | Requires rating sentiments present in tweets, press coverage, and customer comments. |
| Content | 28% | 27% | Ranging from reviewing and editing content to writing abstracts/articles on specific subjects. |

**Note: The percentage indicates the proportion of respondents who performed that category of gig tasks; a respondent could select multiples categories.*

**RESULTS**

Taking into consideration the data collected, it was performed several tests in regard to *Demographic* aspects that would impact the income of the gig workers, as detailed below:
There is statistical evidence that users from The United States of America and India do not receive similar amounts through the MTURK platform X-squared = 11.089, df = 4, p-value = 0.02559. Also, there is statistical evidence that users from The United States of America and India have different distributions for those who receive more than USD 15,000 yearly through the MTURK platform: X-squared = 2.57, df = 1, p-value = 0.1089. Furthermore, in this second group (India), 21% of the users receive more than USD 15,000, against only 14%

for users from The United States of America. The average income of the users from The United States of America is USD 8,726 against USD 11,941 of the users from India.

It was identified that Gender is not statistically associated with different income received through the MTURK platform in both studied groups: The United States of America: X squared = 4.4984, df = 4, p-value = 0.3427 and India: X-squared = 4.3955, df = 4, p-value = 0.3551. Also, there is not any statistical evidence that Gender is associated with users who received more than USD 15,000 yearly through the MTURK platform in both studied groups: The United States of America: X-squared = 2.6724, df = 1, p-value = 0.1021 and India: X-squared = 0.58734, df = 1, p-value = 0.4434.

Furthermore, the Generation of The United States of America users is not statistically associated with different incomes received through the MTURK platform: X-squared = 15.924, df = 12, p-value = 0.1947. Contradictory, the Generation of Indian users is associated with different incomes: X-squared = 41.656, df = 12, p-value = 0.00003804. In a deeper analysis, it was identified that there is statistical evidence that Generation has an influence on users who received more than USD 15,000 yearly through the MTURK platform for The United States of America users: X-squared = 7.0356, df = 1, p-value = 0.007991 but it does not apply for the users from India: X-squared = 3.7965, df = 1, p-value = 0.05136. Furthermore, for the users from India, 100% of the older generations (Baby Boomers and Generation X) receive less than USD 15,000 yearly, while for the younger generations (Y and Z), only 76.9% are set in the same distribution.

Higher Educational Level is not statistically associated with different income received through the MTURK platform in both studied groups: The United States of America: X-squared = 14.327, df = 16, p-value = 0.5744 and India: X-squared = 15.789, df = 12, p-value = 0.2011. Beyond that, there is not any statistical evidence that Higher Educational Levels are associated with users who received more than USD 15,000 yearly through the MTURK platform in both studied groups: The United States of America: X-squared = 1.1516, df = 1, p-value = 0.2832 and India: X-squared = 3.7932, df = 1, p-value = 0.05146.

Then, some data was assessed regarding *Systems Specifications* from the MTURK platform. The results are detailed as follows:

There is statistical evidence that Experienced Workers are associated with different incomes received through the MTURK platform in both studied groups: The United States of America: X-squared = 47.933, df = 4, p-value = 9.746e-10 and India: X-squared = 21.736, df = 4, p-value = 0.0002262. Also, there is statistical evidence that Experienced Workers are associated with those who receive more than USD 15,000 yearly through the MTURK platform in both studied groups: The United States of America: X-squared = 34.887, df = 1, p-value = 0.000000003495 and India: X-squared = 5.065, df = 1, p-value = 0.02441.

Looking from another perspective, there is statistical evidence that users who had their First Work Experience at the MTURK are associated with different income received through the MTURK platform in both studied groups: The United States of America: X-squared = 54.421, df = 4, p-value = 4.296e-11 and India: X-squared = 26.993, df = 4, p-value = 0.00001994. And then, there is statistical evidence that those users who had their First Work Experience in MTURK tend to receive more than USD 15,000 yearly through the MTURK platform in both studied groups: The United States of America: X-squared = 47.678, df = 1, p-value = 5.022e-12 and India: X-squared = 11.012, df = 1, p-value = 0.0009052.

In terms of the amount of work completed, the users who completed more Gig Tasks than the median (200 Gig Tasks) tend to have a different distribution of income in MTURK both studied groups: The United States of America: X-squared = 31.612, df = 4, p-value = 0.000002296 and India: X-squared = 26.21, df = 4, p-value = 0.00002871. And then, to reinforce that, there is statistical evidence that users who complete more Gig Tasks than the median (200 Gig Tasks) are associated with similar distribution for earnings higher than USD

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15,000 yearly for The United States of America: X-squared = 5.9038, df = 1, p-value = 0.01511, but curiously this condition does not apply to the users from India: X-squared = 0.40546, df = 1, p-value = 0.5243. Table 5 summarizes the findings identified in this review.

## DISCUSSION

In the literature, it was mentioned that Technology has the potential to improve living standards since workers can work when and where they want (Ryder, 2018); this was confirmed throughout the analysis of *Positive Factors* that reinforced this point of view. The gig workers really appreciate the flexibility and autonomy given by this contract arrangement. And then these changes in today's societies open up possibilities for more worker cooperatives, self-employed Hodgson (2016), or gig workers that could leverage the improvements in Information Technology, such as the internet, cloud, big data, robotics, machine learning, and artificial intelligence are rapidly changing the way on how the people work and create value (McKinsey&Company, 2017b).

Digital platforms like MTURK are transforming gig work, building on the ubiquity of mobile devices, the enormous pools of workers and customers they can reach, and the ability to harness rich real-time information to make more efficient matches (McKinsey Global Institute, 2016) and (Ashforda et al., 2018). As observed in the current analysis, the users who started their careers directly in the MTURK platform tend to have a higher income when compared to those who had to migrate to this business environment. This condition is also applicable for those users who achieved the Experienced Worker status, which results from high dedication and good quality outcomes over time at the MTURK platform.

The advancement of information technology is enabling organizations to avoid the hiring of full-time employees (Xuefei & Joshi, 2016) and establishing a per-task market where individuals are claimed to be independent and self-regulated workers. In this research, it was found several duties that the gig workers could complete. Basically, they reported to be working on multiple activities (even more than one): Academic Survey (91%), Business Feedback (64%), Categorization (49%), Data Processing (45%), Tagging (42%), Sentiment Analysis (37%) and Content (28%) which reinforce the business opportunity to use this market in replacement of the "standard" contract arrangement.

In this marketplace, Gender and Educational Level does not impact the income received by the users, which might mean a mechanism for social inclusion and income generation for some developing countries. In similar research, it was identified that this type of digital labor platform enables workers and companies to enter geographically inaccessible markets where there is less inequity or exclusion (Nica, 2018). This is also aligned with previous research that affirmed that these new work arrangements have the potential to significantly change how people interact with companies and make money (Xuefei & Joshi, 2016).

As preconized in the literature, these workers do not have any type of protection from the government and/or from the companies that use their services (Tronsor, 2018); nevertheless, the survey reinforced that this is not impacting the willingness of these workers to participate in this business environment. There are some other advantages like Flexibility, Autonomy, and Assess that are more beneficial for them when compared to any potential disadvantages. A similar pattern was already previously observed (Kurin, 2017). Other factors contribute even more to the satisfaction of the gig-workers, like *Access, Accountability, Autonomy, Communication, Dignity, Fairness, Making an Impact, Security,* and *Transparency* (Deng et al., 2016).

Nevertheless, the use of gig workers can be successful in business contexts because tapping into a crowd allows organizations to benefit from a large number of people who bring


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diversity in ideas, knowledge, and experience (Wilson et al., 2017). In the survey, it was identified that 73.8% of the population has a bachelor's degree or higher, which corroborates previous research.
This paper is not intended to discuss the ways how gig workers access the platform to perform or their infrastructure (i.e.: computer, mobile devices, internet connections). It is known that these conditions may vary country by country, and they can impact the outcomes produced, including timing and effectiveness.
Several factors might impact the legitimacy of gig work, such as local legislation, economic conditions, unemployment rate, and others however, these perspectives were not in the scope of this research.

## CONCLUSION

In this study, it was identified that exists similarity of multiple aspects for gig workers from The United States of America and India. It was proven that there are not any differences regarding income generation identified for *Gender* or *Higher Educational Level*. Then, gig workers could be used to create some government policies to improve the insertion of that population in this virtual marketplace. The Research Model built in this paper might be helpful for future studies concerning gig workers and their perceptions of that new business environment.
Except by *Generation*, the users from The United States of America and India are similar in many aspects. It was verified that gig workers from India are making more money than colleagues from The United States of America, which is a contradiction when compared to the regular working environment. That said, MTURK could leverage this information to create target advertisements to bring the additional workforce to the platform and boost its capability to provide this type of service to a larger number of companies. Also, MTURK could improve the overall advertisement of this platform to bring new companies and workers to use their services. This would create a two-sided effect in the gig work environment around this platform. Contradictory, the overall *Expectations* of the users from The United States of America are higher than their peers from India, which could enable targeted communications to bring new customers and users to the platform.
This research also identified that those users who started their "career" directly in MTURK platform tend to have higher income when compared to the peer group, which sign a trend that this could be a good long-term career path, at least from a compensation perspective. This condition is also applicable to those who achieved the Experienced Worker status or complete more work (gig task's) than the average of all users.
Users from The United States of America and India have a positive perception of the work currently performed at MTURK. Both groups demonstrated a high appreciation of the accessibility and autonomy provided by this working environment. Also, assessing their current perception as gig workers, it was identified that users from India tend to have a more positive impression when compared to those from The United States of America. In controversy, looking from future perspectives (Expectations) in this work environment, the users from The United States of America have a more positive point of view than the peer group.
To deal with the gig work reality, companies must review their internal process and procedures to assess the possibilities of moving some work from internal resources to this growing workforce. It would be necessary to define processes where the employees and business leaders can use this additional workforce based on their demands and needs. This initiative would relieve the current regular employees to focus on more strategic tasks and leverage the knowledge from an external party, like MTURK.

Business leaders can use this paper to have a better knowledge of this growing workforce. They must assess the pieces of work that could be moved to the gig workers and define a methodology to follow up on the accomplishment of those tasks. The integration between regular employees and gig workers will be crucial to extract a better balance between these two employment models. At some point in time, depending on the growth rate of this business model, the gig work type might be a reason for the turnover of regular employees. Some of them would be interested in the advantages of that environment and might want to migrate. As a counterattack, business leaders should think of alternatives to maintain their regular employees, trying to emulate some possible conditions, like flexibility, home office, and autonomy.

Gig workers can leverage the usage of this business model to make money. This is a feasible means to generate income for people in The United States of America and India. However, it requires dedication and commitment to receive a reasonable amount of money. It was proven that those users who started their career directly on the platform are making more money than those who started later in their life. This indicates that the users tend to gain knowledge and expertise across their exposure and experience in the platform.

## LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

The assessment conducted during this research considered a sample population from Amazon Mechanical Turk. If a similar study is a platform on a different platform, the expected results may be different from those presented in this document. Also, this paper focused on users from The United States of America (n=208 or 59.2%) and India (n=143 or 40.8%); consequently, if a different set of nationalities is selected, the results might differ.

This paper is not intended to discuss the ways how gig workers access the platform to perform or their infrastructure (i.e.: computer, mobile devices, internet connections). It is known that these conditions may vary country by country, and they can impact the outcomes produced, including timing and effectiveness. Several factors might impact the legitimacy of gig work, such as local legislation, economic conditions, unemployment rate, and others however, these perspectives were not in the scope of this research.

The scope of future work and gig work is extensive, then different types of working environments and arrangements could be part of future studies.

It should be interesting to understand how the users from the "regular" work should respond to the survey and compare their results with gig workers from the MTURK platform.

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# LEVERAGING TECHNOLOGY FOR LEADERSHIP AND MANAGERIAL SKILLS DEVELOPMENT PROGRAMS IN FRONTIER AND EMERGING MARKETS: A QUALITATIVE STUDY OF BRIDGE FOR BILLIONS

By Federica Russo

## ABSTRACT

When the topic of global entrepreneurship development is analyzed, access to quality leadership and managerial skills training is vital for entrepreneurs in frontier and emerging markets. However, these contexts are characterized by unique challenges, such as limited resources, geographical constraints, and lack of tailored support that often hinder the dissemination of such programs.

This is a study that dives deep into the innovative use of technology in implementing and delivering leadership and managerial skills development initiatives for entrepreneurs in these markets, focusing on the efforts of Bridge For Billions, a Spain-based company with a mission to democratize access to quality entrepreneurship support worldwide and build a system within which everyone, everywhere can unleash their entrepreneurial potential to identify sustainable solutions to address societal and business problems.

The specific objectives of this research are twofold: first, to examine the efficiency and impact of Bridge For Billions' technology-driven platform in fostering leadership and managerial competencies among entrepreneurs in frontier and emerging markets, consequently overcoming geographical barriers and providing equitable access to high-quality mentorship; second, to identify opportunities and potential challenges encountered during the implementation and delivery of these programs.

The problem addressed in this study revolves around the disparities in entrepreneurship support between developed and underdeveloped regions. Indeed, in many frontier and emerging markets, aspiring entrepreneurs face significant obstacles in accessing comprehensive training programs due to limited availability and financial constraints. Therefore, the potential for harnessing local talent and fostering sustainable solutions remains untapped, hindering both economic growth and social progress.

A qualitative methodology will be adopted in this study to investigate the experience of Bridge For Billions' in some of the 132 countries across which it operates, with a focus on South and Southeast Asia and LATAM. Additionally, interviews and discussions with program facilitators operating in emerging markets and company representatives will provide valuable insights into the strategies employed to optimize the technological tools for effective skills development.

The findings of this study hold implications for organizations, policymakers, and stakeholders invested in promoting sustainable entrepreneurship in frontier and emerging markets. This research contributes to the ongoing efforts to democratize access to entrepreneurial support and unlock the untapped potential of aspiring entrepreneurs worldwide.

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**Mass Communication and Digital Media**

**024-020**

# RESEARCH ON THE CONSTRUCTION OF LOCAL MEDIA THINK TANKS IN THE AGE OF MEDIA

By Miss Yuyao Wei

## ABSTRACT

Think tank is an important embodiment of national soft power. Media think tank has become an important part of the new think tank system with Chinese characteristics. Compared with traditional think tanks, the advantages of media think tanks are reflected in its special research content, wide range of dissemination, and efficient international influence. Wait. The strong support of the national policy environment, the gradual maturity of its own technical conditions and the growing demand of the media have greatly promoted the vigorous development of media think tanks in recent years.

In the age of media, the media ecology has undergone earth-shaking changes, media forms have been changing, media products have been enriched, media integration has driven new media products, and the integration of think tanks and media has become the trend of the times, driven by national policies and media changes. Under the media, think tanks are generated and developed. Building a media-based think tank is not only a strategic requirement of the country, but also a strategic choice for the development of the media itself. Building a media-based think tank is not only a change of the media itself, but also a new one for the think tank itself. The development momentum and the source of innovation, the media age, the development of local media-based think tanks deserves our attention, by exploring the path of the construction and development of local media-based think tanks, in order to better seek the way out for local media-based think tanks in the future, Summarize the experience of predecessors, analyze existing problems, and propose a vision for the future.

This paper will study the construction of local media-based think tanks in the media age. The first is to sort out the relevant concepts of this paper, to clarify the basic concepts of local media-based think tanks, and the second is to analyze the rise, construction and development of local media-based think tanks in detail. Clarify the basic path of the development of local media-based think tanks, discover the advantages and strengths of local media-based think tanks, short-board and pain points, and use the media fusion theory and PEST model to analyze and study with specific cases. Because it is located in Helena, this paper selects The "Dace Weeing Research Institute" was analyzed in detail as a local media-based think tank in Helena, including the motivation of local media-based think tank construction, the operation of local media-based think tanks, and the construction path of local media-based think tanks to discover local media. Some problems and shortcomings in the construction of think tanks, the fourth is to raise the specific problems of local media-type intelligence inventory, and the fifth is to propose countermeasures and suggestions for the problems existing in the construction of local media-type think tanks.

The emergence of media-based think tanks in the construction of new-type think tanks with Chinese characteristics is unique. The advantages of media-based think tanks cannot be ignored. The rise of local media-based think tanks has added new samples and experiences to the construction of think tanks in China. This paper aims to analyze local media. The specific situation of the construction of the think tank will enable everyone to have a clearer understanding of the relationship between media-type think tanks and the media, more intuitively grasp the general situation of the construction of local media-based think tanks, and point out the direction for the future development of China's media-based think tanks. Scholars research provides new questions and new ideas.

Keywords: media convergence, media, think tank, media-based think tank, local media-based

## INTRODUCTION

The rapid iteration and change of the Internet and new media technologies have led to subversive changes in the media ecology and communication structure. Media integration is in full swing, and the development process of financial media is also the process of traditional media reengineering. In the face of severe challenges and opportunities, doing nothing is the end of media development. Media innovation in convergence and strengthening the development of all media in innovation have become the main theme of media development in contemporary China. With the deep promotion of media integration, data resources and social resources have become the high-quality resources of media. Media public opinion monitoring and decision-making consultation functions are becoming more and more important. With the arrival of the new era, advancing the modernization of national management system and management ability has become an important issue, the central committee of the communist party of China to strengthen the construction of new think-tank decision, and the transformation of the traditional media form synchronous resonance, more and more media began to build media think-tank, under the guidance of the central media think-tank, local media began to establish media think-tank, although these attempts is still in the primary stage, but has achieved good results, especially in public opinion monitoring, activate social user resources, service local government decision-making, etc., has a good potential. What progress will be made in the current think tank construction of local media, whether to build media think tanks in the era of media integration, and how to build local media think tanks are the issues that will be studied in this paper.

1. Topic selection basis and research value

(1) Basis of the topic selection

Under the background of the new era, the development of Chinese society on the fast lane, national demand for think tank, media think-tank in public opinion analysis and information collection has a natural advantage, some media have responded, actively use big data analysis technology of network public opinion mining and analysis, provide new information products, meet the information demand of different decision-making department levels. The advantage of media-based think tanks lies in that they can use the Internet platform to gather the thoughts and trends of public opinion. For the media industry as a whole, the construction of media-based think tanks can further tap their own advantages, give full play to their own value, stimulate their own vitality, explain their potential in content production, and pay attention to integrated development.

"The river public opinion institute" as China's Henan local public opinion analysis institutions, is the local media construction of a think-tank, "public opinion institute of the river" relying on the river network information resources advantage, independent research and development of public opinion monitoring system, effective coverage of more than 20 news sites, and active mobile terminal, such as two micro end, BBS blog, 724 hours real-time monitoring and extract target information, provide users with monitoring, analysis, training and other integration of customized services. River network affiliated to Henan daily newspaper group, "river public opinion institute" relying on the river network, is the pioneer of Henan local media think-tank, all properties of media think-tank, research on the development of the construction has general reference significance, media era of the construction of local media think-tank, in view of the construction of the "river public opinion research" research, conform to the requirements of the sample.

(2) Research value

Along the social history, throughout the world, a think-tank has always been an important embodiment of national soft power, the construction of local media think-tank has become a new social phenomenon, compared with the traditional think-tank, media think-tank advantage is very obvious, first of all media think-tank spread widely, receive feedback more timely, research content keep pace with The Times, output efficient diverse. Having advantages that traditional think tanks do not have is the product of the new era. It is worth exploring the reasons and process of their construction, the difficulties and deficiencies in the construction, so as to provide some valuable suggestions for the future development of media think tanks and provide some theoretical basis for their development.

Between think tank and media is a complementary advantages but the target relationship, both are very close, media think-tank has the dual advantages of think-tank and media, media think-tank can not only through the media to expand the spread of the research channels, increase their social influence, obtain public opinion field recognition of new ideas. At the same time, media think tanks can also rely on the gene of think tanks to enhance the depth and breadth of information content, improve the credibility and guidance of speech, as well as the reliability of results. Media think tank is a very representative product of the era of financial media.

Construction of media think-tank, a long way to go, so to the construction of the media think-tank do more detailed research and analysis, to clarify the difference between the media think-tank and think-tank, combing the construction of media think-tank, found the problems in the process of the construction, through the analysis of domestic local media think-tank construction path found construction model of media think-tank, for the further development of media think-tank, provide reference and advice.

2. Literature review and research status

(I) Literature review

For think-tank research is first in the United States, because the think-tank originated in western countries, has a long history, tend to be specialized, domestic media think-tank started late, less research, the research on the construction of local media think-tank is rare, through search think-tank and media think-tank keywords, get the following summary review:

Quantitative research is the main method of studying foreign think tanks, and the research topics related to think tanks are basically related to the function and policy influence of think tanks. The famous think tank expert James McGan (J ames.G. Mc G owan) In his book "The Competition of Funds, Scholars and Influence in the Public Policy Research Industry", using the questionnaire survey method to make the quantitative research of think tanks into the think tank research.

Media think-tank as a new think-tank construction sequence of new generation, is still in the previous research stage, available reference literature is less, research on the media think-tank is basically according to the present situation of the construction of media think-tank to analyze the development path and construction method, and less local media think-tank, is mostly on local media think-tank, mostly about local media think-tank, classification and advantages, and construction ideas and related analysis. Lack of specific analysis of specific cases, no systematic analysis and demonstration, and is still in the stage of exploration and discovery.

At present, the competition between think tanks and think tanks is intensifying, and the construction of media think tanks has encountered great difficulties and is faced with great challenges. The effective audience of financial media is constantly growing, and the effective audience of traditional media is constantly shrinking. Compared with traditional think tanks, media think tanks have innate platform advantages. However, due to their late start, media think tanks have no unified construction path in their own construction.

(2) Research status quo

By studying the relevant papers of the media think tank, the author summarizes the research situation as follows:

1. Few research results, which have not yet attracted sufficient and extensive attention. Throughout, the research of global media think tanks is still on the traceability and citation of literature. There are few specific case studies, and the research of local media think tanks is limited to the description of the business itself and the causes of construction, with few in-depth exploration of its construction. Overall, there is still a lack of innovative views.

With more qualitative analysis and less quantitative investigation, the empirical research on the use and construction of local media think tanks is worth discussing. At present, some institutions have conducted surveys on the utility of local media think tanks, but on the whole, the overall survey and research on local media think tanks is still very rare, and scholars' research on local media think tanks basically focuses on subjective comments and simple qualitative analysis.

2. For local media think tanks, some scholars pay close attention to and research only to publish articles in journals and analyze the basic forms of local media think tanks. There is a lack of systematic empirical research and academic articles in a real sense.

3. Research ideas and research methods

(1) Research ideas

The introduction mainly introduces the research background and significance of this paper, including research content and innovation points, literature review and research status of relevant research at home and abroad, as well as specific research methods and technology roadmap.

The first chapter is the theory and concept definition, is for the article to study the definition of related concepts, for this paper to use the concept of confusion, the think tank, media and media think-tank, brief analysis of local media think-tank construction, lay the foundation for the subsequent research in this paper.

The second chapter is the media era of local media think-tank construction situation of detailed analysis, including local media era of media rise and development status, and the construction of local media think-tank, systematically to local media think-tank, find out the general method and path of the construction of the media think-tank.

The third chapter takes the local "Dahe Public Opinion Research Institute" in Henan as an example. Through interview investigation and background analysis, the general situation of the construction of Dahe Public Opinion Research Institute is analyzed in detail, including the construction motivation, operation overview and construction path, so as to analyze the development situation of Henan media think tank in the era of media.

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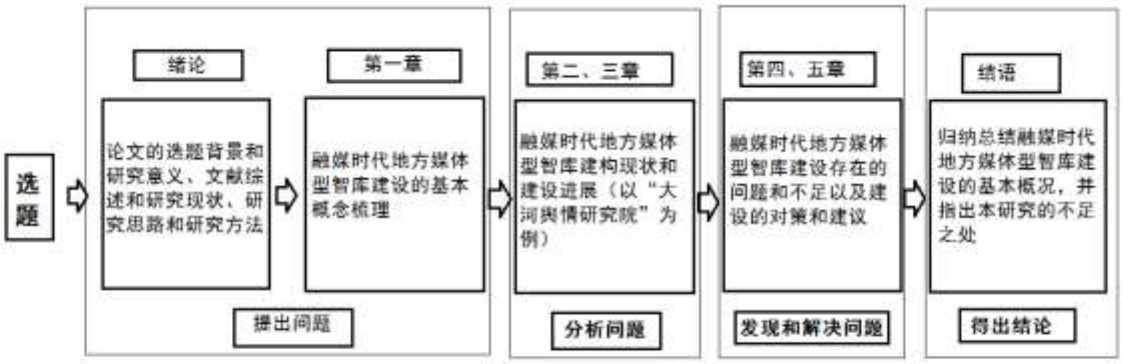
The fourth chapter is to find the problems and deficiencies in the construction of local media think tanks in the era of media, and find the problems and deficiencies in the construction of media think tanks from the external environment, internal environment and their own operation.

The fifth chapter is the suggestions and countermeasures for the construction of local media-oriented think tanks in the era of media integration. In view of the above problems and deficiencies, the theory of communication and the conventional ideas of think tank construction are respectively used to provide countermeasures and suggestions for the construction of media-oriented think tanks, and provide theoretical basis and reference ideas for the construction of media-oriented think tanks in the era of media integration.

Conclusion is a summary and explanation of the research results obtained in this paper, and analyze the shortcomings of this research, and put forward relevant suggestions and ideas on the construction of local media think tank. The research in this paper involves the knowledge of multiple disciplines such as communication science. Only by integrating knowledge can the overall research be completed.




(2) Research methods

This paper mainly uses the following research methods:

**case study method**

First find out the local media think-tank construction of several typical cases, briefly analysis, also selected the Henan representative "river public opinion institute" for the reason, development characteristics and operation mechanism of detailed analysis, although not to partial, but can basically analyze the situation of the construction of local media think-tank, and found the prospect of the construction of media think-tank in China.

**Literature research method**

By reading monographs and literature related to think tanks, media think tanks, media and media convergence, to clarify the development of media think tanks and the basic situation of the era of media, so as to comprehensively and correctly understand the research questions, and then study the hypothesis reasoning of the questions raised, and finally draw a conclusion.

**Qualitative research method**

Through the era of media media think-tank, the emergence of the social phenomenon and media think-tank has attributes and its contradictions in the development, from the media

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think-tank inherent regularity to explore the problems we have, according to certain theory and experience, seize the main aspects of media think-tank construction characteristics, get a typical understanding, obtain a preliminary conclusion, and the conclusion to the study of the overall.

interviewing method

By various query and investigation, locked several media type, a think-tank, because to ensure the stability and authority of the samples, chose the relying on Henan newspaper group river network "river public opinion research institute", and interviewed the river network river public opinion institute director Yang Huijun teacher, through finishing the interview content and subsequent business consulting, combined with the river public opinion institute of construction and development, find local media think-tank development short board and defects.

Think-tank involves many aspects of knowledge, research on the construction of the media think-tank, problem analysis not only stay on the surface of the phenomenon, more to analyze the deep reasons contained about the problem itself, so we start from a think-tank, and analyze the construction of new things, media think-tank, media think-tank development general law, through the analysis of the construction of local media media era, the different research methods using each other, theory learn from each other, connotation blend each other, finally solve the problem of this research, form the research results. Using the above methods, this study can better analyze the problems, so as to construct the construction framework of local media think tanks in the era of financial media, and provide a simple theoretical basis for the construction practice of local media think tanks in China.

## Chapter 1 Media Think tank: The marriage of media and think tank

In the era of media, great changes have taken place in the mode of information dissemination and communication media. How to accelerate the integration and transformation of media is an urgent and important issue for media to face. In the era of the media, media think-tank as the product of media and think-tank cooperation, is the most representative product of media fusion media, media think-tank itself has obvious gene, think-tank itself has the function and function of production information, so the marriage of the media and think-tank, is the new trend of media development, is the product of The Times.

### Section 1: The Construction of Think Tanks and Chinese Think Tanks

In ancient Greece, the wise men of the West had the function of think tank, and the wise men of Aristotle provided many valuable suggestions for the development of city-states. At the beginning of the 20th century, the think tank was just starting and was also known as a think tank (think tank). During World War II, the US military established a secret room to discuss strategy, and the word "think tank" was born. After World War II, research centers with military background were called "think tanks". The world's first think tank Rand Company, formerly the research department of Douglas Aircraft Company, was funded by the Ford Foundation of the United States. The emergence of Rand think tank has made a large number of think tanks emerge and attracted the attention of the government and society.

1. Think-tank definition and connotation

For the definition of a think-tank, academia is not yet unified, the concept of the think-tank originated in the first refers to us during world war ii to discuss strategy and combat room, is composed of experts, for policy makers in dealing with social, economy, science and technology, military, diplomatic and other aspects, provide the best theory, strategy, thought of public research institutions.

Frank Colbomo (Frank Colombo), the founder of the Land, believes that the think tank is a


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"think factory", a "brainstorming center", and a professor James McGan (James G.McGowan) of the University of Pennsylvania has proposed a broader definition of think tank in the Global Think Tank Development Report.1 He believes that think tanks or public policy research and analysis, as well as participating institutions are such organizations that conduct policy-oriented research and analysis and make suggestions on domestic and international affairs, so that policy makers and the public can make informally supported decisions on public policy affairs. These think tanks may be affiliated to political parties, governments, interest groups or private companies, or independent non-governmental organizations. These institutions often act as a bridge between academic and policy-making groups, serving the public interest as an independent voice that transforms practical and basic research into language and forms that are understandable, trustworthy and accessible to policy makers and the public.
From the concept of previous think tanks, Summarize the following points, The so-called think tank, Is a thought tank, The basis of discrimination is not the difference between profit and non-profit, ownership or independence, But whether the ability to produce ideas, Serving the public good, To provide the best theories, strategies, ideas, and methods for the government and the public, This is the essential nature of think tanks, As a carrier of thought output, Think tanks have distinctive characteristics, Think tanks themselves not only assume the role of service, but also carry the input and output of various information, This determines the nature and connotation of think tanks, So we can give a think tank a basic definition, Think tanks are based on the output of thought, An institution that serves the whole of society, Depending on the function, Can produce generation of various types of think tanks, Think tanks are not relatively isolated individuals, But rather, the interconnected whole, Only the different types of think tanks cooperate with each other, To give full play to the strengths of think tanks, To realize their own service functions. The connotation of think tank can include three aspects. First, the essence of think tank is an ideological output institution; second, it is the service-oriented research products spawned by social development; and third, it is the ideological entity used by the national government and the public as a reference for decision-making. With the continuous development of society, the functions of think tanks will be more enriched, the penetration rate of think tanks will continue to increase, the spread of think tanks will be more extensive, and think tanks will be endowed with more definitions and connotations.

## 2. Construction and type of Chinese think tank

Think tank construction refers to the establishment and setting of an overall target system and the completion of the work requirements of each stage. The completed target system should be able to well complete the work requirements of each stage, and have a complete, systematic movement process that can independently play its own functions. American think tanks started early, There are more obvious development paths, In the historical process of think tanks and construction, The emergence, construction, and development of American think tanks, Without the whole country's demand for think tanks, First, American think tanks were established to meet the advisory needs of governments and policymakers, With the continuous progress of the society and the continuous development of the economy, Diversified environments that influence decision-making, The government requires higher accuracy and credibility of information, Government would be like think tanks seeking professional advisory services, The US government follows expert advice in its decision-making process, Leave some questions to think-tank experts, Think tank experts will then

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analyze and demonstrate the complex and difficult problems, Through the research results of the experts, To meet the needs of government decision-making, Major decisions in the United States Congress, Generally, think tanks now propose, The media came to discuss it, After the meeting for the hearing, Government to decide to adopt and implement, Think tanks are an important manifestation of national soft power.

China's think-tank construction is still in the primary stage, but with the continuous development of social economy and the continuous improvement of policy, the construction of the think-tank by the state and the government, the size of the think-tank, increasing types of think-tank, the influence of the think-tank gradually enhanced, but still in the primary stage of construction and exploration period.

Recently the number of global think-tank explosive growth, Europe and the American think-tank started early development faster, but a think-tank, although late but still fast, China as the largest developing country, the demand for a think-tank, the construction of new think-tank is the strategic demand of national development, on the sequence of the current Chinese think-tank, tube office think-tank, strength to be reckoned with, is the main component of our think-tank.

The number of think tanks in China is increasing, however, due to the wide variety of think tanks and the difficulty in classification, there is not a complete set of classification standards and system for Chinese think tanks. However, from a macro point of classification, they are basically divided into three categories: government-run think tanks, university think tanks and non-governmental think tanks. If they can be divided from the attributes, functions and service scope, they can be divided into the following categories: they can be divided into official think tank and private think tank; according to the functions of think tank, party and government think tank, university think tank, enterprise think tank, media think tank, social think tank; the service scope of think tank can be divided into policy research think tank, public opinion research think tank, economic consulting think tank, national condition analysis think tank, international relations research think tank, etc.

3. The development status of Chinese think tanks

The Global Think Tank Report 2018 (2018 Global Go To Think Tank Index Report), compiled by the Think Tank Research Project (TTCSP) of Pennsylvania, was published in more than 100 cities, including New York, Washington and Beijing. In 2018, there were 8,162 global think tanks counted in the report, including 2,219 (27.2%), 1,972 (24.2%). The number of think tanks in Asia has increased to 1,829 (22.4%), while Central and South America have 1,023 think tanks, accounting for global (12.5%), while the number of think tanks in Africa and the Middle East is 1,119 (13.7).

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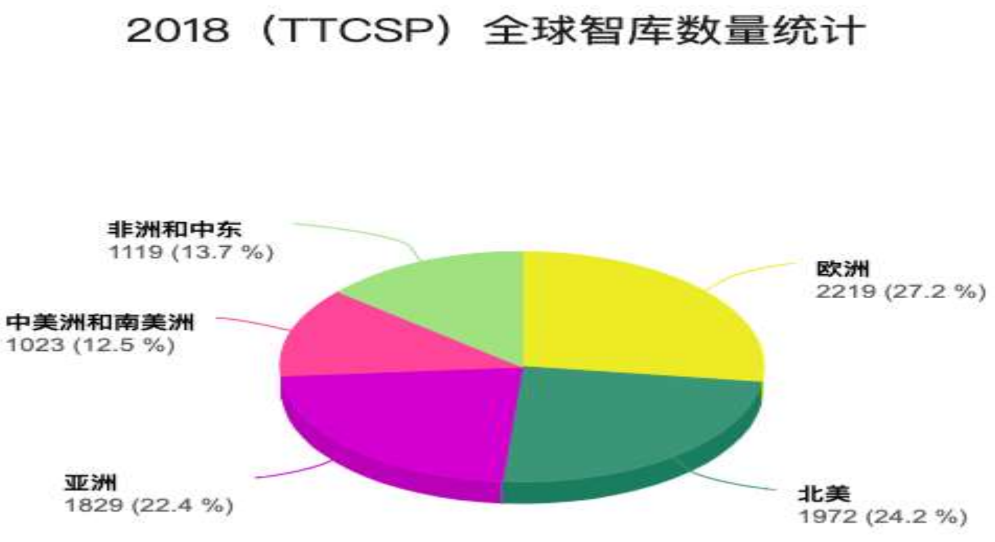


**Table 1: Statistics of the number of global think tanks in 2018 (TTCSP)**

In 2018, the world had the largest number of think tanks were the United States, India and China. The United States still has the largest number of think tanks in the world with 1,871. With a series of measures to promote the development of think tanks, India has more think tanks than China, with 509 think tanks, ranking second in the world. In 2018, China had 507 think tanks, ranking third in the world. The UK and Argentina have 321 and 227 think tanks, respectively. In 2018, Russia surpassed France (203) with 215 think tanks, overtaking Germany (218) with the seventh largest number of think tanks.

| Country | quantity | ranking |
|---|---|---|
| America | 1871 | 1 |
| India | 509 | 2 |
| China | 507 | 3 |
| Britain | 321 | 4 |
| Argentina | 227 | 5 |
| Germany | 218 | 6 |
| Russia | 215 | 7 |
| France | 203 | 8 |
| Japan | 128 | 9 |
| Italy | 114 | 10 |

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**Table 2: Ranking of the countries with the largest number of global think tanks (top 10)**

Chinese think tanks have made outstanding achievements in the lists of "2018 Global Outstanding Policy Research Think Tank", "2018 Global Best Foreign Policy and International Affairs Think Tank", "2018 Global Best International Economic Policy Think Tank", "2018 World's Most Powerful Policy Think Tank" and "2018 Global Best Environmental Policy Think Tank".
Although the development of Chinese think tanks has entered a period of opportunity, there are many problems in the construction of the Chinese think tanks, relatively lack of experience, the path is not clear, its own development mechanism is not sound, and the international influence needs to be improved. In light of China's national conditions, the construction of a new type of think tank with Chinese characteristics will gradually expand with the development of time. China's think tank should conform to the development trend of the international think tank situation, constantly innovate, cooperation and exploration. To seek experience and path for the construction of a new type of think tank with Chinese characteristics and lay the foundation for the development of high-end think tank construction in China.

Section 2 think tank Media and media think tank

Media think-tank as the product of media and think-tank marriage, is the most representative product media era media fusion, media think-tank itself has obvious think tank gene, also has the media itself, with the continuous development of social and economic, the public demand for the media, is no longer simple, access to information channels and access to information, the public lack of professional and reliable information, the emergence of the media think-tank to cater to the needs of the society and the audience, is also the era development of the development of the media.
The emergence of media think tanks plays an indispensable role in stabilizing the credibility of the media, enhancing the communication force and strengthening the guiding force. The content production of media is the main focus for media to maintain their own operation. Content production also needs media think tanks to play a role. Whether traditional media or new media, the establishment of media think tanks is an essential intelligent external brain and pillar industry for media convergence in the Internet era. Media advantage is communication and channels, has a strong ability of public opinion guidance, but in the depth interpretation, the advantage of the depth of policy research, but in the transformation and the spread of products and a short board, think-tank and media marriage can good supplement the short board, the emergence of the media, a think-tank to think-tank construction provides a better development direction and development prospect.

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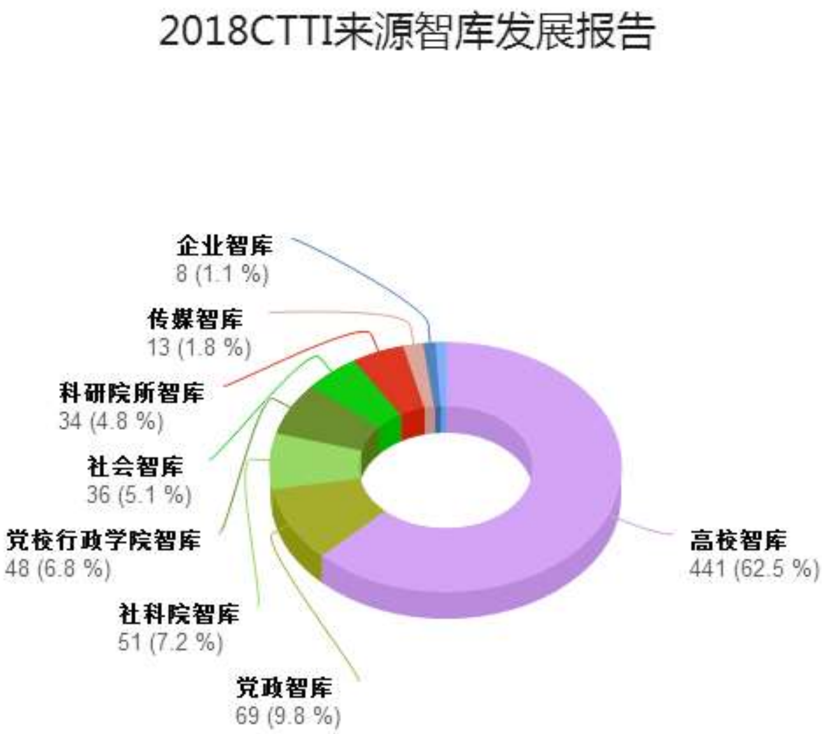


**Table 3:2018 CTTI source think tank statistics**

"China Think Tank Index" (CTTI) is jointly built by China Think Tank Research and Evaluation Center and Guangming Daily Think Tank Research and Publishing Center. CTTI included 706 institutions, 11,992 experts, 17,878 activities and 115,421 achievements. According to statistics as shown in the figure above, it can be clearly seen that university think tanks are still the main force of think tanks, and the proportion of media think tanks is still very small. However, with the continuous development of financial media, media think tanks will continue to emerge.

In studying media think tank, we should first distinguish two concepts, one is think tank media and the other is media think tank. Both but literally can distinguish, think-tank media is functional and think-tank, can assume the role of the think-tank, because the media itself strong ability, so the transformation do think-tank, think-tank business also have the properties of the media, think tank media must be media, emphasize the media is a think-tank, to study is the whole media, sometimes may be the whole media group. Media think-tank and think-tank media, media think-tank can be independent individual and both the function of the media and think-tank, media think-tank, is an integral part of the media, can be a specific professional institute or institute, but affiliated to the media, as a function of the media, is to help the media to improve their level, improve the propagation force of the media. Here we will analyze the similarities and differences between think tank media and media think tanks from the basic concepts and connotations.

This section is divided into three parts, which will sort out the related concepts of think tanks, think tank media and media think tanks, clarify the basic concepts of research objects, so as to facilitate the better analysis and judgment of problems, and pave the way for the next research.

1. Think-tank-type media and its connotation

Think tank media is the restructuring of media groups, reshaping their own discourse system.

Think tanks no longer serve the government and the public as a function of media, but take think tanks as their own strength to provide distinctive services for the government and the public. Think-tank type media is not only the media improved influence and research ability, at the same time from information collection, production, communication, feedback of rigorous have the dual attributes of think-tank and media, even the decision-making consulting department and information dissemination department, the foothold is no longer a think-tank, but the media, think-tank media is the product of media transformation period, the preliminary establishment of media, is to promote news products more systematic, specialization and quality compass, constructive significance.

The specific connotation includes the following points: 1. Think tank media is the product of the restructuring of media groups, and the attributes of media and think tank must be included in the dual attributes, and its essence is still media.2. Think tank media are not independent individuals and their research results are not independent.3. The operation mode of think tank media should not deviate from the track of media, but also have the general attributes of media.

Therefore, it can be seen that think tank media is the primary form of media think tank. Although the two are similar, there are still big differences. Think-tank media, is the media transformation and the construction of the think-tank, but with the development of the think-tank media, media in their own discourse system construction, operation mechanism, research output, professional personnel, may have a new breakthrough and progress, the development of the media can become the media difficulties in the future.

2. Media-type think tank and its connotation

"Media-oriented think tank" means that the media produces news products, produces research reports or new media around the relevant business of the think tank. "Media-oriented think tank" is a platform that mainly changes the traditional production mode of news into in-depth research, and the key problem is to change the product concept.

In the era of financial media, media think tanks, as the product of mutual cooperation between media and think tanks, are the most representative products of media convergence in the era of financial media. Media think tanks themselves have obvious think tank genes, and also have the unique functions of media themselves. Media think-tank, relying on media group, but can set up independent research institutions or research institute, independent institutions alone think-tank function, media group can support for media think-tank, such as capital, technology, and personnel, so that the media think-tank can better focus on policy research, data mining, information analysis and a series of business, further enhance the influence of the media itself.

The connotation of media think tank also includes three aspects: 1. Media think tank is diverse, dependent on media groups but independent.3. Media think tanks can have their own business.

The emergence of the media think-tank, is the Internet and the wisdom of the information society, the development of the media speed and the increasing quantity, because the public demand for media, is no longer a simple access to information, because access to information channels and ways is increasingly diversified, the public lack of professional and reliable information, the emergence of the media think-tank to cater to the needs of the society and the audience, is also the era development of the development of the media. The emergence of media think tank is to enhance the credibility of the media, enhance the communication power and strengthen the guiding power of the media. Media content production, is the main gripper media maintain its own operation, so content production requires a media think-tank to play a role, media, a think-tank as a function of a media, to the media to provide great help quality content, both traditional media and new media, establish a media think-tank is essential to the Internet age media fusion wisdom brain and pillar industries.

3. From think tank media to media think tank

Both think-tank media and media-based think tanks are the products of the era of media convergence. Think-tank media does not emphasize the attribute of think tank, but the function of the media, the changes brought to the media after the media reshaping the discourse, focuses on the change and development of the whole media, and focuses on the innovation and transformation of the whole media. Media think tanks and think tank media have different attributes, which are different from think tank media. As independent institutions, media think tanks can serve the media, but the most important thing is to provide more complete wisdom for the government, the enterprise, the society and individuals and decision-making tips.

Think tank media and media think tank are different in three aspects, the first is in the institutional nature level. Think-tank is still the nature of the media and media, media think-tank belongs to research consulting, think-tank media is still the main business of communication, and media, a think-tank is research consultancy, think-tank media expertise is content production and propagation ability, media, a think-tank in research ability and provide policy advice, think-tank media products is still newspapers and magazines, radio and television and new media and other related derivatives, media think-tank results is the research report belongs to the ideological content products.

Section 3 Local media think tank in the financial media era

2In the era of the media, great changes have taken place in the whole media ecology, media rapid development, with the progress of the Internet and information technology, intellectual media also gradually surfaced, the media blue book: China media convergence development report (2019), 2017~2018, the media fusion from additive turning point towards blending, by monomer fusion, their fusion towards regional integration, the key point of overall integration, the fusion of the media fusion by form, content fusion and upgrade to system as the main characteristics of fusion 3.0 era. Media think-tank as a media era the fusion of media and think-tank, is the media in the transition period of innovation and innovation development, the condition of the local media fusion also drives the construction of the media think-tank, local media think-tank has what kind of connotation and characteristics, and combined with the actual situation to find out the local media think-tank, the development of contemporary demands.

1. Financial media and local areas, media integration and development

About "melt media" there is no clear definition, but is sure that "melting media" is based on "media fusion" and "media fusion" the development of the new concept, is the relationship, is the media fusion development to a certain degree of latest form, "media" can on the basis of better enhance the transmission effect. It can be seen from the discussion of relevant concepts that "financial media" makes use of the Internet as a carrier to fully integrate the media with common characteristics and the media with complementary advantages, so as to realize the mutual integration of resources, content, publicity and other businesses. The concept of "fusion" was first proposed by Negroponte, which means that "various media show a trend of multi-functional integration". Through combing the concept of "media convergence", it is not difficult to find that "media convergence" in a broad sense emphasizes the integration of information transmission media, and the physical integration of media with various

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characteristics to transfer information out. On the premise of making full use of traditional media, the integration of media makes use of diversified media resources, and then realizes a harmonious and unified new media in the full integration of human resources and information core.

The development of local financial media is unstoppable, although facing the huge development based on also facing many challenges. Local media is the core value of the user, better service for the user is the main task of local media, so local media for the Internet core technology to keep pace with The Times, to learn to use all possible information transmission channels, through the blind area, better convey our information, at the same time through local media platform to achieve two-way communication with the user. Local base compared with the hands of the central media, more fine and precise, but the local media information for the audience influence is weak, the audience to accept information or rely on the central media, so local media to develop media products with regional characteristics, innovation, let the content of local media and the form of local media.

Fusion development of the media, should always under the guidance of public opinion, uphold the content is king, local media to actively fusion, actively seek new change, change traditional thinking, innovation development idea, attaches great importance to the process reengineering, promote the transformation and upgrading, pay attention to the diversity of information presentation, realize the true sense of fusion, local media to actively expand camp, actively seek help, collaborative innovation integration development.

2. Local media think tanks and their characteristics

In recent years, the construction of local media think tanks has become a trend. In terms of the number, local media think tanks are increasing day by day, but on the whole, the positioning of local media think tanks is relatively vague and the development is insufficient. However, in essence, local media think tanks have their advantages, such as their proximity to grass-roots information and their effective data basis for regional issues. Therefore, local media think tanks are an important subsystem of China's new think tank system.

The main connotation of local media think tanks includes three aspects: first, the think tank for local governments, and the function of the think tank itself is the think tank, which provides research results for users through analysis and research. Second, the research institute and public opinion research that provide local public opinion analysis are the main aspects of local media think tank business. Due to geographical factors, it is difficult to grasp the regional factors of local users, so it is necessary for media think tanks to advance and maintain regional stability. Third, monitoring the media ecology of local media think tanks should analyze the unpredictable media ecology, which is conducive to the reflection of the media itself and the media think tanks themselves.

Local media think tanks are established by local media to practice the opinions on the construction of a new type of think tank with Chinese characteristics, and also a way for local media to seek a way out in the era of media integration. Local media think tanks have rich connotations and will gradually be endowed with new significance with the continuous change of The Times. Local media think-tank and media think-tank, foothold is in the local, pay attention to the local policy and analysis, provide services for local governments, followed by the construction of the local media think-tank path each have each characteristics, according to the regional information habits of similarities and differences, adopt different ways of transmission, in construction mainly is based on local, draw lessons from the experience of others, seeks the development for themselves.

3. The demands of local media think tanks for contemporary development

Local media think-tank, the development of contemporary demands can be analyzed from


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several aspects, based on the local construction of media think-tank, according to the era of the development of local media, think-tank, first in the media level, from the perspective of the relationship between the central media, the think-tank, the development of local media think-tank is to keep unity and the central pace, the construction of media think-tank is the central special policy, the implementation of the level of appeal, is the first important issue of the construction of the local media think-tank. In addition, from the perspective of the government, local media think tanks should provide the basis for the government, and the government decision-making needs more accurate information positioning. Media think tanks should play their own advantages to adapt to the development of the policy situation and do a good job in advance.

The demands of local media think tanks is to shorten the time for information filtering, and to allow the government to take precise measures. From the perspective of the development level of The Times, Media convergence has caused major changes in the structure of media communication, Computer and the Internet jointly build a virtual communication platform and cyberspace, New media and traditional media coexist, coexist and merge, A new shift in the media, The propagation power needs to be improved, One of the important elements of propagation power is information, Information is the content of the dissemination, Only if the content is detailed, High credibility, To improve the user experience, Local media are very weak over the state media, Policy research and judgment requires timely and precise efforts, Because media think tanks rely on a team of experts, It can provide accurate analysis and technical support. Therefore, the establishment of local media think tanks is conducive to local governments to implement precise policies and serve the people.

## Chapter two: The era of financial media: the current situation of the construction of local media think tanks

The prosperity and development of local financial media has driven the construction of local media think tanks, and local media have innate advantages in media publicity and public opinion guidance. First of all, the local media, as a media publicity window, have witnessed the formulation process of local policies, and have a better understanding of the goals and specific implementation paths of local policy planning. Secondly, in the long-term practice, local media have established a relatively close relationship with local audiences, and the audience has a high acceptance and trust in local media. In this context, strengthening the construction of local media think tanks can promote local media to improve their ability to interpret local policies and measures, and then enhance the effect of public opinion guidance. The research results of think tanks should not only be exchanged and discussed in academic communities, but also need to be disseminated widely, which requires think tanks to establish a benign interactive relationship between them and the media. The following is the analysis of the construction status of local media think tanks in the era of financial media from three aspects: the rise of local media think tanks, the construction mode of local media think tanks, and the development status of local media think tanks.

### Section 1, the rise of local media think tanks

Local media is a branch of the media industry in our country, is also an important element of the media ecology, with the continuous development of the Internet and information technology, new technology, major changes have taken place in the media field, media fusion, media development, in the era of the media, all kinds of information transmission channels more broad, more diversified transmission, local media entered the development opportunity, in order to cope with the new challenges under the new situation, local media seize the opportunity, formulate construction plan, find suitable for their own development strategic path. The construction of media-based think tanks is a special form for local media to improve their communication and guiding power. The strong analytical ability of think tanks can enable media to expand other businesses in addition to traditional businesses, so as to ensure that they can obtain a certain space for survival and development in the era of the media integration.

1. From the framework of public opinion monitoring

With the rapid development of information technology, media ecology and media changes have taken place, and the information environment is very important, public opinion analysis has become one of the focus of the media work, public opinion monitoring is an important step of accurate public opinion situation, public opinion monitoring requires professional professionals dealing with professional problems, big data is the public opinion monitoring technical support, professionals are public opinion monitoring instructor, analysis and analysis of public opinion trends is to find the direction of public opinion, in order to strengthen the local party's ruling ability construction.

Local media began to explore similar path, relying on the media group, joint research institutions such as universities, set up public opinion institute, public opinion analysis and so on public opinion monitoring institutions, the current various types of public opinion organization is quite active, local media is the foothold of the main business public opinion monitoring, this to improve the governance ability modernization has great help, but compared with the central media public opinion monitoring institutions, local media think-tank, on the data and personnel architecture far behind the central media, a think-tank.

2. Change forced by the development of new media

The emergence of new media has brought a huge impact to the traditional media, Traditional media should proactively cater to the new media, Active cooperation, The impact of new media has caused a huge change in the media landscape, Traditional radio and television newspapers are gradually weakened, New media has gradually stepped onto the stage of history, A series of new carriers, such as mobile phones and tablets, make the dissemination of information present through multiple channels, The multi-angle transmission trends, Competition between old and new media has entered a white-hot phase, Traditional media are eager to gain more audiences with professionalism, But the instant convenience of new media is more suitable for the reading habits of the new era, New media will not replace the old media, But if the traditional media doesn't change, Its own position is to be impacted, So the traditional media should take the initiative, In particular, the traditional media ability of the local media itself is slightly inferior to the traditional media of the central authority, If we do not adapt to the changes in the media environment and the needs of the audience in the media era, Are in danger of being marginalized,

Therefore, traditional media should face up to the impact brought by new media and the challenges raised by financial media, and actively integrate with their own communication ideas, communication content and communication methods with new media. The establishment of local media think tanks is conducive to local traditional media to open up new business areas, and the development of media itself has a new direction. Local media think tank belong to the reform and transformation of traditional media, which is the embodiment of active integration into the development of new media and brings opportunities and directions for the development of the whole media group.

3. Integrative research provides decision-making advice

The establishment of a media think tank and the integration with the existing research departments of the media is a major basic condition. In general, in the former Internet age, some departments of the media function has a think-tank attribute, such as media, media inside some research journals, newsweek, media research institute, etc., itself with consulting, depth and research, in the process of new media transformation, most media have more sensitive to grasp the public opinion monitoring and public opinion response to the latest consulting function, integrate these departments, form depth, think-tank synthesis mechanism is necessary and possible. On the other hand, various functional departments of the media, such as the Ministry of Finance and Economics and the Ministry of Rural Affairs, are relatively local and research-oriented. In particular, they have a wide contact with experts in various departments and opinion leaders in related fields, which can help the development of think tanks. Compared with foreign media industry, China's media industry is not mature enough, and the emergence of media consulting industry is the catalyst for accelerating the maturation of media industry.

Media integration research providing decision-making consultation is closely related to the following two aspects. The development and growth of media consulting industry is based on the increasingly mature development of China's mass media industry. The ownership and management of media can be separated, the operation can be more professional, and the management can be independent. Secondly, the competition in the media market makes the media have to increase their profits through their own operation. Scientific and effective management and professional service can effectively enhance the influence of the media and make the media operation more professional. The establishment of local media think tanks is the integration research of media groups to provide users with decision-making consulting services.

Section 2. Construction methods of local media think tanks

The construction and development of local media think tanks is of great significance to the construction of a new type of think tanks with Chinese characteristics. After the establishment of Xinhua News Agency "Outlook Think Tank", it marks the birth of media think tanks in China. The number of local media think tanks has not increased short, but the number is still small and their research ability is weak. The establishment of representative local media think tanks such as South Wind Window think tank, cover think tank and 21st Century Economic Research Institute has provided experience and reference for the construction of local media think tanks. Local media think tanks have been established one after another, gradually forming a new pattern. There are three ways for local media to extend their functions and build their own think tanks; the second type is to give full play to their strengths and professional think tanks to jointly run think tanks; here are detailed examples.

1. Extend the media functions, build their own think tank

"South Window" is affiliated to Guangzhou Daily Newspaper Group. "South Window" is positioned as a political and economic news magazine, and most of its readers are government agencies and large enterprises. On September 25,2015, the South Wind Window Media Think Tank was established. One of its main functions is to provide consulting services for the government and enterprises. In recent years, the media has become a common trend. "Outlook Think tank" is the first media to build a think tank itself. In June 2013, Xinhua News Agency decided to set up a research institute "Outlook Think tank". In September 2014, relying on the platform of Xinhua News Agency, Outlook obtained the special support of the central Cultural Industry Fund of the Ministry of Finance, and formed a response pattern of "one magazine, one database" with the Financial and Economic National Weekly.

South window media think-tank and the original media itself, has the essential difference, the south window media think-tank is not only an internal institutions, but the transformation of media fusion platform products, the south window media think-tank is no longer a department, but the south window extends the wisdom of its function brain, and the south window magazine echo each other.

The development of the media and think tanks is inseparable, When the media is spreading it, First, we should enhance our own credibility, The premise of enhancing public credibility is to ensure the accuracy of the information, next, Think-tanks, as research institutions, Need to use the media platform to deliver information, So that their own research results can be reflected, With the development of The Times, The accelerating process of media convergence, Media think tank, as one of the products of media, With a very strong competitiveness and development space, And the increase in the number of media products, It also poses a lot of challenges to media think tanks, High-quality content at any time, A scarce resource in any media product, So the media have built their own think tanks, You need to invest more human and material resources, Thus making media think tanks more competitive in the era of convergence, Media building think tanks first need their own research strength, Secondly, to create their own characteristics, Again, you need to change your operational thinking, Giving think tank functions more accurately to the media, So that the think tank function built by the media can be developed and run well, Finally, taking advantage of the media itself, Expand the communication channels, Establish the brand effect of a media think tank, The media think tank has the dual attribute that both the think tank and the media do not have, Self-formed systems and complement each other.

2. The media gave full play to its advantages and jointly run think tanks

As one of the party newspaper groups with the longest media industry chain in China, its subsidiary Southeast Business Daily formulated the integrated development model of "media + think tank" in 2017, aiming to build a think tank-based financial media IP. The National Research Institute and Ningbo Daily Press Group jointly established the Donghai Branch of the National Research Institute to expand the think tank industry. The National Research Institute is a national high-end professional think tank, and the Donghai Branch jointly established by the two, as the operator of the think tank platform of Southeast Business Daily, jointly expands the think tank industry. The "Media + think tank" platform built by Southeast Business Daily has a high position, composed of experts from various fields, with a high position, focusing on the local level and serving the overall situation. In terms of research mechanism, we should pay attention to openness and cooperation, and target the high-end national think tanks. It is composed of senior media personnel, experts and scholars, entrepreneurs, government officials and other elites in various fields, which is a decision-making consulting platform highlighting practical and countermeasure research, and a new type of think tank providing wisdom and thought products for Ningbo city decision-making level, enterprises and media themselves.

For example, the media think tanks similar to Southeast Business Daily and think tanks' cooperation and jointly run think tanks are very different from the media think tanks. The cooperation between media and think tanks is not only the integration of business, but also the transformation of production mode. Different from the media self-built think tanks, the media-built think tanks with the cooperation of media and think tanks have made a step forward compared with the media self-built think tanks, with the advantages that the media self-built think tanks do not have. First of all, from the perspective of the system and mechanism, operation mode and talent echelon, Are all very different, A media think tank of media and think tanks, First, with a dual system, And not just in the media, And, as a think tank, Combination of two individuals with similar and different functions, This is not just a simple superposition, It's the integration of institutions, Media think tanks in collaboration between media and think tanks are both led by think tanks and governed by the media, So there is a dual system, Secondly, in terms of the operation mode, Media self-built think tank, Still follow its own business model, It will also make changes in improving its business model, Is not out of the normal orbit of the media, Combining the advantages of both operations, Upgrade and restructure the single operation model in the news and communication field, Combine cross-border integration and industrial chain integration into one, So that the media and the think-tank model, The fission effect of one plus one is greater than two, Finally, the difference in the talent echelon, Different from the media's self-built think tank, this is that, Media self-built think tank is the media to give itself a think tank function, Think tanks or media people are not professionals, The professionalism degree is relatively low, But think-tank media, where media and think tanks cooperate, With a dual talent echelon, Well-skilled media personnel, And have compound talents in the field of research, So the media think tank, the media think tanks, In these three aspects, it is better than the media to build self-established think tanks, It provides the government, enterprises, society and individuals with a more complete intelligent external brain and decision-making kit.

3. Media industry transformation, transformation into a think tank

On February 8,2018, the south newspaper group of 2017 summary commendation congress Jan big data institute opening ceremony, from "China's best newspaper" to "build China's most influential think-tank media", the transformation of the future development to the difficult direction, SMW big data institute of slogan is "data connect everything", SMW in 2018 plans to launch a batch of influential data products in the country, to promote the southern metropolis daily successful transformation into an influential media in the country. SMW transformation to do a think-tank, southern metropolis daily reorganized its own structure, reshape its own discourse system, data became an important decisive factor, the data as a reference, think-tank is no longer as a function of the media and social media service, media as a media as a media, the foothold is no longer a think-tank, but the media key development think-tank, become a new media process, full play to the role of the media, and the think-tank media as the promoter of their own development, is their become the most competitive think-tank media, finally realize the comprehensive transformation of the media.

From the transformation of Southern Metropolis Daily into a think tank, Think-tank media is a think tank founded based on the media, The foothold of the research is the change and development of the media after the transformation into a think tank, Different from the function of a single think tank established by the media and the think tank established with the cooperation of professional think tanks, Media think tanks directly produce news products from a professional perspective, Is a professional news product with the professional think tank policy research, There is also a broad channel of information circulation, Both intellectual support and distribution channels, Is a rare product for media transformation practice in the integration era, The initial establishment of the think-tank-type media, Is to promote more systematization of news products, A professional and high-quality compass, It has a constructive meaning.

## Section 3: Development status of local media think tanks

With the prosperity and development of media think-tank, local media think-tank construction and development status is worth our attention, in addition to the central media, other local media think-tank according to different regions, the business is different, the pace of the development of local media think-tank in accelerating, in terms of Guangdong region, the south window media think-tank established in 2015, in the same year yangcheng evening news newspaper group and baidu established the yangcheng evening news wisdom information research center, in 2018, the southern metropolis daily south big data institute, build new media based on big data platform, a think-tank. From the perspective of the construction of media think tanks in various regions, they basically start from the analysis of public opinion, so based on the form of the construction of local media think tanks.

1. Gradually form a public opinion monitoring platform

With the rapid development of the Internet and modern information technology, people contact the media has become diverse, local netizens for various social phenomenon attitude formed the Internet public opinion information, public opinion information affects people's lives, also affect the operation of the whole society, the government and enterprise decisions need to be accurate, local media, a think-tank of public opinion monitoring platform, can provide reference for local government and enterprises to further grasp public opinion information, in order to take effective measures. Local media think-tank in terms of public opinion monitoring can quickly monitor a lot of information on the Internet, real-time monitoring public opinion at 24 time, at the same time, local media, a think-tank, gradually realized, public opinion data collection, data analysis, data sharing, public opinion report and a series of media function of a think-tank.

Southern newspaper all media database and public opinion, a think-tank project by the southern public opinion data institute, aggregated the southern newspaper media group of political and economic resources and elite team, using the entire network search, large data mining analysis and visualization presentation, personalized exclusive push technology, through the "online and offline" source full coverage, "computer + human brain" analysis, the combination of "public opinion + data" comprehensive analysis, "full-time + part-time" production of online collaboration, "problem + countermeasures" operation value concept, to provide users with public opinion monitoring and early warning, analysis, response to guidance and skills training and so on a package of public opinion services. Southern Public Opinion Data Research Institute has become a new type of think tank focusing on the research field of "governance modernization" from the perspective of professional media, and is the chief public opinion service platform to explore the path of governance modernization in Guangdong.

2. Public opinion guidance has been done somewhat

"Public opinion guidance" is one of the five functions of a new think tank with Chinese characteristics. In terms of guiding public opinion, local media think tanks should do something. The way for local media think tanks to guide public opinion is to make their voices heard on hot issues, and build social consensus from different perspectives, analysis and judgment. The professional advantages of local media think tanks can interpret the major policies of the Party and the state in a comprehensive way, and guiding the public opinion is the internal requirement of the development of local media think tanks. Local media think tanks should intervene in public affairs, analyze and explain hot issues and public opinion events from an objective and professional perspective, and guide public opinion.

Local media think-tank in SMW big data research institute, for example, SMW big data institute set the resources, the data extraction redistribution, supported by data information accuracy greatly improved, and all kinds of data integration technology for the media to better adapt to the data is various, time pressing provides a good technical support. Southern Big Data Research Institute is the starting point of data aggregation and circulation, and the factory of data products. It can give full play to the role of think tanks and media, so that the professional nature of media can be improved and released. Therefore, efficient and accurate information improves the ability of public opinion guidance and gives full play to the role of local media think tanks in public opinion guidance.

3. Initial decision-making advisory services

Decision-making advisory services is the main business of traditional think tanks, The central media think tank strength is relatively strong, Local media think tanks are relatively weak, In addition to public opinion monitoring and other businesses as a conventional path, Decision-making advisory services have also been initially launched, For example, the cover think-tank, Relying on the cover news client, Focusing on national policy research on Belt and Road, the Yangtze River Economic Belt, Is the only media think tank cooperating with the Belt and Road Think Tank Alliance, The results of the cover think tank cannot be underestimated, First, the cover think tank released the first Internet + "Belt and Road" development report, Organize seminars related to "Belt and Road", Expand the communication channels, Open a wechat public account to publish exclusive interviews and reprint articles related to "Belt and Road", Provide decision-making consultation services for users.3

Worthy of our attention and southern newspaper think-tank matrix, southern media think-tank matrix by southern economic think-tank, south, think-tank, think-tank, southern education, think-tank, southern digital government research institute, Guangdong rural revitalization of service center, southern weekend institute, SMW big data institute, southern public opinion data institute and other top ten think-tank, trying to build hierarchical high-end, large expert database, launch personalized, targeted, customized content products, provide high quality, specialization, characteristic type wisdom service. At present, it has been deeply involved in the key areas of Guangdong's reform and development, and has put forward a number of representative topics and products around their respective fields to provide decision-making support for party building, economy, rule of law, education, and rural revitalization.45.

## Chapter three:Progress in the construction of local media think tanks in the era of financial media

—— Take "Dahe Public Opinion Research Institute" as an example

"Dahe Public Opinion Research Institute" is a local authoritative media think tank in Henan province. "Dahe Public Opinion Research Institute" is the rapid vision of Henan government affairs, which is the main focus of sorting out and researching network government information, and provides services to government departments. The goal of "Dahe Public Opinion Research Institute" is to fully extract the network government information involved in Henan province, and provide big data services for the relevant decisions of the provincial government units. Based on large-scale data processing capacity and data mining technology, it provides customers with Internet information collection and analysis services. Help public opinion analysts to efficiently collect and grasp the public opinion dynamics, and provide scientific and correct data support for public opinion guidance.

### Section 1 "Dahe Public Opinion Research Institute" construction motivation

On January 20,2015, the general office of the central committee of the communist party of China, the State Council general office issued "on strengthening the construction of the new think-tank with Chinese characteristics" clearly pointed out that support the central key news media to carry out high-end think-tank construction, and encourage think-tank in a variety of ways, such as mainstream thought value, gather social positive energy."Dahe Public Opinion

Research Institute" was established under this background. At the same time, with the external drive of the media ecology and the development needs of the media itself, Henan local media think tank should respond to the trend. Take advantage of the trend.

1. External drive of financial media ecology
The state proposed that " we should focus on building a group of new mainstream media with various forms, advanced means and competitiveness, build several new media groups with strong strength and communication power, credibility and influence, and form a modern communication system with three-dimensional, diversified and integrated development.6"2015 media convergence, accelerate the transformation, traditional media media exploration, on November 21,2015" river public opinion institute " arises at the historic moment, the media blue book: China media convergence development report (2019), in 2017~2018, the media fusion by addition to the turning point of blending, by the monomer fusion, their fusion towards regional integration, the key point of overall integration, by the enterprise cloud construction towards a new starting point for the construction of the media cloud. China's media convergence has been upgraded from form convergence and content convergence to the convergence 3.0 era with the main characteristics of system and mechanism convergence. In the era of media integration, great changes have taken place in the mode of information dissemination. How to accelerate the integration and transformation of the media is an urgent and important issue for the media to face. Due to the external drive of the media ecology, "Dahe Public Opinion Research Institute" actively tries. The emergence of local media think tanks not only adapts to the changes in the media ecological environment, enriches the functions of media, but also is the self-innovation of media in the integration concept of The Times.

2. National policy encouragement and promotion
On January 20,2015, the general office of the central committee of the communist party of China, the State Council general office issued "on strengthening the construction of the new think-tank with Chinese characteristics", clearly put forward "support the central party school, Chinese Academy of Sciences, Chinese Academy of Sciences, Chinese Academy of Social Sciences, Chinese Academy of Engineering, the State Council development research center, national school of administration, China Association for Science and Technology, the key news media, universities and research institutes, military system key teaching and research units and conditional place to carry out high-end think-tank construction pilot" the implementation of the construction plan. Currently active Chinese think-tank development presents four main direction: comprehensive think-tank, professional think-tank, platform, its both platform think-tank emphasizes the characteristics of supply and demand of unicom and docking, and has its more unique "institutions or founder from the media" "sensitive problem discovery ability and policy comment ability" "good at capturing public opinion information and use media means to promote" etc. Mainstream press and publishing units are encouraged to build media think tanks, give full play to the resource advantages of press and publishing units with extensive social resources, internal and external information channels and solidarity with high-level experts, and strengthen the collection and mining of information data in economic, cultural and social fields.

3. The development needs of the media itself
With the continuous development of the Internet and the constant change of new media,

Media users have changed a lot in their access to information, From relying on traditional media to adapting to new media, Users' needs are more diverse, The same uneven media itself brings conditions and dilemmas for the public to choose information, The diversity of new media groups, But the strength is still insufficient, The immediacy of microblogs and small videos makes the speed of information transmission greatly increased and also full of uncertainty, The emergence of news turns, The phenomenon of decision-making deviation often occurs, This adds more opportunity costs to the government and the public, While saving the time of obtaining information, it takes a lot of time cost to test the correctness and accuracy of the information. New media is gradually dividing up the information market, highlighting the advantages of interactivity and immediacy, but also reducing the public's trust in the media and media credibility.

The emergence of media think tanks plays an indispensable role in stabilizing media credibility, enhancing media communication power and strengthening media guidance power. Media content production, is the main gripper media maintain its own operation, so content production requires a media think-tank to play a role, media, a think-tank as a function of a media, to the media to provide great help quality content, both traditional media and new media, establish a media think-tank is essential to the Internet age media fusion wisdom brain and pillar industries.

Section 2 Operation Overview of "Dahe Public Opinion Research Institute"

"River public opinion institute" as Henan local media think-tank, relying on Henan daily newspaper group and hwa network media group, have innate brand advantage and talent advantage, is a representative of the local media think-tank, unique media advantages and expert advantage, equipped with high-end public opinion monitoring software, collect and integrate multimedia information, for party and government organs, enterprises and institutions to provide public opinion found, analysis, analysis, early warning, guidance and response to comprehensive services. Invited public opinion analysts to solve the problems, computer plus human brain, network media plus flat coal, products and services, three characteristics to meet the needs of users."The river public opinion institute" operation profile can clearly explore the construction and operation of local media think-tank, the author had the opportunity to interview to the "river public opinion institute", please he is the construction of the detailed answer, the following from several aspects to analyze the operation of the "river public opinion institute" general situation.

1. The goal and mechanism of the construction of "big River public opinion"

"River public opinion" is belongs to the river network department, in the current regional big data service under the background of the overall weak, market prospects, "the river public opinion" to its positioning is Henan government clairvoyance, the goal is comprehensive extraction and network government information, for the provincial government affairs unit related decisions to provide large data services. At present, "Dahe Public Opinion" has sorted out and studied the network government information as the main focus, and provided services to government departments. In recent years, the network information organized by "Dahe Public Opinion" has been paid more and more attention by relevant departments and achieved remarkable results.

The construction of "Dahe public opinion" is not limited to simple policy research and information release, But to make full use of big data, In integrating the information resources, On the premise of careful study and judgment, Innovate its own operating mechanism, By building an information service system with its own characteristics, Integrate its own innovation mechanism into the service process of information service and policy research, Thus increasing the added value of the information produced by media think tanks, Through the integration and reasonable division of their own resources, Promote the accuracy of information release, Establish a mobile platform to form an information sharing mechanism, Let the achievement acquisition break through the boundaries of time, In addition, the integration of information resources will take the information produced by media think tanks as the result of senior value-added, Create a high-quality platform, To enhance the visibility of the media think tank itself and the media itself.

"River public opinion" in the operation mechanism is convenient, provide three different standards of service, according to the different user demand, provide different degrees of exclusive service, to provide customers with public opinion monitoring, crisis warning, information consulting, network word of mouth research and other comprehensive analysis services and decision-making Suggestions, and at the top of the domestic public opinion monitoring software system covering media terminals, one-stop solve the user's Internet public opinion information prediction, early warning, analysis, guide, processing all requirements.

2. Advantages and weaknesses of the construction of "big river public opinion"

Although "Dahe public opinion" is slightly inferior to the central media think tank in terms of scale and influence. However, as the most authoritative media think tank in Henan, it has many unique advantages."River public opinion" relying on Henan newspaper group and the river network media group, has a strong support, at the same time, a think-tank is media support of the media, the river public opinion team strong strength, expert committee of more than 50 people, invited analyst more than 100 people, public opinion analysts, public opinion collector more than 3000, product engineers nearly 100 people."Dahe Public Opinion" has a first-class operation team, 18 years of experience in website system development, a complete public opinion early warning system, a comprehensive public opinion disposal plan, a self-developed information big data collection system and a government website content management system.

The specific aspect of "Dahe Public opinion" is reflected in eight aspects: first, it has the top public opinion monitoring system in China, and tries to fully cover the network public opinion; second, professional and please editors should edit and process the information and overload the customer with the one-to-one follow-up service, respectively, and provide the exclusive public opinion service, and present the reality and the problems. Fifth, relying on Henan Press Group, it is more convenient to contact the media, which can help users timely clarify, assist users to voice, and influence the trend of public opinion. Sixth, conduct professional analysis for major public opinion events at home and abroad involving Henan and gather into case database; seventh, conduct public opinion training according to user needs; the last one is to build the system in user working area for more convenient to use. The team strength and technical strength of "River Public Opinion Research Institute" provide a double guarantee for the operation of "River Public opinion". When the media involves the in-depth analysis of professional fields, the opinions of experts are often needed, especially "River public opinion" as a think tank for public opinion analysis and judgment. The professional research team makes the depth and accuracy of public opinion analysis through the analysis and research of experts.

At present, the two-wheel drive mode of "Dahe Public opinion", namely "technology + labor", provides a guarantee for the operation of "Dahe Public opinion". Regular public opinion reports connect the relationship between the government and the public, collect and analyze feedback information, and increase the intelligence of issuing the upper information and uploading the lower information. But in terms of technology, talent, big data have short board, media think-tank need timely accurate data, big data and algorithm technology proficiency determines the "river public opinion" capture data speed and accuracy, data

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storage is one of the "river public opinion" pain points, the use of cloud technology is "river public opinion" need to supplement the short board. The talent dilemma beyond the technological shortcomings is also one of the pain points of "river public opinion". "River public opinion" is in the initial stage of development, and there is no long-term plan in strategic selection and strategy formulation.

3. The prospect and dilemma of the construction of "big River public opinion"

According to the construction of the "river public opinion", its operation and management are moving forward steadily, according to the positioning of government clairvoyance, research network government affairs information, public opinion analysis, in recent years "river public opinion" sorting network and information is more and more by the attention of relevant departments, such as Puyang high-speed public opinion series report (2017), vaccine public opinion report (2018), the college entrance examination answer card public opinion report (2018), in addition "river public opinion" in government list release, also made some exploration, "the river public opinion" basic can meet the customer's information needs.

In addition, "Dahe Public Opinion" focuses on the cooperation with other professional think tanks, such as "Institute of Public Opinion and Crisis Management of Nanjing Normal University" and "Shanghai Public Policy Research Association have certain cooperation". The big data service in Henan province is generally weak. As a professional media think tank, "Dahe Public Opinion" should undertake the heavy responsibility, actively optimize and improve the technology, and actively introduce learning, to ensure that the big data service in the region can meet the needs of current users. From these two aspects, "Dahe Public Opinion" has a considerable prospect and has the ability to become an important public opinion supplier and local media think tank in Henan.

But on the current development situation, the "river public opinion" big data mining in audio, video, and even image retrieval there are some problems, technical problem is one of the difficulties, the river, the river public opinion " the most basic business, another point is the talent shortage, as a media think-tank, need to have a large number of media experience to join, the current media appeal, led to the talent shortage, talent problem will affect the operation of the media think-tank. Therefore, the current technical weakness and talent dilemma are the main dilemma faced in the development of "Big River Public opinion".

Section 3 The Construction Path of "Dahe Public Opinion Research Institute"

Construction of "Dahe Public Opinion Research Institute", It is the self-innovation of the media in the era of financial media, With the deepening of our understanding of media think tanks, The development path of media think tanks is worth exploring, On the road of the traditional transformation of the media, New media can bring unexpected gains to traditional media, And the media think tank appears as a function of the media, Help to strengthen the strategic research capabilities of the media, Thought development capability, Ability to spread information, ability to guide public opinion and provide public service, With the higher demands of media convergence in the new era, The pace of the transformation and integration of traditional media has also changed accordingly, Innovation has become a perpetual motion machine for the integrated development of old and new media, Bring new vitality and vitality to the media in the era of convergence, This path is the superposition and integrated development of the advantages of the media and think tanks. Under the upsurge of the construction of a new think tank, the strategic choice behind the "Big River Public Opinion Research Institute" is worth exploring.

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1. Professional development of endogenous achievements
The public opinion briefing, public opinion report, public opinion special report, public opinion map and public opinion list of "Dahe Public Opinion Research Institute" are the five products of "Dahe Public Research Institute". These five products are the endogenous results of "Dahe Public Opinion". The public opinion daily, weekly and special newspaper of "Dahe Public Opinion" have formed brand influence in Henan."River public opinion" report has formed a professional process, from monitoring, data extraction, data analysis, content research, nature and to have experts are responsible for, has formed a system, professional research results is the vitality of the think-tank, and the media think-tank in the process of development than need to follow this principle, strengthen their specialization and comprehensive ability, for the society and the public to solve the problem, promote the development of society. Local media think-tank as a media think-tank team important and special group, endogenous results of professional development needs a batch of high degree of specialization of big data technicians, editorial talent, research experts, provide high quality research results, is a local media think-tank has a fixed user group, is also a media think-tank professional strengthened.

2. The-dimensional extend of dimensional dimensions
"River public opinion institute" relying on Henan newspaper group, in addition to their own public opinion report, the river public opinion network, public, APP and other products, these products extend the spread of the "river public opinion" tentacles, integrate the "network, newspaper, micro" public media resources, supported by technology platform, integrated editorial as the way, comprehensive information service as the main content, mobile communication as the main channel, set up a relatively perfect multimedia fusion of modern communication system. In addition, "Dahe Public Opinion" continues to explore service areas, aggregates expert resources, and improves its own service dimension. The communication tentacles of "River Public opinion" are constantly expanding and multi-dimensional extension, giving play to channel advantages, and realizing flow aggregation and achievement value transformation.

3. Optimize existing resources in media convergence
Due to the development of digital technology, The popularity of big data, The network becomes a platform for accommodating the media, Media think tanks often have a diverse combination of resources, From the classification of the resources, With information resources, media resources, user resources, These resources are existing resources for media think tanks, The development and utilization of these resources are directly related to the brand competitiveness of media think tanks, In the constant change of the Internet and the media, Traditional media have received the impact of new media and forced reform, As the process of media convergence accelerates, Expanding information capacity, diverse circulation methods, and increasingly available resources for media think tanks, However, as the development of local media has shortcomings in some aspects, Therefore, "Dahe Public Opinion Research Institute" is based on the local area, Give full play to its own resource advantages, Using big data technology, Fully collect the information, Make full use of the existing media resources and user resources, Yes, the media think tank surpasses the think tank function of traditional media in product form, With the optimization and upgrading of the resources, The development and application of local media think tanks, There will be a huge space for development.

4. Explore alternative resources in collaboration
In terms of resource integration, "Dahe public opinion" actively integrates on the basis of

existing resources and seeks new ways and innovation points. In the development process of the new type of think tank with Chinese characteristics, the cooperation between think tanks and think tanks is particularly important. Because "Dahe Public Opinion" has similarities with other think tanks in terms of management system, capital, technology, information, talent and other aspects, etc. Only through cooperation can we learn from each other and complement each other's advantages in cooperation.

In the development of "Dahe," Dahe Public Opinion " pays attention to the cooperation with think tank experts, including journalists and editors in the media field, professors from universities and media think tanks in various places. In cooperation, "the river public opinion" build exclusive detection platform, entire network search, public opinion dynamic, and other local media, a think-tank, break the regional and department division, establish comprehensive monitoring of public opinion matrix, realize major public opinion timely and accurate capture, form a joint research center, to realize the major public opinion problems. Through cooperation, "River Public Opinion" self-innovates, realizes organizational filtering, replaces short board resources, gradually realizes open development, vertical integration and deep integration, and realizes the resource cycle of local media think tanks.

It is necessary to break the division of majors and departments, promote the establishment of multi-disciplinary matrix research teams, and jointly carry out research on major practical problems through the joint establishment of research centers or joint research groups. Should further set up "open the door client zheng" and "wisdom and the raise" concept, encourage guide party and government departments, think-tank in the form of network organization to strengthen the vertical and horizontal joint: vertical joint to a line, practice, horizontal joint to the international and domestic, provinces, in the integration of political, academic, industry resources to solve all kinds of complex decision-making problems.

## Chapter four: The construction of local media think tank in the era of financial media

Since media think tanks are good at using big data for analysis and technology to win, the achievements of media think tanks are still worth exploring, and the future development space of media think tanks is also worth looking forward to. At the same time, our weaknesses in the process of development deserve our attention, which is a stumbling block to hinder the progress of local media think tanks. It is timely developed and optimized to explore a development path of media think tanks with Chinese characteristics. Next, we will make a specific analysis of the construction of local media think tanks in the era of financial media in terms of the external environment, internal environment and operation of the construction of local media think tanks.

### Section 1 The construction guarantee of local media think tanks is not sound

About the construction of local media think-tank plan and system guarantee, but in the central media think-tank, local media think-tank, some local media think-tank has established their own brand, such as southern newspaper media group's southern public opinion data institute, southern defense think-tank has a professional research ability. It is worth mentioning that the cover think tank of Sichuan Press Group was rated as one of the eight outstanding think tanks of "One Belt and One Road" in 2016, and was listed in the Index of Chinese Think Tanks. The development of local media think tanks is ready to go, but the imperfect construction guarantee will affect the progress of media think tanks.

1. The system construction of local media think tanks is not perfect

Due to the development of the media think-tank is still in the primary stage, so for the media think-tank itself system is not very sound, the construction of local media think-tank has not introduced relevant policies and regulations, the construction of local media think-tank, need

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system to guarantee, most local media think-tank or rely on and media related laws and policies to ensure their own operation, media think-tank results have particularity, but the relevant system construction or blank. From the legal level, there are no laws and regulations to ensure that local media think tanks, and some provisions only stay at the level of policy call. In addition, there is also no think tanks to ensure the users of local media think tanks. The contracts signed between think tanks and users need to be constrained by the system. A sound market order is also a condition to ensure the good operation of think tanks.

2. The guarantee system of local media think tanks is not sound
Local media think-tank main business in the local, local government and media group should give local media think-tank certain political guarantee and business security, the local government information disclosure system for media think-tank is not sound, media think-tank and to analyze the problem and public opinion analysis, need to get some global information, accurate and comprehensive information is the premise of local media, a think-tank. The second point is the collection of opinions. The opinion collection system is not perfect. Local media think tanks cannot gather the broadest forces and obtain comprehensive information when conducting public opinion analysis and policy research. The third point is that the achievements of local media think tanks are not guaranteed, and the copyright of some research reports is not protected. The imperfection of these guarantee systems is a deep-seated contradiction in the construction of local media think tanks.

3. The problem of "two unsound"
System construction and guarantee system are the external factors for the operation of local media think tanks. The external environment determines the normal operation of local media think tanks, and the imperfect system construction will directly lead to the operation of the whole media think tank. The state has corresponding management regulations and management mechanisms for the existing radio, television, publishing and the Internet, which specifically stipulates that the media units, as legal entities, shall independently bear the corresponding legal responsibilities. In the early stage of their establishment, media think tanks can serve as a department of media to realize their own intelligence. However, with the continuous development of media think tanks, the system guarantee system for media use is no longer enough to meet the goals and requirements of the construction of local media think tanks."Two imperfect" will bring the confusion of organization construction, the inability to attract talent and the inaccurate analysis and judgment.

Section 2 The construction capacity of local media think tank is too weak

The construction of media think-tank, from the national level for the central media think-tank, great support and help, the central media resources, a think-tank, the degree of the construction of the media itself is far more than the local media, so both local media, local media think-tank, ability is very weak, local media think-tank in its construction and business level in two aspects are very weak, the following is a brief analysis of "two too weak".

1. The self-construction level of media think tanks is weak
The core resource of media think tanks is the scientific research ability of media think tanks themselves, Most of the relevant experts from the media think tanks, Like the digital analysts, Lack of professional talents, such as public policy researchers, After all, media think tanks are just starting to develop, Is still in the exploratory phase, Compared to the traditional think tanks, Communication talents who master communication skills, Is the patron saint of the media that leads the ground, Is one of the strengths of media think tanks, But the lack of specialized scientific research personnel, It will cause significant shortcomings, Too much

reliance on researchers from traditional think tanks, Not conducive to the development of media think tanks themselves, The development of media think tanks needs to be long-term, sustainable and professional, Talent is the founder of the development of media think tanks, Only the talent is gradually complete, The development of media think tank can develop steadily for a long time.

Media think tanks as a function of the media, It's not autonomous, It's about developing with external forces, In the later stage, media think tanks will become more dependent, Development will lag behind, Because of innovative development and independent production, Is the only way for the development of media think tanks, So when media think tanks are springing up, We should pay attention to the shortcomings of talents, Only by strengthening the weak links, Media think tanks can better fulfill their responsibilities, Put talent pool construction first, Compound media talents are the talent resources needed by media think tanks, Compound media talents directly restrict the product quality, development progress and policy research level of media think tanks, At the same time, it also indirectly affects the communication power and guiding power of the media.

2. The decision-making consultation level of media think tanks is weak

The basic law of market economy development is the balance of supply and demand, It is also a law that social development should follow, Similarly, the construction of media think tanks also needs to consider the balance of supply and demand, Whether the balance between supply and demand is the standard to evaluate the public decision information system, In terms of the supply and demand aspects of the current research results of media think tanks, Is relatively lagged, Because the Chinese media think tank and the overall think tank construction has just started, It is difficult to meet the growing needs of Party and government organs and the general public, Public decision-making consultation needs are divided by region, With the development of society, The level of economic development continues to improve, The government and the public's demand for information also increases, With the continuous development of our national economy, The imbalance of output of media think tanks in decision-making consultation is the main contradiction facing media think tanks, To address this principal contradiction meets the needs of public decision-making, Maintain the balance of supply.

Especially after the party's 19 big, promote the pace of the comprehensive well-off continuously moving forward, and faster and faster, the task of reform and development, more and more severe environment form, the more need strong intellectual support, from the perspective of the intellectual results of media, a think-tank, is still relatively lag, media think-tank decision consulting products cannot meet the urgent and a lot of demand.

3. "Two are too weak" brings about the problem

The weak level of self-construction and decision-making consultation is the weak board in the self-construction of local media think tanks. At present, the experts of media think tanks all rely on outside experts and do not have their own think tank talents, which leads to the instability of the development of media think tanks. Self-construction determines the vitality of local media think tanks. The level of self-construction is too weak, so the business development can not be carried out smoothly, the analysis of problems cannot be accurate, and the services provided are not professional enough. The weak level of decision-making consultation will lead to the loss of user resources and reduce the professional degree of media think tanks. In order to avoid the waste of technical resources and the fact of human resources, the problems caused by the "two too weak" should be solved as soon as possible.

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Section 3 The construction mechanism of local media think tank is not perfect

The construction mechanism of local media think tanks includes strategic selection mechanism and operation mechanism, which determine the development of think tanks, strategic selection determines the development direction of media think tanks, and determines the development of the specific business of local media think tanks. The operation mechanism determines the operation of media think tanks. The following is a specific analysis of the specific situation and problems of the "two imperfections".

1. The strategic selection mechanism is not perfect

Strategic choice usually includes four aspects: development direction, development speed, development quality and development ability selection. These four points are the key points that determine the development and progress of local media think tanks. Reference to PEST model, the local media in political, economic, social and technical aspects have no perfect mechanism, in politics, government policy guarantee influence local media think-tank development, while economic growth, but the media money to the media and new media, local media think-tank own industrial structure is not perfect, macroeconomic fluctuations will affect the development of media think-tank. Due to the level of population and media contact, local media think tanks have no perfect plans and strategies, which need to consider a series of issues such as social mobility and cultural tradition. Finally, the disorder of media ecology caused by technology. The progress of technology can make no local media think tank conduct effective analysis of users and provide one-to-one services to users. How to make a strategic choice is the top priority for local media think tanks to improve, which is related to the development direction and main tasks of media think tanks.

2. The think tank operation mechanism is not perfect

The operation mechanism of media think tank refers to the structure, function and mutual relationship of various factors affecting the operation of media think tank, as well as the process, principle of action and their operation mode that these factors influence and play their functions. The operation mechanism of media think tank is the basic criterion and corresponding system that guide and restrict decision-making and various activities related to people, finance and material. It is the general term for the internal and external factors and mutual relations that determine behavior. As a product of the integration era, local media think tanks should actively integrate, straighten out the organizational structure of media, establish an integrated pattern in terms of collection, editing, operation and operation, control all processes in their own hands, without affecting the media group, give play to their abilities to bring more benefits and technical support to the media.

3. The problem caused by the "two imperfections"

Local media think tanks are still in the development stage, and the development of financial media is also comparing with the imperfect strategic selection mechanism and operation mechanism, which will lead to problems in the operation and operation of local media think tanks. Today's media market has changed from the competition of platform to the competition of communication elements. The imperfect strategic selection mechanism will lead to the failure of local media think tanks to accurately predict in the integration, and the inaccurate prediction of the external macro environment and their own industrial environment will affect the cultivation and building of the core competitiveness of local media think tanks. The imperfect operation mechanism of think tanks will affect the normal operation of their own institutions. According to the principle of overall optimization, local media think tanks should ensure the optimal allocation of human resources, material resources, financial resources and technology. If resources are not effectively coordinated, the value of local media think tanks


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(Co. Reg. 1136118-A)

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will decline and their development will be sluggish.

Chapter V: Countermeasures for the construction of local media think tank type in the era of financial media

With the deepening understanding of local media think tanks, The think tank construction of local media is one of the paths of media innovation and transformation development in the era of financial media, The development path of local media think tanks is worth exploring, On the road of the traditional transformation of the media, New media can bring unexpected gains to traditional media, And the media think tank appears as a function of the media, Help to strengthen the strategic research capabilities of the media, Thought development capability, Ability to spread information, ability to guide public opinion and provide public service, With the higher demands of media convergence in the new era, The pace of the transformation and integration of traditional media has also changed accordingly, Innovation has become a perpetual motion machine for the integrated development of old and new media, Bringing new vitality and vitality to the media in the era of financial media, This path is the superposition and integrated development of the advantages of the media and think tanks. Under the boom of the construction of the new think-tank, local construction of media think-tank, traditional media development based on its own characteristics of media, a think-tank, the problems existing in the construction and the short board is also worth our thinking, by combining the above specific problems, from three aspects to explore the local media intelligence facing problems in the construction of coping strategies.

The first section is accurate and effective positioning, and give full play to the advantages of the media

Local media think-tank, rely on local media group, strong strength, professional advantage, in the good news public opinion at the same time also can thorough social investigation, in the depth of the planning of major planning, can actively dig deep reason and deep content, the information provided by the high research value, can directly promote the content of local media, a think-tank. The media has a good resource system in terms of technology, channels and resources, effective and accurate positioning, give full play to the advantages of the media, and better provide a good rear guarantee for the local media think tanks, and play a positive role.

1. We will strengthen public opinion monitoring and give full play to the advantages of public opinion guidance

In the era of melting, media form of social public opinion through the media, affecting the social and public order, received social attention, local media think-tank must first strengthen public opinion monitoring, because the social public opinion life cycle is a continuous process, information, local media think-tank to make good use of big data, under the support of technology, grab network information, analysis of public opinion trends, to predict the future. Local media think tanks should strengthen public opinion monitoring, grasp the data sovereignty in the complicated information ocean, control the information within the controlled range, hold the leading power of control, analysis and processing into their own hands, give play to the advantages of public opinion guidance, and improve the scientization of public opinion monitoring and early warning.

Public opinion is undergoing great changes in terms of data, complexity and generation speed. The method of public opinion has exceeded the traditional commonly used framework. Local media think tanks, supported by media, analyze and predict public opinion through big data, which is conducive to improving the governance capacity of public opinion and

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exploring the best solution for local media think tanks in the development model supported by big data.

2. Do a good job in integrated communication and give play to the advantages of user network

In the era of financial media, the communication pattern has undergone great changes. The way and channels of the audience to receive information have appeared the trend of subdifferentiation and object, and the single media battle appears to be weak. The purpose of promoting integrated communication is to further consolidate the position of mainstream media, highlight the communication power, credibility, comprehensive influence and competitiveness, and form a modern communication system featuring integrated communication, mutual support and coordinated development. At the same time, I realized that the transmission of hot spots and focal events in the Internet era is more convenient and the development of events is more changeable. The mainstream media should not be led by the network voice. We should fully grasp the law of network communication and the "law of public opinion", turn passivity into initiative and emit mainstream voice.

Integrated communication is a systematic project. From the integrated processing of manuscript sources to the platform construction of text, pictures, audio and video and communication innovation, it must be guaranteed by good mechanism and system to achieve efficient communication and cooperation between different media. In the era of financial media, network users show diversity and complexity. Local media think tanks should give full play to the advantages of users 'networks, extract the network data used by users, analyze and study the rules of users and use, give full play to the advantages of users' networks, and enhance the accuracy of public opinion analysis.

3. Expand the consulting services and give full play to the advantages of data resources

The consulting service of local media think tanks is also one of the functions of media think tanks. An important form of think tank resources is reporting, because the fundamental task of think tanks is to provide consulting reports according to the requirements of users. Think tank reports need to make thorough and practical research plans. The RAND company publishes 350-450 reports every year, and think tanks have rich high-quality reporting resources. In addition, in order to expand the influence of think tanks, there are also journals, books and newsletters. However, think tank reports with their unique advantages have become an important source of information for academic research, especially in international politics, public relations and other disciplines. Media think tanks should give full play to the resource advantages of think tanks and make use of media to provide more accurate information for the public. This requires a lot of manual reports on the basis of data analysis and evaluation. Such analysis can be applied to media development, new media evaluation, transformation of Internet +, deduction of public opinion, etc., including various government internal reference reports and public opinion reports, all of which require the combination of man-machine to complete the application of data. Big data is characterized by a complex and large quantity. The Internet industry can analyze customer behavior with big data technology. Similarly, media think tanks can also use big data to analyze the current situation while producing better research results.

The second section strengthens the connotation construction and enhances the ability level

Media has its own media advantages and professional advantages. While doing a good job in the news and public opinion work, I also have my own experience in the in-depth research of national governance and social issues. While reporting news facts to the public, many of them undertake the writing task of internal reference and directly serve the decision-making departments. Despite the impact of new media leading to some brain drain in recent years, China's mainstream media still retain a number of senior editors and journalists. Their usual rigorous thinking, discourse logic and diagnostic ability to identify public policy affairs are no less than the scholars of some research institutes. At present, the major mainstream media have a close interaction with the academic circle, industry and political circles. Some pages or channels will build expert resource databases, and a number of key experts and scholars in the field will regularly hold seminars and release the latest research results. Strengthen the connotation construction of local media think tanks, and improve their own ability level.

1. Strengthen talent construction and establish talent echelon

The core resource of media think tanks is the scientific research ability of media think tanks themselves, Most of the relevant experts from the media think tanks, Like the digital analysts, Lack of professional talents, such as public policy researchers, After all, media think tanks are just starting to develop, Is still in the exploratory phase, Compared to the traditional think tanks, Communication talents who master communication skills, Is the patron saint of the media that leads the ground, Is one of the strengths of media think tanks, But the lack of specialized scientific research personnel, It will cause significant shortcomings, Therefore, media think tanks should introduce professionals while building and developing, Not only the communication talents who are well versed in media skills, Also includes R & D talent, Big data analysis talent, At present, the experts of media think tanks all rely on outside experts, It doesn't have its own think-tank talent, This leads to the instability in the development of media think tanks, Too much reliance on researchers from traditional think tanks, Not conducive to the development of media think tanks themselves, The development of media think tanks needs to be long-term, sustainable and professional, Talent is the founder of the development of media think tanks, Only the talent is gradually complete, The development of media think tank can develop steadily for a long time. Media think-tank in recruiting professional personnel at the same time, also should strengthen the training of the media itself, training media literacy and research literacy combination of compound talents, some public policy research experts can think-tank as the media of the development of the brain, but can not replace the media itself into professional media, a think-tank, if the media think-tank with external experts instead of their own personnel, then will make the nature of the construction of the media think-tank appeared deviation,

Media think tanks as a function of the media, It's not autonomous, It's about developing with external forces, In the later stage, media think tanks will become more dependent, Development will lag behind, Because of innovative development and independent production, Is the only way for the development of media think tanks, So when media think tanks are springing up, We should pay attention to the shortcomings of talents, Only by strengthening the weak links, Media think tanks can better fulfill their responsibilities, Put talent pool construction first, Compound media talents are the talent resources needed by media think tanks, Compound media talents directly restrict the product quality, development progress and policy research level of media think tanks, At the same time, it also indirectly affects the communication power and guiding power of the media.

2. Integrate the media resources and activate the all-media efficiency

Media resource integration is the adjustment, combination, allocation and sharing of media resources according to the internal connection of various resources and the principle of integrity and order. It should be pointed out that this kind of integration is not a simple collection of various resources in structure, form, function and sense, but maximizes various resources in the media system through agglomeration, reconstruction and optimization. Local media think tanks can make full use of their social media resources and platforms, improve

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the public opinion guidance mechanism, and give full play to their role in interpreting public policies, guiding social hot spots and spreading mainstream values. Media think tanks can also use big data to establish and improve databases, and on this basis, form a benign interaction with users, do a good job in the gathering of wisdom from all walks of life, timely play the role of public opinion supervision and early warning, and inject new impetus into the construction of network ideology. It spreads faster and is more effective. Can achieve accurate and 24 / 7 push. Lower cost, combined use and flexibility.
With the development of the Internet, there are full media, holographic media, full media and full-service media. At the 12th collective study session of the Political Bureau of the Political Bureau of the CPC Central Committee, General Secretary Xi Jinping explained the concept of "all media", believing that "information is everywhere, everywhere, and no one is everywhere". In the era of omnimedia, the media is not only the information provider and disseminator, but also can effectively integrate into the process of governance, and realize the optimization and improvement of governance efficiency and level.

3. Actively open up and cooperation, and coordinate professional resources
Compared with professional think-tank, media think-tank, although personnel diversity, broad research field, convenient transmission channels, but still far and the development of professional think-tank, professional think-tank has become the developed countries to provide reference of important information sources, is an important part of national soft power, strategic research and policy recommendations has become a professional think-tank service concept.
Media think-tank, the development of the independence does not represent the media think-tank from other think-tank, on the contrary, good cooperative relations can make the think tank achievement, and professional think tank cooperation can make up for media think tank power is weak, discuss building is and professional think tank cooperation to follow the principle, because discuss involves the interests of the middle, think-tank research should be in line with the attitude of impartial, and media think-tank and professional think-tank cooperation to guarantee the think-tank professional can also weigh the shortcomings of the parties, to produce high quality decision-making advice.
Cooperation between media tanks and professional think tanks, Include both a symmetric resource structure and a common decision value base, Both are important, With the increasing systematization of modern decision-making science, An ecosystem between different types of think tanks, The open research network is the principle of cooperation between media think tanks and professional think tanks, Resource sharing has become the allocation mechanism of media and professional think tanks, Both have their own rationality, But in response to the changing decision-making environment and the challenges of diverse decision-making, Media think tanks and professional think tanks combine their respective advantages to play their role together, Together to play active consultation providers and decision-making benchmarking.

Section 3 Strengthen the financial media strategy and improve the operation mechanism
In the era of media integration, the media strategy is mainly reflected in the expansion of new projects, the integration of media and the application of innovative technologies. In the era of media integration, local media think tanks can only strengthen the media integration strategy and improve the operation mechanism, and local media think tanks can better play their role. The following are three aspects to the analysis.


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1. We will deepen and refine the strategy of "data + public opinion + consultation"

With the deepening of the melting media, local media think-tank should pay attention to, network public opinion is not really public opinion, local media, a think-tank public opinion report can not accurately reflect the characteristics of network public opinion, in major events at home and abroad, netizens through the Internet, form the public opinion field, network public opinion has become the current government understand the main source of public opinion, but in the face of the network public opinion diversity, group polarization, network public opinion cannot represent the public opinion.

With the rapid development of information technology, data has gradually become a national basic strategic resource. Comprehensively promoting the development of big data is an important means to replace the old and new growth drivers of economic and social development. Local media think tanks should seize the opportunity of the development of big data. The rise of "wireless public opinion field" complicates the public opinion environment and poses new challenges to the monitoring of online public opinion. Among them, the rise of private WeChat circle of friends makes the expression of public opinion more secret, and the specific data is difficult to extract, which makes the difficulty of public opinion monitoring and research and judgment increased. The online public opinion industry that speaks with data has always been inseparable from the use of big data technology. However, network public opinion monitoring is no longer so simple to data capture and collection.

Industry experts believe that the deep integration of big data is not only to get a public opinion report, but also to pay attention to the relevance and regularity of public opinion events."To compare and summarize the horizontal public opinions in related fields and vertical diachronic public opinions, so as to provide reference for practical public opinion guidance and contradiction resolution, and provide decision-making consultation services for users. By deepening and refining the strategy of "data + public opinion + consultation", the functions and role of local media think tanks will be improved.

2. We will improve the operational mechanism for transforming and expanding the achievement system

The operation mechanism of media think tank is the basic criterion and corresponding system that guide and restrict decision-making and various activities related to people, finance and material. It is the general term for the internal and external factors and mutual relations that determine behavior. Various factors are interrelated and interact with each other. To ensure the real realization of the goals and tasks of media think tanks, a set of coordinated, flexible and efficient operation mechanism must be established. For example, the management mechanism, employment mechanism, financing mechanism and achievement promotion mechanism of media think tanks, etc.

Research results are the vitality of think tanks, and in the process of development, media think tanks should follow this principle, strengthen their own strategic planning ability and comprehensive research and judgment ability, effectively solve problems for the society and the public, and promote the development of the society. Promotion of the research results of media think tanks, There are the following problems that exist, First, the lack of emphasis on promotion, Without a deep understanding of the role of the media, The ideological results and ideological communication of media think tanks are the strong support for the development of media think tanks, In the process of building a media think tank, Most value the generation of ideas and relax the promotion of results, This goes against the original intention of building a media think tank, Building media think tanks is not to let the audience choose independently, but to actively provide information, Secondly, the results are still biased towards the traditional media in the process of passing through, The means and information flow channels are still very single, Too narrow information circulation channel will bring restrictions in the development of media think tanks. Attention should be paid to the expression of research results, which should be easy for the audience to accept, too professional discourse is not easy to deconstruct, and attention should be paid to enhancing their own interaction ability, so as to promote the transformation of their own achievements.

3. Relying on the financial media, deep communication and promotion channels

In the Internet era, how much the time for users to contact media and the types of beauty are far and scattered. Mobile terminal has changed the channels for users to obtain information. Wechat and Weibo are extremely convenient and relatively limited. It has become a habit of many people to pay attention to and send Weibo and wechat at any time. The rapid development of Weibo, wechat public accounts and mobile APP has also provided a technical platform for the communication channels of local media think tanks. At present, a considerable number of local media think tanks have opened microblogs, wechat public accounts and mobile APP to their audiences, making information exchange between media think tanks and users more convenient and access means more abundant. Local media think tanks should distinguish the primary and secondary relationship between traditional communication mode and new communication channels, rather than just regard new media as a simple supplement to the old communication mode. Different media have their own advantages, clarify their own goals and functions, and establish an integrated form. In the era of financial media, all kinds of media are integrated with each other. Local media think tanks should seize the development opportunities, deepen the communication and promotion channels, promote their own achievements, and make a good lookout for The Times.

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Nowadays, the main body of the competition between countries is no longer the competition of natural resources, but to the competition of soft power. As a combination of information industry and consulting industry, media think tank is easy to integrate human resources, capital and market. From the perspective of development trend, media think tank, as the special subject of thought output and thought circulation, will certainly become an effective starting point for the competition between countries and enterprises.

Media convergence has led to the transformation of the communication structure and function of the media. At the present stage, the support of national policies and the construction of new think tank and media think tank with Chinese characteristics as the product of integration in the period of the transformation period, is the process of gradual convergence and integration of the two communication subjects, think tank and media, in their respective development process.

Local media think-tank in the construction of the new think-tank with Chinese characteristics, has the particularity, this paper selects local media think tank construction, is to find out the advantages and disadvantages in the construction of local media, because with the continuous development of The Times, the national and social demand for think-tank, complex variable information environment led to the disorder of public opinion in the media environment, to the government and the public decision. Media think tanks can monitor the public opinion environment and facilitate government decision-making. Similarly, local media think tanks are also an important reference basis for government decision-making and an important channel for the government to understand social conditions and public opinion. However, in the construction of local media think tanks, due to their weak strength and the initial stage of development, there are many pain points and weaknesses, and the basic construction of some local media think tanks still needs to be improved.

For now, the development of the media think-tank, existing diversification, information diversification, achievement opportunities such as facilitation, also facing internal and external pressure and administrative constraints, homogeneity trend, thinking innovation bottleneck challenges, in the face of think-tank rapid development, we need to calm down, calm thinking a media think-tank construction faces many challenges, in-depth analysis of the significance of the construction of media, a think-tank. There are still many imperfections in this paper. In view of some deficiencies in the research process, I will gradually improve them in the future study and research. I will continue to pay attention to the research of local media think tanks and look forward to the better development of local media think tanks.

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**077-066**

# INFODEMICS AND THEIR IMPACT ON COVID-19 THROUGH SOCIAL MEDIA

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## ABSTRACT

This article discusses how false information and news pertaining to COVID-19 swayed people's opinions and impacted the society. The COVID-19 epidemic and its consequences impacted every continent, as all the countries were put on lockdown, and individuals were stranded at home browsing through social media. Digital media had a great deal of success and gained widespread acclaim throughout the three years of COVID-19. Applications for social media like YouTube, Facebook, Instagram, Twitter, TikTok, and others began to have a huge global influence. Social media platforms grew in prominence as a means for influencers to upload videos, earn enormous money, and achieve notoriety during this time of lockdown. However, influencers were disseminating false information and data across a variety of social media platforms by exploiting phony facts and analytics.

These significant impacts started the uprising of spreading misinformation throughout all social media platforms all around the world. This caused many people to be trapped and believe that the fake news was real news. Social media has the capability to convince and manipulate the minds of people, as people tend to spend their spare time watching social media. In the past, there have been discussions, arguments, and comments about false information on all social media sites. The false information during COVID-19 include cures, vaccination, and avoiding wearing masks in public areas, etc. which caused problems and havoc amongst the people. People have suffered from various health issues and physical ailments because of this inaccurate information, and some have even lost their lives because of social media misinformation. For instance, in the USA Chloroquine were considered as a cure and many who used it had a negative impact and some even died as a result of it. Few nations have incorporated Chloroquine in COVID-19 treatment guidelines or as an extreme intervention for individuals with a severe likelihood of mortality based on published research.

Based on the findings of the impact of social media during COVID-19 pandemic, it can be concluded that the public should be more careful while reading, watching, or spreading information. This would also create a sense of responsibility for those who spread false information. The government should take a very stringent approach to dealing with false information on social media.

## INTRODUCTION:

A significant change in the manner in which we conduct ourselves, perform our jobs, and interact with each other was brought about by the COVID-19 epidemic, a worldwide calamity that had never before occurred. Our collaborative dependence on digital platforms increased as the world struggled with restrictions, curfews, and social isolation measures. Social media

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became a digital lifeline that kept us connected to relatives, close friends, and some sort of routine in spite of the lack of physical contact. People all across the world discovered that they utilized greater amounts of time on social networking sites compared to ever before, looking for knowledge, comfort, and relationships in the virtual world.

When physical distance became commonplace, online communication channels that had previously been an instrument of amusement, conversation, and information exchange unexpectedly turned into vital resources to the rest of the world. Due to orders to stay at home, many individuals have resorted to online platforms for relationships and enjoyment. Numerous individuals are kept in isolation at their homes or in medical facilities. Social media may be a useful tool for finding information and for staying up to date with additional knowledge sources of information, such as news about the COVID-19 pandemic (Lelisho et al., 2023). Social media was not only an efficient basis of knowledge, but also provided other useful information by educating people in order to prevent new viruses and save lives. Prior to the COVID-19 pandemic, there were over three billion frequent social media viewers. Ever since the COVID-19 outbreak began, there was a considerable increase in the amount of time that was spent on social media, in which social media influencers began to share information on the COVID-19 pandemic. Through the use of online social media sites like Facebook, Instagram, and Twitter, people may connect with one another around the world and share COVID-19 writings, documents, and studies. During the epidemic, the younger generation mostly adopted a web-based lifestyle. Previous research found that students learned academic material in addition to COVID-19-related material by using an array of online social networking apps, including YouTube for learning for oneself, the WhatsApp platform for sharing documents, knowledge, and discussions, and Zoom, Skype, and Meet on Google for conference calls to hasten learning. The usage of video conferencing tools has become commonplace as well as to text communication to foster interactions among teachers and students (Chowdhury et al., 2023).

Direct distribution of crucial COVID-19 advice through government agencies proved difficult during the outbreak. Television, a number of websites, social media, and especially Facebook and YouTube all had a significant impact on spreading health information and sustaining people informed about the epidemic. Social media sites provide individuals immediate access to an unparalleled volume of content and have the potential to spread unreliable data and misinformation. Twitter is becoming a more significant player in the spread of medical knowledge (Chowdhury et al., 2023). There is growing evidence that a work that receives a lot of attention on this social networking site may be of excellent quality, which may subsequently be the subject of discussion in journal-club discussions and an online peer assessment procedure after publication that may help with retractions. The epidemic has been helped by knowledge posted via social media about basic health precautions, mask usage, keeping social distance, sanitation of hands, and shutdowns.

In addition to being a serious worldwide health emergency, the COVID-19 epidemic of the twenty-first century was also characterized by an unparalleled infodemic—a flood of false information that has permeated our digital lives. As the globe struggled to contain the virus that was fatal, a second, equally pernicious infection expanded at a startling rate: untruths, conspiracies, and pseudoscientific assertions about the virus, its causes, and its cures. The rapid spread of news over social media channels in the age of technology has allowed for misrepresentation to proliferate and cause uncertainty, disorientation, and even terror among populations all over the world. Theorized conspiracies, which hold that a tiny number of individuals are covertly working against humanity and that major events like a COVID-19

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outbreak are manipulated by them, are perhaps the most severe kind of false information (Zimmerman et al., 2023).

Numerous social media individuals rushed to their individual channels as further information about COVID-19 spread to discuss a wide range of conspiracies. These conspiracy theories have a significant effect on people's behavior and reduce the overall effectiveness of COVID-19 restrictions that have been put in place by governments. One of these theories focused on how the COVID-19 epidemic and the launch of the wireless communication system coincided. Users speculated that the widespread transmission of COVID-19 was caused by the 5G network. Various conspiracies about possible remedies such drinking boiling water, urine from cows, or chloroquine have been going around (Joseph et al., 2022). Numerous social media individuals rushed to their individual channels as further information about COVID-19 spread to discuss a wide range of conspiracies. These conspiracy theories have a significant effect on people's behavior and reduce the overall effectiveness of COVID-19 restrictions that have been put in place by governments. One of these theories focused on how the COVID-19 epidemic and the launch of the wireless communication system coincided. Users speculated that the widespread transmission of COVID-19 was caused by the 5G network. Various conspiracies about possible remedies such drinking boiling water, urine from cows, or chloroquine have been going around (Joseph et al., 2022).

As a result, individuals started disseminating knowledge regarding COVID-19 through all accessible channels for interaction, online as well as offline (which offline communication was just before the lockdown of the COVID-19 pandemic). However, the COVID-19 epidemic brought to light a crucial problem in the knowledge landscape: the quick spread of data on social networking sites and other electronic mediums, sometimes without a solid scientific foundation (Coman et al., 2022).

This article explores the complex terrain of disinformation surrounding the COVID-19 a global epidemic, looking at the most common myths, the conditions that led to their dissemination, and the significant effects they had on society trust, health for all, and the pursuit of truth in a time filled with data overload.

## COVID-19 MISINFORMATION AND FAKE NEWS ON SOCIAL MEDIA:

Misinformation during the COVID-19 pandemic became such a big problem, due to many false data and facts, and many false conspiracy theories that began to arise during the pandemic. Since COVID-19 has brought the world to a lockdown state, all of this false information and false conspiracy theories began to spread online through social media. This false information and beliefs are extremely complicated to change the minds of the people. This leads to many false information made without any information or data to prove that it is true information, one of which is:

a. False information on COVID-19 vaccine: Users who publish false information about vaccinations on social media have the potential to distribute it widely, escalating vaccine skepticism and raising vaccine fears. This endangers public health and thwarts worldwide efforts to avoid disease through vaccinations. According to a new study, those who consume vaccine material on social media are more likely to be uninformed and be skeptical about vaccinations (Ngai et al., 2022). Previous research has shown proof of COVID-19 disinformation on social media. Examples of this include the fact that there

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were more opposed to vaccinations tweets than pro-vaccine tweets, and that against vaccinations films were more inclined to be found on YouTube. Misinformation concerning the safety of COVID-19 vaccinations has a powerful hold on the minds of individuals because it develops on the basis of previous anxieties, feeds skepticism and a negative attitude toward innovative vaccines, and prevents individuals from becoming vaccinated. There is a strong association between the amount of false information spread via the internet and the inability of vaccination programs to immunize the greatest number of individuals since the population as a whole has started to put an increasing amount of trust in social media. Anti-vaccination organizations bring attention to the harm caused by vaccines and raise questions about their safety. These organizations distribute false information about the vaccine's ineffectiveness and charge pharmaceutical firms with hastening the licensing procedure for vaccines. Social media is the most effective channel for these groups, and during the past ten years, the general usage of social networking sites has sharply increased (Gudi et al., 2022).

The relationship between antivaccine inaccurate information and vaccine unwillingness has been extensively studied, but more research is needed to fully understand the particular subject matter topics of debate surrounding antivaccine misunderstandings regarding COVID-19, the way these subject matter topics are expressed through language through the application of among particular techniques for writing, and the way these concepts influence social media popularity. Without taking into account a variety of writing techniques used to spread these kinds of messages and the usage of social networking sites, prior research has mostly focused on material topics linked to disinformation and their connection with vaccination hesitancy through questionnaires and experimental investigations (Ngai et al., 2022). Studies frequently ignore the application of such tactics in disinformation against vaccines. The investigation of language itself, such as figuring out the manner in which concepts are expressed via the application of expression tactics, is essential in order to fully comprehend the false information that is discussed on social networking sites because the public establishes and gathers implications from messages posted on social media. According to a research study, there were a couple of strategies that were noticed that was used by social media influencers in order to manipulate the minds of the public and viewers with misinformation and fake news. This study claims that there are three ways of understanding the art of language and the method of communication used in sharing and spreading the idea of misinformation through social media. The first is safety concerns, followed by conspiracy theories and lastly efficacy concerns.

i. Safety concerns: According to studies, vaccination reluctance is mostly a result of worries about vaccine security. Information that casts doubt on the safety of vaccinations is characterized as such. This might include claims that immunizations are dangerous or even fatal without conferring protection. Misinformation shared on social networks, especially the idea that COVID-19 vaccinations were produced rapidly and are thus hazardous and that all of the adverse effects have not yet been researched, has heightened this fear (Ngai et al., 2022). This misinformation about safety concern consists of variety of fake concerns that are shared and spread across the social media. One of the issues is the eroding of public confidence in vaccination initiatives and medical professionals due to security worries around vaccinations. People may start to doubt the validity of the health care system when they meet assertions that vaccinations are hazardous. In areas with a long tradition of healthcare unfair practices, where suspicion regarding vaccinations is already pervasive, this

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mistrust can have an especially negative impact. Another fabricated safety anxiety is Emotional Effects, which refers to how false information suggesting that vaccinations are dangerous or even fatal can arouse powerful feelings, especially dread. These emotional responses may affect individuals' choices and lead to vaccination reluctance. Even if the chances of injury are extremely low, parents could be reluctant to vaccinate their kids if they feel there is a danger of harm. When security concerns about kid vaccines are of special concern, since parents are frequently the ones making the choices for children who need immunizations, misconceptions about the psychological consequences of vaccine reluctance might contribute to parental worries. Parents may put their child's alleged security before the possible advantages of vaccination when they hear assertions about vaccine dangers, which can lead to vaccine reluctance and falling rates of vaccination.

ii. Conspiracy theories: Exposure to misleading data on social networking sites is linked to conspiracy theories. This topical theme offers particular theories about conspiracies, which may include accounts of untrue allegations that vaccines contain poison and microchips, deception, conspiracy among pharmaceutical businesses, authorities, and physicians, and the manipulation of vaccine effectiveness information by the pharmaceutical industry in order to increase their profits. Conspiracy theories have been linked to vaccination hesitation and uptake, according to a growing body of research. The reported safety of vaccines as well as readiness to get immunized were inversely correlated in the United States with belief in COVID-19 conspiracy claims (Ngai et al., 2022). Conspiracy theories may be spun into a variety of tales, such as how vaccine-related conspiracies enhance already-present worries and anxieties. People who already have reservations about vaccinations may be more prone to speculative beliefs that bolster their reservations. These stories might confirm people's preconceived views and give them a false feeling of justification for refusing vaccinations. These public fear instilling ideas have the potential to subsequently arouse powerful emotions like wrath, dread, and mistrust. They portray vaccinations as a potential threat by alleging that they include microchips, poisons, or other dangerous substances. Because individuals are prone to avoid situations they see as an imminent danger to their health, this fearmongering may cause them to be reluctant to receive vaccinations. The widespread conviction in these stories can lead to the formation of social circles and online groups around such conspiracies. These networks constantly promote false information, which fosters a sense of community and solidarity among those who share the same viewpoints. Because people are impacted by the opinions of others on social media, this social cohesiveness can be a significant factor in COVID-19 vaccination resistance. Therefore, these conspiracies frequently dissuade people from adhering to advised public health recommendations, including mask use, social withdrawal, and most crucially, vaccination reluctance. By downplaying the severity of the illness, this failure to comply can enhance viral transmission, impede attempts to contain the global epidemic, and further encourage vaccination hesitation.

iii. Efficacy concerns: This content topic emphasizes that vaccinations are unneeded and inefficient, and that there is a higher prevalence of the disease following immunization. For instance, it's thought that receiving the vaccination increases a person's risk of contracting COVID-19 rather than avoiding illness (Ngai et al., 2022). Doubt and reticence about immunization efforts have been largely sowed by statements that COVID-19 medications are unneeded and ineffectual. Public health

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activities aimed at managing the worldwide epidemic have been undermined by these misleading narratives, which have led to vaccination reluctance in a number of ways. This effectiveness problem causes doubt in both groups of the community: the people who take vaccination and people who are afraid to take vaccination. The fear may cause doubt on the people who take vaccination, causing them to question reality to whether or not is COVID-19 vaccine effective, whereas it causes complete lockdown on the people who are afraid to take vaccines if fake news or misinformation are their first observation on social media. There are ways in which the fake news on COVID-19 efficacy concerns spread across the social media, such as Incorrectly interpreting the information: selected or incorrect interpretations of the data are frequently the foundation of false information. Some statements could highlight particular incidences of "breakthrough infections," in which vaccinated people get the virus, without realizing how uncommon these occurrences are. This deception might give the impression that vaccinations are ineffective while, in fact, they are successful in lessening the extent of the illness. Providing fictitious information for comparison regarding the effectiveness of vaccines and acquired protection is another method. Notwithstanding scientific data demonstrating that vaccination is a more trustworthy and secure means to gain protection without the hazards linked to spontaneous infection, one may argue that those who have previously contracted COVID-19 are more fortunate compared to those that have received the immunization. This may eventually result in a sizable section of the populace doubting the effectiveness of vaccinations, which may reduce the adoption of vaccines. This not only jeopardizes people's health but additionally hinders the development of collective immunity, as vaccinations can only be successful if a certain percentage of the general population receives them.

## SOCIAL IDENTITY THEORY:

Social identification refers to a person's propensity to deeply connect with the communities that they are a part of, fusing communal identity with the individual. This psychology theory highlights the significance of an individual's sense of social self and affiliation with a group in influencing their ideas, views, and actions. It was created by Henri Tajfel and John Turner in the 1970s. Solid identities within society aid in a person's sense of purpose and belonging in the world. People are driven to believe and spread material that promotes their in-group and disparages their out-group in order to preserve a good social identity. A few members of a group may be driven to look for or accept information that reaffirms their group's superiority when circumstances endanger the image of their in-group, even if such data is questionable (Robertson et al., 2022). This theory well explains that any particular person who feels very well belonged to a particular group will believe that whatever the leader of the group claims or what that particular group believes is said to be true.

The concept of social identity is useful in understanding why people are easily misled by misleading data as well as how it could bolster current dynamics of group in the setting of the COVID-19 epidemic. The idea of in-group prejudice and out-group favoring is central to social identity theory. Individuals frequently support and connect with their fellow in-group due to common connections, principles, or goals (Leonard, 2018). This suggests that people may be more inclined to embrace and disseminate data that supports the views and convictions of their peer groupings in the setting of COVID-19 disinformation. Since it

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strengthens the sense of belonging and cohesiveness of the in-group, false information that validates previous prejudices or beliefs is frequently more widely disseminated.

The importance of social categorization—the process by which people divide themselves and other people into different groups—is highlighted by social identity theory. This division may result in a sense of "we versus. they." This split might appear in relation to the COVID-19 pandemic to encompass those who take advised health precautions and treat the virus carefully (the in-group) vs those who minimize its importance (the out-group). Since false information strengthens the story that surrounds the in-group and validates their identity, it is frequently used as a weapon to further split these organizations.

A conspiracy theory is characterized as a single, top-secret plan by a few influential people to get unjustified control over the system of government, finances, or various other organizations. A network of connected conspiracy theories makes up a large number of popular hoaxes. These belief structures produce mythologies about malicious, hostile out-groups and unfairly victimized in-groups of individuals. Since theories about conspiracies are frequently indisputable and lessen the guilt or failure assigned to their organization, they are a good tool for mitigating identity-related risks. In fact, conspiracies have a greater probability to be believed by voters whose party of choice lose the election in question. Thus, some of the ideas included in conspiracies could render them particularly appealing to social identification drives, such as emotions of group power, by spinning tales whereby the strong and evil outgroup is blamed for bad outcomes rather than the ingroup (Robertson et al., 2022).

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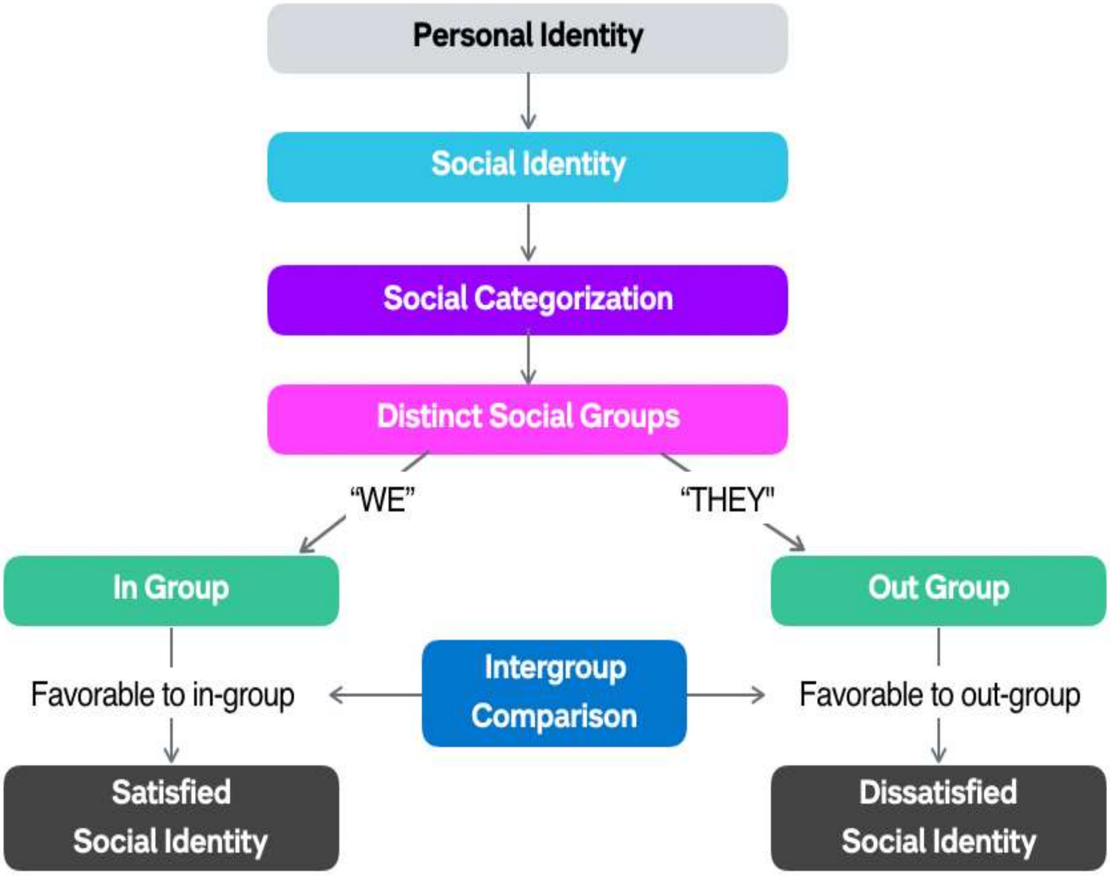
**Figure 1: Framework of Social Identity Theory**




In social identity theory, the idea of in-group as well as out-group movements is fundamental. Individuals instinctively assign themselves and other individuals to social groups according to common traits or connections. This classification may give rise to a feeling of inclusion in an in-group that frequently has similar values or perspectives. Conspiracy theories around COVID-19 have a tendency to support and enhance this sense of belonging. Conspiracy theory supporters are far more inclined to stick to and advance their idea because they have a greater feeling of connection to a community that supports their beliefs. In addition, a crucial component of social identity theory is the existence of an outgroup (Robertson et al., 2022). An out-group is seen as distinct and occasionally as a danger to the essence or ideals of the in-group. A common feature of conspiracies is the demonization of an outgroup, that can help the ingroup become more united. Those who subscribe to these beliefs could reinforce their sense of community and loyalty with their In-group by viewing oneself as "well-informed or activated people who stand in contrast to the purported conspirators.

COVID-19 conspiracy beliefs also use concepts from the concept of social identity, such as in-group favoring and out-group rejection. People frequently harbor animosity toward people from other groups while favoring their own. In these beliefs, the out-group (such as government organizations, hospitals, or specific people) is sometimes portrayed as evil players in a covert scheme. The in-group's devotion to the conspiracy idea is strengthened by this narrative, which serves to preserve a sharp division among "us" versus "them."

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Furthermore, the idea of social identity sensitivity is quite important. Social identity significance is the degree to which a person's self-concept emphasizes their participation in a certain group (Robertson et al., 2022). People are more inclined to reject data that contradicts their group's identification and seek out knowledge that supports it if their social grouping is extremely salient. Given that COVID-19 conspiracy beliefs fit with the preexisting paradigm of their group, people who are particularly associated with one specific in-group might be far more inclined to embrace and disseminate these beliefs.

## IN-GROUP BIAS OF MISINFORMATION ON COVID-19: SOCIAL IDENTITY THEORY:

People are classified and, thus, differentiated for a multitude of causes in every part of society. Individuals vary in their roles, talents, living situations, wants, and ambitions, thus it happens in daily life and is necessary for the functioning of groups and the structure of society. Differentiating among groups of individuals is frequently useful and pertinent, but it also serves as the foundation for ingroup prejudice starting at a young age (Verkuyten, 2021). Knowledge the dissemination of false information regarding COVID-19 on social media requires a knowledge of partiality within an in-group, a notion connected to social identity concept. The propensity for people to prefer members of their own social groups—those alongside where they identify—over out-groups—those who are viewed as distinct—is referred to as this bias. In the case of disinformation about COVID-19 on the internet, prejudice inside the in-group may have a big impact.

First of all, those who have a strong sense of belonging to a certain in-group—be it political, intellectual, or cultural—are more inclined to embrace and disseminate knowledge that supports the principles and views of that group. People may become more susceptible to bogus news that supports their group's interpretation of the epidemic as a result of this bias (Craig & Sadovykh, 2022). An individual might be more likely to trust and spread deceptive data that favors a political organization that disregards the seriousness of the virus, for example, if they have a strong personal connection to that organization.

Furthermore, this bias may cause information that challenges the views of the in-group to be rejected. People who are prejudiced in favor of their in-group may reject details about COVID-19 as a component of an elaborate scheme or as false information propagated by out-groups, regardless of whether they are provided with reliable and accurate facts. Confirmation prejudice serves to validate prior opinions, which makes it difficult for people to assess the veracity of information objectively (Craig & Sadovykh, 2022). Echo networks on social networking sites can also be formed as a result of in-group prejudice. These virtual echo chambers are places where people who have similar views converse and support one another's opinions. Echolocation sites are hotbeds of false information that quickly propagate when it comes to COVID-19 disinformation. Within these channels, individuals of the in-group may spread erroneous information and receive reinforcement as well as encouragement from their peers, strengthening their dedication to the misinformation.

According to the social identity theory, people are driven to think favorably of their own group because they want to feel good about themselves as a group: Favorable identity is influenced by demonstrating the beneficial uniqueness of one's own group in comparison to other groups, a phenomenon known as ingroup bias (Verkuyten, 2021). In the setting of COVID-19 false news, one of the greatest alarming characteristics of in-group bias is its ability to fuel extremism and divisiveness. It gets harder to have productive conversations when people get more firmly rooted in their in-group identities and less receptive to information that contradicts them. Real-world repercussions of this division might include opposition to immunization campaigns, disregard for public health recommendations, and a worsening of the epidemic.

In addition, disregard for health care recommendations is among the most serious and direct effects of this split. People are more unlikely to follow important safety precautions like wearing face masks, social distance, and lockdown limitations when they have a strong connection as belonging to an in-group that downplays the seriousness of the global epidemic or rejects particular health initiatives. This negligence may endanger public health by facilitating the virus's ongoing spread (Craig & Sadovykh, 2022). Another effect of vaccination attempts is resistance. COVID-19 vaccinations have frequently become the center of divisive discussion. People who associate with in-groups that oppose vaccination could be less likely to get the shot, which might delay the pandemic's progression and prevent collective immunity from being achieved.

## CONCLUSION:

The fast spread of knowledge on social media has contributed to the growth of infodemics, which has had a significant and far-reaching effect on the COVID-19 pandemic's control. This occurrence has shown how crucial it is to have trustworthy information, to be scientifically literate, and to behave responsibly when using the internet. Infodemics, which are defined by the dissemination of inaccurate data, fabricated news, and theories about conspiracies, have hampered attempts to promote public health, widened societal gaps, and had practical repercussions including vaccination reluctance and failure to comply with safety precautions. The widespread dissemination of false information and misleading news about COVID-19 via social media channels has been a significant obstacle to public health initiatives. Misinformation, whether deliberate or unintentionally disseminated, has played a role in creating disarray, anxiety, and disregard for essential public health protocols. Recognizing how people's identities as part of groups, connections, and in-group prejudices affect their views, opinions, and actions has been made easier with the help of social identity theory. This theory emphasizes how social identity shapes how misleading information is received and spreads in the setting of COVID-19 and misinformation. One of the major ideas of the concept of social identity, in-group bias, has significantly influenced the dissemination of false information about COVID-19. People are influenced by this tendency to favor the views of their in-group and to be more receptive to information that challenges the assumptions of their peer group. In the wake of the epidemic, this has resulted in the development of social networks where people who have the same beliefs are more likely to accept and spread bogus news. There are observable effects of in-group prejudice, such as heightened polarization, disregard for public health recommendations, and opposition to immunization campaigns.

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**079-068**

# BATTLE OF ONLINE COMMERCE: CONSUMERS' PREFERENCES TOWARD ONLINE SHOPPING PLATFORMS (E- COMMERCE VS. SOCIAL MEDIA)

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## ABSTRACT

The study of consumers' preferences and their implications to actual purchase behaviour has always been an interesting and challenging yet elusive task in commerce. It's profound need for researchers as well as marketers to understand consumers' preferences and purchase intention especially while purchasing on each platform such as e-commerce platform and social media platform. This study identifies and explore the main factors that influence and determine consumers' preferences and subsequent intention to purchase products on each platform. Using a quantitative method of convenience sampling of young adults in Perak, a sample of 138 respondents studying in local universities were used. Data was collected using a structured questionnaire with a five-point Likert scale, which was adapted from previous research studies. The findings of the study reveal that advertisement, perceived quality, perceived price, and perceived risk were found to have a significant influence on preferences as well as the purchase intention. Further, the relationship of these factors with preference and purchase intention on each platform was also found to be influenced by various demographic variables.

Keywords: Online shopping, E-commerce, Social Media Marketing, Online shopping preference

## INTRODUCTION

In the past decade, online shopping platforms have enjoyed outstanding growth around the global world. E-commerce has become one of the most crucial elements in this Internet era. According to Export.Gov in 2019, fifty percent of the population in Malaysia, approximately 16.53 million are online shoppers, with 62 percent of the mobile users used to shop online through their devices. Advertisers, anthropologists, and academic scholars have historically demanded to investigate consumers' preferences because attitude is perceived to be strongly associated with one's desires, which is an appropriate indicator of behavior. Consequently, research on preferences will help in further understanding and predicting the way consumers react to a certain product or service (Fishbein & Ajzen, 1975). From a consumer behavioral perspective, consumer satisfaction is constantly being evaluated from different factors in different ways. This perspective will be affected by the decisions made by the consumers, from perceived product quality, perceived product value, perceived risk, price consciousness, and their preferences. For instance, when engaging in perceived risk, although there is a risk of scams and fake products on both platforms, however, the customer service of the e-commerce platform provides a proper procedure for refunding or returning products.

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Conversely, inexperienced merchandisers on social media platforms might not have an appropriate concept on the related plan of action. Consumers are most likely to purchase products and services on which they have a favorable attitude. A favorable attitude toward a brand is often the manifestation of repeated satisfaction with the same company's product. As a result, developing a favorable attitude toward the products and services is a crucial approach for all companies. From a marketer's perspective, it is critical to recognize the attitudes of consumers for the brand to succeed. To explain in short, consumers' views toward a product, service, or advertisement are affected by a range of sources of information about the product or service.

Previous research has made major contributions to our understanding of the complexities of the field in online shopping. There is, however, a lack of consistent analysis of the effect on online shopping platforms of relevant variables on consumers' preferences. This makes it difficult to compare various tests, implementations, restricted scientific outcomes, as well as the possibility of synthesizing and implementing analytical literature in this field is far from certain. Therefore, the objective of this research study is to further investigate the conceptual framework of the factors influencing consumers' preferences between social media platform (Facebook and /or META) and e-commerce platform (Lazada).

## OBJECTIVES

This research tends to understand the relationship between the advertisements, perceived quality, and consumers' preferences on online shopping platforms. This research investigates the online shopping platforms' preferences of consumers on social media platforms and e-commerce platforms.
RO1: To study the relation of perceived quality towards consumers' preferences amongst undergraduates on shopping platforms.
RO2: To study the preferences of consumers towards online shopping platform focusing on undergraduates.

From the collected data, business marketers able to understand that whether their target consumers more prefer e-commerce platforms such as Lazada and/or social media platform such as Facebook/META. Thus, the marketers able to focus more on the specific platforms with more effort. In an addition, the research provided a framework that demonstrates how the independent variables; advertisement, perceived quality are able to influence the consumers' preferences on online shopping platforms. Hence, the outcome of this study validated the theory of reasoned action.

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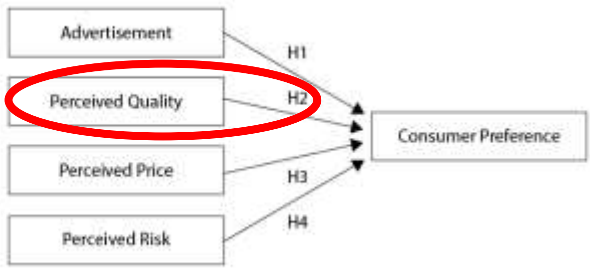
**Figure 1: The framework shows the relationship between the independent variables (perceived quality) and the dependent variable (consumer preference).**




## METHODOLOGY

This study employs a quantitative study using a structured survey on a five-point Likert scale with a sample size of 265 respondents using adoptive convenience sampling. Respondents were from the population of undergraduates presently enrolled in the Universiti Tunku Abdul Rahman (UTAR) in Malaysia. The items tested consist of advertising in online platform, perceived quality, and consumer preferences along with basic demographic information. This study will mainly focus on the consumer preferences of online shopping platforms within Malaysia. The online shopping platforms that are chosen for this study are Lazada that represent the regular e-commerce platform and Facebook representing social media platform. The study focuses on descriptive analysis and correlational studies between the variables using SPSS Statistic 23. Pearson correlation was used to determine any significant relationship between RO1; perceived quality and RO2; consumer's preference.

## FINDINGS

**Table 1: Correlation Analysis between the Advertisement, Perceived Quality and Consumer Preference of Online Shopping Platforms**

| | (1) | (2) | (3) |
|---|---|---|---|
| (1) ADVERTISEMENT | 1 | .623* | .457* |
| (2) PERCEIVED QUALITY | .623* | 1 | .512* |
| (3) CONSUMER PREFERENCE | .457* | .512* | 1 |

**Notes:** *Correlation is significant at the 0.05 level (2-tailed).

As the analysis displays, there is a significant relationship between advertisement, perceived quality and consumers' preferences towards online shopping platforms is supported determining the proposed objective 2 (RO2): There is a significant relationship between perceived quality and consumers' preferences towards online shopping platforms is supported with significantly positive correlation [$r = .512^{**}$, $N = 265$, $p < 0.05$].

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**Table 2: The Frequency and Percentage of the Respondents Preference of Online Shopping Platforms**

| Preferred Platform | Frequency (N=265) | Percentage (%) |
|---|---|---|
| FACEBOOK | 60 | 22.6 |
| LAZADA | 88 | 33.2 |
| OTHER | 117 | 44.2 |

The respondents chose the option of "Other" is the major group in this survey which has number of 117 (44.2%). According to the respondent's feedback, their "Other" platforms are Shopee, Taobao, Carousell, Mudah which all are classified as e-commerce platforms. These platforms are all application that helps to provide the firms a place to set up and operate an online store in the Internet world (Deshpande, 2019). These platforms have the same function with Lazada that are mainly used for online selling and purchase. Although Lazada is not the first choice as the e-commerce platform for most of the respondents, but the result still shows that most of the respondents prefer to have the online shopping at e-commerce platforms (Lazada and others) compared to the social media platforms (Facebook/META).

## CONCLUSION AND RECOMMENDATION

The findings of the study concluded that consumers preferred an e-commerce platform in comparison to social media platforms when purchasing online. This can be seen in their selection with a higher percentage of e-commerce platforms. In understanding the relationship between the preferences and perceived quality it can be concluded that perceived quality plays a crucial role in the formation of consumers' preferences towards online shopping platforms which are consistent with previous study such as Vasić et al. (2019). According to the research, it is revealed that the quality of products and services demonstrated a positive impact on consumer satisfaction. As it has shown within this study pertaining to undergraduates it is determined that online retailers should deliver consistent product quality. It is especially central when one considers that a consumer cannot personally evaluate product quality but must instead rely on information and offers found on a platform. Similarly, this result confers with Yee and San's (2011) discussion that consumers evaluate a products or service's quality based on the informational measurement consisted of physical and extrinsic characteristics. It can be mentioned that perceived quality focuses more on product and service specifications. Relatively, the consumers build their expectations based on the platform offer; if these expectations of service are achieved, consumers will be satisfied and will continue to purchase product on that online platform. As digital marketing strategy is inevitable in this modern era, not only does it build up brand awareness and create good relationship between brand and consumers, but it is also important for marketers or online retailers to evaluate the consumer preference on which platform (Facebook/META and Lazada) to conduct online shopping. The marketers and online retailers can obtain insight needs of consumers through these platforms to increase revenues. Therefore, they can invest their digital marketing on the platform which attracts more consumers.
This research provides an insight of consumers' preferences toward online shopping platform in which Lazada is representative of E-commerce platform and Facebook/META is a representative of social media platform. There are a few limitations to this study as it only focuses on a certain type of sample and population targeting undergraduates from Universiti Tunku Abdul Rahman (UTAR). Future research may broaden the population type and size to enrich data set and understand a wider understanding of consumer preferences.

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**Marketing**

**014-008**

# GOLD GALORE SDN BHD: BUSINESS EXPANSION

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## ABSTRACT

Gold Galore Sdn Bhd was a 100% Bumiputera holding company. It was incorporated in Malaysia on 26 November 1994 with the company number 324 766-K, as determined pursuant to Section 16 (A) of the Companies Act 1965. Gold Galore Sdn Bhd was incorporated to do business and trade on gemstone, gold, silver, and other precious and valuable items. Gold Galore Sdn Bhd was set up at a rental space first in City Point Alor Setar, the most famous shopping mall in Alor Setar during that time. Since then, the shop was renovated and started selling gold related products. From 1995 till 2013, Gold Galore Sdn Bhd managed to open another three gold shops in North Kedah which were located at Jitra, Langkawi and Pendang. Each of these branches had its own management team led by the couple' children. Hajjah Maimunah and Hj Mohd Asnawi used their own money as capital for branches in Jitra and Langkawi. The other branches in Pendang were funded by PUNB under Prosper scheme. Thanked to the care and insight into the pair, Gold Galore now led by the children of the couple, Mrs. Yasneen Deanna, Mr. Yusri Danial, and Mrs. Yasmeen Damia. Generally, Gold Galore provided services such as sales, orders, repair, purchase old gold, advisory services for wedding packages and services do not miss out on wholesale or bulk-selling 'to the middlemen and small shops nearby. Gold Galore sold many forms women and men jewelry comprising yellow gold, white gold, gemstones, silver, bronze, and crystal. In addition to offering the services provided, Gold Galore also become dealer for gold sale package for Cooperative Teachers Malaysia (KOGUMA), and Koperasi Pegawai-Pegawai Kerajaan Negeri Kedah. Members of those two bodies were easily buying gold related products through special scheme introduced and agreed between those two managements.

Keywords: Business expansion, consumer analysis, competitor analysis, market analysis

**075-064**

# THE ROLE OF UNIQUE SELLING PROPOSITION AND PRICE ON BUYING DECISION WITH BUYING INTEREST AS AN INTERVENING VARIABLE (Case Study of Mie Balap Pecicilan Consumers in Bandar Setia Village)

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## ABSTRACT

The author's aim in conducting research is to determine the influence Unique Selling Proposition To Buying Decision, to determine the influence Price to Buying Decision, to determine the influence Unique Selling Proposition to Buying Interest, to determine the influence of Price on Buying Interest, to determine the influence of Buying Interest on Buying Decision, to determine the influence of Unique Selling Proposition on Buying Decision through Buying Interest, and to influence Price on Buying Decision through Buying Interest in Mie Balap Pecicilan Bandar Setia Village. The approach used in this research is an associative approach. The population in this study were all Mie Balap Pecicilan customers in Bandar Setia Village. Meanwhile, samples that meet the sampling criteria for observation are carried out using Non-Probability Sampling. The data collection technique in this research uses a questionnaire technique. The data analysis technique in this research uses Path Analysis, Partial Least Square (PLS) and Hypothesis Testing.

Data processing in this research uses the SmartsPLS software program. Unique Selling Proposition Has a Significant Influence on Buying Interest. Price has a significant influence on buying interest. Unique Selling Proposition Has a Significant Influence on Buying Decisions. Price has a significant influence on buying decisions. Buying Interest Has a Significant Influence on Buying Decisions. Unique Selling Proposition Has a Significant Influence on Buying Decisions Mediated by Buying Interest. Price Significant Influence on Buying Decision Mediated by Buying Interest.

Keywords: Unique Selling Proposition, Price, Buying Decision, Buying Interest

## INTRODUCTION

In Indonesia itself, the types of processed noodles are very diverse and varied and have their own characteristics according to each region. Usually noodles are processed and served by frying or boiling. For example, Mie Aceh, Mie Sop, Mie Celor, etc. The diversity of noodle preparations has its own appeal for connoisseurs. Starting from the popularity of noodles among the community, ideas and creativity in Indonesia have grown, one of which is in Percut Sei Tuan District, Bandar Setia Village. Bandar Setia Village is one of 18 villages that are part of Percut Sei Tuan District. Bandar Setia Village has an area of 3.50 km2 and is the fourth largest village in Percut Sei Tuan District. In this village, processed noodles are developing through micro, small and medium businesses with the quite unique name, namely

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Mie Balap. Mie Balap is about discourse and theoretical studies that reflect the latest issues in research being conducted. The proportion of writing in this section should not be more than 10-15% of the total length of the article.

*Buying decision* also very related to *buying interest* and *price* which is offered. The higher the price for customers, the higher the Buying Interest will be, and in the long term it will of course also produce the higher Buying Decision, meaning that Price has a significant influence on the Buying Decision which is influenced by Buying Interest. (Arianty, 2016). The higher the Buying Interest, the higher the opportunity to purchase (Arianty & Gunawan, 2021) As stated by (Prof. Ina Primiana) from the Faculty of Economics and Business, Padjadjaran University, Interest is a tendency in a person that is related to attitudes and behavior. *Buying Interest* has a very important role in marketing because *buying interest* is the result of a customer's perception of the value received in a transaction or relationship that is perceived relative to *price* and costs incurred by customers (Sulasih, 2017). In current conditions, marketing is a battle for consumer perception and is no longer just a battle for products but *Buying Decision* is also very influential in winning the market (Susanti et al., 2021).

So that it forms an attitude in consumers to process all information and draw conclusions in the form of responses that emerge as to what product to buy (Arif, 2016). Strategic application of unique selling proposition has a positive and significant influence on consumers in making purchasing decisions from companies that apply this strategy, meaning that if *unique selling proposition* the more intensively it is applied then *buying decision* consumers towards certain products will increase on the contrary, if the strategy gets worse *unique selling proposition* which is applied then *buying decision* consumers of these products will decrease (Kotler & Armstrong, 2014).

There are previous research studies that discuss influence *unique selling proposition* to *buying decision* (angelita & melati, 2014) (murbaranti, 2012) in their research found significantly *unique selling proposition* have influence with *buying decision* consumer. According to research (Kurniawan, 2018) price has a positive influence on purchasing decisions at food stalls around Simpang Lima Semarang. The cheaper the price offered, the more consumers will make purchases at the stall. As for previous research studies (Maghfiroh, 2019) which also obtained the results that price has a positive and significant influence. However, the results of this research are in line with research by Cahyono (2018) which states that price has a positive influence on purchasing decisions. *Buying interest* is a consumer's tendency to buy a brand or take actions related to purchasing as measured by the level of probability that consumers make a purchase (Marsudi & Triyanto, 2022). According to research (Afifi & Wahyuni, 2019) Buying interest has a positive and significant influence on Buying Decisions.

As for previous research studies (Sari, 2020), the results of this research show that buying interest has a positive and significant effect on purchasing decisions. This shows that purchasing interest is very determining for consumers to buy or not. Influence *unique selling proposition* to *buying interest* produces positive and significant values. This research states that the more unique the sales of Bandar Setia Studi Village Pecicilan Noodle Racing, the more *Buying Interest* will experience an increase. This research is in line with (Melinda,

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2018) (Sinha, 2015) this shows that consumers really like the unique sales carried out by Mie Balap Pecicilan Bandar Setia Studi Village, so their buying interest has increased drastically. There are previous research studies that discuss the influence of price on *buying interest* (Kusumawati & Saifudin, 2020) (Prawira & Yasa, 2012) In his research, he found that price perceptions had a significant influence on consumer buying interest. According to (Kotler, 2010) Role influence *buying interest* as a mediating variable against *unique selling proposition* and *buying decision* produces positive and significant values.

This shows that *buying interest* there is an influence on buying decisions *buying interest*. these findings mean that *buying interest* able to mediate *price* and *buying decision*. According to research by (Yanti & Budiatmo, 2020), the results of the research are in line with (Mega & Agung, 2020) concluding that price influences Rocket Chicken with buying interest as an intervening variable for Wolter Monginsidi's Rocket Chicken in Semarang City. This is of course also influenced by various factors such as the strategic location of the business, the quality of the product, such as the taste that consumers can enjoy, the uniqueness of the sales which is the attraction, where the funny behavior of the seller who pays too much in installments when serving racing noodle products is enough to be entertainment for consumers when buying. as well as other factors such as consumer lifestyles are also part of business sustainability which is expected to contribute to improving the economy in Bandar Setia Village. However, quite a few consumers of installment racing noodles in Bandar Setia Village complain about the high price *price* a portion of racing noodles because they are considered irrelevant to the economic conditions and location of the surrounding community, which can be said to be still a rural area. And also on the other hand, there are complaints from consumers who do not receive entertainment from the seller's installment behavior as expected by consumers when buying racing noodles, which may be due to several factors within the seller himself or other things.

Thus, from the explanation above, the author is interested in conducting research entitled"Influence *Unique Selling Proposition* and *Price* To *Buying Decision* With *Buying Interest* As an Intervening Variable (Case Study of Pecicilan Racing Noodle Consumers in Bandar Setia Village)".

**RESEARCH METHODS**

This type of research is survey research, because it takes samples from one population. Associative research is research that aims to determine the relationship between one variable and another variable, and in general, according to this research, the aim is to explain, predict and control something related to the variable being studied. The type of research used is quantitative research, which aims to obtain data in the form of information, both verbally and in writing. The population in this study were all Mie Balap Pecicilan customers in Bandar Setia Village. Based on the existing population, the sample that meets the sampling criteria for observation is carried out using Non Probability Sampling, so the sample used in this research is 90 people. The data analysis technique used in this research uses SEM-PLS.

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## RESEARCH RESULTS AND DISCUSSION

## RESULTS

### Structural Model Analysis

This structural model analysis will analyze the relationship between variables, namely the independent variable and the dependent variable, as well as the relationships between:

### Validity test

Validity test is a test used to show the extent to which the measuring instrument used in measuring what is being measured. According to Agustian et al., (2019) To measure validity, you must test the relationship between variables, including: Discriminant Validity and Average Variance Extracted (AVE) with the expected AVE value > 0.5 Andreas Wijaya, (2019:101).

**Table 1 Discriminan Validity (Fornell Lacker Criterion)**

| | X1 | X2 | AND | WITH |
|---|---|---|---|---|
| (X1) | 0,777 | 0,303 | 0,528 | 0,376 |
| (X2) | | 0,711 | 0,720 | 0,721 |
| (AND) | | | 0,826 | |
| (WITH) | | | 0,776 | 0,595 |

Research Data (processed) SmartPLS, 2022

Based on this table, the data shows that all variables have higher values between *buying decision* (and) explains the variable itself compared to other variables in different columns. *unique selling proposition* (x1) and *buying decision* (and) if you look at the table above, it has a value of 0.826 which is higher than other variables in different columns. thus, based on this table, a conclusion can be drawn that the data model tested in this research has met the requirements or criteria which shows evidence that the construct in the model has good discriminant validity, as well as being an initial stage before testing the hypothesis after going through various test suite.

### Reliability Test

Reliability tests are carried out to prove the accuracy, consistency and precision of the instrument in measuring the construct. In PLS-SEM using the SmartPLS 3.0 program, measuring the reliability of a construct with reflexive indicators can be done by calculating the composite reliability value. The condition usually used to assess construct reliability is that composite reliability must be greater than 0.7 for confirmatory research and a value of 0.6 – 0.7 is still acceptable for exploratory research. Ghozali & Latan, (2015: 75). Reliability testing cannot be carried out on formative models because each indicator in a latent variable is assumed to be uncorrelated or independent.

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**Tabel 2 Cronbach Alpha & *Composite Reliability***

| | **Cronbach Alpha** | **rho_A** | ***Composite Reliability*** | ***Average Veriance Extracted* (AVE)** |
|---|---|---|---|---|
| (X1) | 0,952 | 0,955 | 0,958 | 0,603 |
| (X2) | 0,910 | 0,914 | 0,924 | 0,506 |
| (AND) | 0,957 | 0,961 | 0,962 | 0,682 |
| (WITH) | 0,770 | 0,800 | 0,839 | 0,354 |

Research Data (processed) SmartPLS, 2022

1. *unique selling proposition* has value *composite reliability* 0.958 which is a value more than 0.6 so it can be concluded that *unique selling proposition* has a realistic value.
2. *Price* has value *composite reliability* 0.924 which is a value more than 0.6 so it can be concluded that *price* has a realistic value
3. *Buying decision* has value *composite reliability* 0.962 which is a value more than 0.6 so it can be concluded that *buying decision* has a realistic value
4. *Buying interest* has value *composite reliability* 0.839 which is a value more than 0.6 so it can be concluded that *buying interest* has a realistic value

**R-Square**

*R-Square* is a measure of the proportion of variation in the value of the variable that is influenced (endogenous) that can be explained by the variable that influences it (exogenous). This is useful for predicting whether the model is good/bad (Juliandi, 2018b). According to (Juliandi, 2018a) the criteria for R-Square assessment are:

1) If value*R-square* = 0.75 then the model is strong
2) If value*R-Square* = 0.50 then the model is medium
3) If value *R-Square* = 0.25 then the model is weak (bad)

**Table 3 *R-square***

| | ***R-square*** | ***R-square Adjusted*** |
|---|---|---|
| *Buying Decision (Y)* | 0,715 | 0,705 |
| *Buying Interest (Z)* | 0,548 | 0,537 |

Research Data (processed) SmartPLS, 2022

Conclusion on testing *R-square* are as follows:

1. *R-square Adjusted* path model 1 = 0.705, meaning the ability of variable X1, namely *unique selling proposition* in explaining variable y, namely *buying decision* is 70.5% belonging to the medium category.
2. *R-square adjusted* path model 2 = 0.537, meaning the ability of variable x1, namely *unique selling proposition* and y ie *buying decision* in explaining the z variable, namely *buying interest* is 53.7%, so the model is classified in the medium category.

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**F-Square**

Measurement *f-Square* or*f2 effect size* is a measure used to assess the relative impact of an influencing (dependent) variable on the influenced (independent) variable. Measurement*f2 (f-Square)* also called the effect of changing R2. This means that changes in the R2 value when certain dependent variables are removed from the model can be used to evaluate whether the omitted variables have a substantive impact on the independent variable construct (Juliandi, 2018b). Criteria *F-square* according to (Juliandi, 2018b):

1) If the value of F2 = 0,02→ small effect of exogenous variables on endogenous variables.
2) If the value of F2 = 0,15→ moderate/severe effect of the exogenous variable on the variable
endogenous.
3) If the value of F2 = 0,35→ large effect of exogenous variables on endogenous variables.

**Table 4 *F-square***

| | *Unique Selling Proposition* | *Price* | *Buying Decision* | *Buying Interest* |
|---|---|---|---|---|
| (X1) | | | 0,208 | 0,060 |
| (X2) | | | 0,168 | 0,899 |
| (AND) | | | | |
| (WITH) | | | 0,321 | |

Research Data (processed) SmartPLS, 2022

Based on table*F-square* then the following is the conclusion from the table values*F-square*.

a) Variable X1 ie *unique selling proposition* to variable y, namely *buying decision* get value*f-square* 0.208 then produces a moderate influence.
b) Variable X1 ie *unique selling proposition* to variable z, namely*buying interest* get value *f-square* 0.060 then produces a small effect.
c) Variable X2 ie *price* to variable y, namely *buying decision* get value*f-square* 0.168 then produces a moderate influence.
d) Variable X2 ie *price* to variable z, namely *buying interest* mark *f-square* 0.899 then produces a large influence.
e) Variable Z ie *buying interest* to variable y, namely *buying decision* get value*f-square* 0.321 then produces a large influence.

***Mediation Effect***

The mediation effect analysis contains 3 sub-analyses; a. *Dirrect effect* ; b. *Indirrect effect* ; and c. *Total effect.*

**1. Direct Effect**

The purpose of direct effect analysis is useful for testing the hypothesis of the direct influence of a variable that influences (exogenous) on the variable that is influenced (endogenous) (Juliandi, 2018b).

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Direct effect measurement criteria include (Juliandi, 2018b):

a) If the P-Values < 0.05, then it is significant
b) If the P-Values value is > 0.05, then it is not significant.
c)

**Tabel 5 Path Coefficients**

| | **Original Sample** | **P value** |
|---|---|---|
| *Unique Selling Proposition (X1) -Buying Decision (Y)* | 0,263 | 0,000 |
| *Unique Selling Proposition (X1) - Buying Interest (Z)* | 0,173 | 0,021 |
| *Price (X2) - Buying Decision (Y)* | 0,317 | 0,000 |
| *Price (X2) - Buying Interest (Z)* | 0,669 | 0,000 |
| *Buying Interest (Z) - Buying Decision (Y)* | 0,449 | 0,000 |

Research Data (processed) SmartPLS, 2022

Based on table *path coefficients* then can be concluded as follows, among others:

1. Variable X1 ie *unique selling proposition* to variable y, namely -*buying decision* obtain a P-value of 0.000 < 0.05, then the relationship is significant.
2. Variable X1 ie *unique selling proposition* to variable z, namely *buying interest* obtained a P-value of 0.021 <0.05, then the relationship is significant.
3. Variable X2 ie *price* to variable y, namely *buying decision* obtain a P-value of 0.000 < 0.05, then the relationship is significant.
4. Variable X2 ie *price* to variable z, namely *buying interest* obtain a P-value of 0.000 < 0.05, then the relationship is significant.
5. Variable Z ie *buying interest* to variable y, namely *buying decision* obtain a P-value of 0.000 < 0.05, then the relationship is significant.

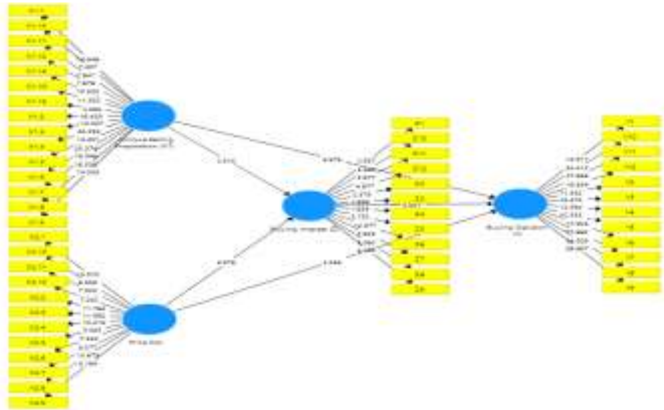

**Figure 1**

## MEDIATION EFFECT

### 1. Indirect Effect

Analysis *indirect effect* useful for testing the indirect hypothesis effect of a variable that influences the variable that is influenced which is mediated by an intervening variable (Juliandi, 2018a) According to (Juliandi, 2018b).
assessment criteria *indirect effect* is :

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a) If the P-value <0.05 then it is significant, which means the mediator variable mediates the influence of a variable that influences a variable that is influenced. In other words, the effect is not direct.
b) If the P-value is > 0.005 then it is not significant, which means that the mediator variable does not mediate the influence of a variable that influences a variable that is influenced. In other words the influence is direct.

**Table 6 *Indirect Effect***

| | Original Sample | P-Value |
|---|---|---|
| *Unique Selling Proposition (X1) - Buying Interest* (WITH) - *Buying Decision* (AND) | 0,078 | 0,041 |
| *Price (X2) - Buying Interest* (WITH) -*Buying Decision* (AND) | 0,300 | 0,000 |

Research Data (processed) SmartPLS, 2022

From table *indirect Effect* above, it can be said that
1) Variable X1 ie *unique selling proposition* to variable y, namely *buying decision* through the variable z ie- *buying interest* obtained a P-value of 0.041 < 0.05, then the relationship is significant, which means that the mediator variable mediates the influence of a variable that influences a variable that is influenced. In other words, the influence is indirect.
2) Variable X2 ie *Price* to variable Y, namely *Buying Decision* through the variable Z ie *Buying Interest* obtain a P-value of 0.000 < 0.05, then the relationship is significant, which means that the mediator variable mediates the influence of a variable that influences a variable that is influenced. In other words, the influence is indirect.

2. **Total Effect**

*Total effect* is the sum between *direct effect* and *indirect effect* (Juliandi, 2018b)**.**

**Table 7 Total*Effect***

| | Original Sample | P Value |
|---|---|---|
| *Unique Selling Proposition (X1) - Buying Decision (Y)* | 0,340 | 0,000 |
| *Unique Selling Proposition (X1) - Buying Interest (Z)* | 0,173 | 0,021 |
| *Price (X2) - Buying Decision (Y)* | 0,617 | 0,000 |
| *Price (X2) - Buying Interest (Z)* | 0,669 | 0,000 |
| *Buying Interest (Z) - Buying Decision (Y)* | 0,449 | 0,000 |

Research Data (processed) SmartPLS, 2022

Based on table*Total Effect* then the following conclusions can be drawn, among others:
1) *Total Effect* variable X1 ie*Unique Selling Proposition* against Z i.e*Buying Interest* is 0.021.

2) *Total Effect* variable X1 ie*Unique Selling Proposition* against Y i.e*Buying Decision* is 0.000.
3) *Total Effect* variable X2 ie*Price* against Z i.e*Buying Interest* 0,000
4) *Total Effect* variable X2 ie*Price* against Y i.e*Buying Decision* is 0.000.
5) *Total Effect* variable Z ie*Buying Interest* against Y i.e*Buying Decision* is 0.000

## DISCUSSION

### Influence*Unique Selling Proposition* Regarding Buying Interest

*Unique Selling Proposition* is one of the fields of communication studies because USP is a message strategy used in communication, especially in activities *advertising*, Success will be use *Unique Selling Proposition* in *Advertising* is when it increases investors' understanding of competitors' products and also motivates the public to carry out purchasing activities.*Unique Selling Proposition* is at the basic stage that consumers who use and buy the product will get unique benefits

According to research (Sinha, 2015) Influence *Unique Selling Proposition* to *Buying Interest* produces positive and significant values. This research states that the more unique the sales of Bandar Setia Studi Village Pecicilan Noodle Racing, the more *Buying Interest* will experience an increase. This research is in line with (Melinda, 2018) which shows that consumers really like the unique sales carried out by Mie Balap Pecicilan Bandar Setia Studi Village, so their buying interest has increased drastically.

### The Influence of Price on Buying Interest

Price is one of the determining factors in generating buying interest and consumer purchasing decisions.

Price is an economic sacrifice made by customers to obtain a product or service. Price from a marketing perspective is a monetary or other measure (including other goods and services) that is exchanged to obtain the right to ownership or use of a good or service.

According to research (Prawira & Yasa, 2012) stated that price perceptions have a positive influence on buying interest. Because affordable prices increase consumer buying interest, the cheaper the price offered, the greater consumer buying interest.

There are previous research studies that discuss the influence of price on *Buying Interest* (Kusumawati & Saifudin, 2020) In his research, he found that price perceptions had a significant influence on consumer buying interest.

### Influence *Unique Selling Proposition* Regarding Buying Decisions

*Unique selling proposition* often also known as *unique selling proposition*. A concept that often appears in advertising and communication activities. A good USP is able to communicate the superiority of the product clearly and consumers who see it make this something important, therefore, in order to be a good and correct USP, you must be able to convey the slightest uniqueness.

According to research (Angelita & Melati, 2014) Influence *unique selling proposition* to *buying decision* produces positive and significant values. the research states that

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increasingly *unique selling proposition* which was given by Pecicilan Racing Noodles in Bandar Setia Studi Village, then *Buying Decision* will experience an increase (Murbaranti, 2012).

This shows that *unique selling proposition* In general, it has been well received by customers, but it would be even better if Mie Balap Pecicilan Desa Bandar Setia Studi introduces more *unique selling proposition* Consumers who understand *unique selling proposition* this will increase purchasing decisions. the significant value states that *unique selling proposition* big influence on *buying decision* influence *price* to *buying decision.*

**The Influence of Price on Buying Decisions**

Price is the amount of money charged for a product or service or the amount of value exchanged by consumers for the benefits of owning or using the product or service. The definition of price is an amount of money as a medium of exchange to obtain a product or service.

According to research (Kurniawan, 2018) price has a positive influence on purchasing decisions at food stalls around Simpang Lima Semarang. The cheaper the price offered, the more consumers will make purchases at the stall.

As for previous research studies (Maghfiroh, 2019) which also obtained the results that price has a positive and significant influence. However, the results of this research are in line with research by Cahyono (2018) which states that price does not have a positive influence on purchasing decisions.

**The Influence of Buying Interest on Buying Decision**

Purchase interest is a person's desire to carry out an activity with a specific goal. Desire within a person can grow due to several factors. First, desire grows due to interest in the goods offered, with product differentiation that has many advantages compared to other products. So this can trigger consumer interest in purchasing this product. Second, desire grows due to experience and knowledge in choosing the products needed

According to research (Afifi & Wahyuni, 2019) Buying Interest has a positive and significant influence on Buying Decisions. These results show that the higher a person's level of buying interest when visiting, the more the decision to make a purchase will increase. The connection between buying interest and purchasing decisions is an event that arises due to reasons that can trigger buying interest.

As for previous research studies (Sari, 2020), the results of this research show that buying interest has a positive and significant effect on purchasing decisions. This shows that purchasing interest is very determining for consumers to buy or not.

**Influence *Unique Selling Proposition* To *Buying Decision* mediated *Buying Interest***

*Buying Interest* is a person's desire to carry out an activity with a specific goal. Desire within a person can grow due to several factors. First, desire grows due to interest in the goods offered, with product differentiation that has many advantages compared to other products.

According to (Kotler, 2010) Role influence *Buying Interest* as a mediating variable against *Unique Selling Proposition* and *Buying Decision* produces positive and significant values. This shows that *Unique Selling Proposition* to *Buying Decision* has an influence with *Buying Interest*.

**Influence *Price* To *Buying Decision* mediated *Buying Interest***

*Buying interest* is consumer behavior that appears as a response to an object that shows a person's desire to make a purchase, the producer's stages in determining buying interest or determining consumer encouragement in making a purchase of the product or service offered.

Role influence *buying decision* as a mediating variable against *buying interest* and price produces positive and significant values. This shows that *buying interest* there is an influence on buying decisions *buying interest*. These findings mean that *buying interest* able to mediate *price* and *buying decision* according to research by (Yanti & Budiatmo, 2020), the results of the research are in line with (Mega & Agung, 2020) concluding that price influences Rocket Chicken with buying interest as an intervening variable for Wolter Monginsidi's Rocket Chicken in Semarang City.

## CONCLUSION

### a. Conclusion

based on the results of research and discussions carried out by the author regarding influence *unique selling proposition* and *price* to *buying decision* with *buying interest* as an intervening variable in the Mie Balap Pecicilan Village of Bandar Setia Case Study of Mie Balap Pecicilan consumers of Bandar Setia Village, the following conclusions can be drawn:

1. Based on the results of data processing, it is known *unique selling proposition* positive and significant effect on *buying decision* to consumers of Pecilan Racing Noodles in Bandar Setia Village.
2. Based on the results of data processing, it is known *price* positive and significant effect on *buying decision* to consumers of Pecilan Racing Noodles in Bandar Setia Village.
3. Based on the results of data processing, it is known *unique selling proposition* positive and significant effect on *buying interest* to consumers of Pecilan Racing Noodles in Bandar Setia Village.
4. Based on the results of data processing, it is known *price* positive and significant effect on *buying interest* to consumers of Pecilan Racing Noodles in Bandar Setia Village.
5. Based on the results of data processing, it is known *buying decision* positive and significant effect on *buying interest* to consumers of Pecilan Racing Noodles in Bandar Setia Village.
6. Based on the results of data processing, it is known that the influence of role *buying interest* as a mediating variable from *unique selling proposition* to *buying decision* has a positive and significant influence on Bandar Setia Village Pecicilan Noodle Racing Consumers.
7. Based on the results of data processing, it is known that the influence of role *customer buying interest* as a mediating variable from *price* to *buying decision* has a positive and significant influence on Bandar Setia Village Pecicilan Noodle Racing Consumers.

**b. Suggestion**

Based on the research results that have been obtained, the suggestions that can be given are as follows:

1. From the data above it can be seen that *unique selling proposition* positive and significant influence on *buying decision*, then can be expected though *unique selling proposition* significant but it is necessary for Mie Balap Pecicilan to implement more sales uniqueness such as adding product uniqueness, etc. to customers in order to attract more interest to customers so that *buying interest* will increase even more.
2. From the data above it can be seen that *price* positive and significant influence on *buying decision*, then can be expected though *price* significant but it would be better if Mie Balap Pecicilan could adjust the level again *Price* on the economic conditions of the surrounding area and to customers so that customers do not feel burdened and of course *Buying Interest* is also increasing.
3. It is hoped that MSME players must be more enthusiastic in running their businesses so that MSMEs in Bandar Setia Village can develop well and the economy in Bandar Setia Village can improve, such as using social media, being creative in carrying out promotions, improving the quality of products and services to customers and so on.

**c. Research Limitations**

1. In this research, the data produced is only from a questionnaire instrument which is based on the perception of the respondent's answers, so that the conclusions drawn are only based on data collected through the use of a written questionnaire instrument.
2. In conducting this research, the author still found several limitations in conducting research, one of which was the difficulty in processing data which was still not good and perfect. The author recommends that future authors can be better at processing data so that they will get perfect results.

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**Management and Entrepreneurship**

**018-012**

# A COMPREHENSIVE SYSTEMATIC LITERATURE REVIEW AND SENTIMENT ANALYSIS ON STUDIES OF LEADERSHIP TYPES AND ORGANIZATIONAL OUTCOMES IN THE LAST TWO DECADES (2000-2020) FOUND IN PROQUEST AND EBSCOHOST

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## ABSTRACT

This research is a systematic literature review that was conducted to investigate online materials on leadership types within the last 20 years (2000-2020) prior to the global Covid-19 pandemic from two major academic databases, ProQuest and EBSCOhost. The review aimed for a comprehensive analysis of the types of leadership that have been studied, identify the common themes and gaps in the literature and offer insights into how leadership has evolved over the past two decades. The review was performed by searching both Proquest and EBSCOhost using a combination of keywords related to leadership and leadership types. Publications released between 2000 and 2020 in these two libraries, peer-reviewed, and written in English was the main criterion in the study. A total of 110 articles were identified to have studied about leadership in general. After screening for eligibility, 34 articles were included in the final review. The research revealed that the study of leadership types has evolved significantly over the past 20 years. Four main types of leadership were identified: transformational, transactional, authentic, and servant leadership. Transformational leadership was the most commonly studied type, followed by transactional leadership. Authentic and servant leadership were less studied but gained more attention in recent years. Numerous themes were also noted in the review, such as the significance of emotional intelligence, the significance of gender and diversity, and the influence of leadership on organizational success. The review also uncovered gaps in the literature and identified the trends in leadership concepts. The study also contributed in all possible little ways to fill in the gaps in sources of knowledge regarding leadership styles, evolution, and organisational outcomes. This study will be significant for policymakers wanting to support and enforce leadership principles that align with best practices effective in organizations. Furthermore, the academe can benefit from the findings useful in curricula in developing students to become good to great leaders and managers in the future.

Keywords: Evolution of leadership, leadership types, organizational outcomes, systematic literature review

**026-022**

# LAND LAW PERSPECTIVE ON SOIL EROSIONS AT HOUSING AREAS IN MALAYSIA

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## ABSTRACT

Many landslides occurring in housing areas in Malaysia have intrigued and shocked the Malaysian public. These disasters have caused colossal damage to property and losses of life. It is a trite fact that, in Malaysia, soil problems have negatively impacted the residents' life and property. The most significant soil problem disaster in Malaysia was the collapse of Highland Towers in 1993. This disaster caused pecuniary and non-pecuniary losses to the residents of the buildings. The question is, what can be learnt so far from these land-related catastrophes? The main objective of this paper is to analyse the legal provisions in land law that bear on soil problems in housing areas. This writing aims to explore the weaknesses in the land law and its implementation to provide preventive and curative legal measures against soil problems and their consequences in housing development areas. This writing proposes a new perspective on land legal ideas for governing soil fitness. The author researchers used qualitative social and legal research methodologies to study the facts and issues. The subjects of this research involve many housing development areas that face soil problems in Malaysia. It follows that the outcomes of this paper and its analysis relating to flood disasters in housing areas can enrich the knowledge and ideas on how to face the issue and protect the rights of the house residents.

Keywords: Soil Erosion; Soil Problem; Soil Settlement; Housing Areas; Land Law.

## INTRODUCTION

Since Malaysia Independence in 1957, the Malaysian Government has embarked on developing the nation by providing housing to the citizen. Various means and efforts have been made to actualise this noble agenda. This can be seen in various Malaysian Plans since independence. The objective of the Malaysian Government is to provide sufficient housing to the citizens which are affordable, quality, and sufficient (Prime Minister’s Office, 2021). The blueprint of housing policy in Malaysia is evident in the Housing Policy 2018-2025. The policy states, “The goal of the DRN (2018- 2025) is to guide the country's housing sector by emphasising the systematic, quality, inclusive, efficient and affordable housing planning, development and management of the people in order to generate sustainable and empowered housings” (National Housing Department, 2018). One of the challenges in the Malaysian housing industry is soil erosion and landslide that have caused damage and losses to the victim residents in the housing areas. The problem can be due to flood, geographical location, inadequate planning, and the act of God. This includes the failure of the State Authority ('SA') to alienate and provide suitable lands for housing areas, failure of the Local Authority ('LA') and Local Planning Authority ('LPA') to identify the suitability of geographical locations suitable for housing development and the lack of competent professional agencies for dealing with soil erosion.

## OBJECTIVES

This writing aims to study the land law that governs soil fitness in housing areas in Malaysia. Secondly, the aim is to study the land legal issues on soil fitness in the areas. The third objective of this writing is to suggest certain ideas and approaches in dealing with the problem of soil fitness in housing areas.

## RESEARCH QUESTIONS

The research questions of this writing are as follows:

1) What are Malaysian land laws that govern soil fitness in housing areas?
2) What are the land legal issues in the above respect?
3) What are the weaknesses of the Malaysian land law in facing soil fitness issues areas?
4) How and why the weaknesses and problems occurred?
5) What are the new legal suggestions for dealing with weaknesses and problems?

## DISCUSSION

The SA in Malaysia has an absolute power to dispose land and land matters within the territorial area of the states. The power is enshrined in the Federal Constitution ('FC') and National Land Code 2020 ('NLC'). The subject matters that are within the power of the SA in the disposal of land include alienation of land below state land, temporary occupation licence ('ToL'), issuance of permit to use air space above State land or reserved land; land reservation for public purpose, issuance of permit to extract and remove rock material from any land.

In exercising the above powers relating to land, there are conditions that the SA must abide by to ensure that the decision-making process in disposal of lands and the related land matters is made in accordance with the law, equity and comply with the policies of the SA, particularly to ensure welfare and justice of the subjects and spur the economic growth through land development within the state. However, the power to dispose lands is the prerogative of the SA. To ensure that the decision-making process of the SA and its governance are correct and reasonable, the SA may refer to for comments of the relevant technical agencies, planning authority and federal authority (Koperasi Pegawai Pentadbiran dan Pengurusan Tanah Malaysia Berhad, 2003; Md Dahlan, 2012, 2014a, 2016). Examples of technical agencies that the SA may refer to for comments and advice are the Department of Minerals and Geoscience ('JMGS'), Department of Irrigation and Drainage ('JPS'), Department of Environment ('JAS'), Department of Public Works ('JKR'), and Department of Lands and Mines ('JTG'). The objective of referring to these technical agencies is to ensure that the SA obtains professional views and advice of certain geographical locations within the state for the purpose of alienation of land and other land matters. This would ensure that the soil and location of the lands are suitable for housing development projects, free and safe from any possible soil harm, soil erosions, soil degradation and soil problems in the future.

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## ISSUES

As a repetition to the above, to ensure the decision-making process relating to the implementation of the above powers is carried out effectively, just, and equitable for the benefits of the public and the state, the SA in practice may refer to and follow the planning authority, and technical agencies for comments and advice. However, there are some issues arising from this practice, *viz*:

1) In the disposals of lands and land matters that are under the absolute and prerogative power of the SA, the SA is not duty-bound or under an obligation to refer or follow the comments and advice of the planning authority, and the technical agencies, as the case may be.
2) Section 108 of the NLC undermines the role and function of the planning authority and technical agencies.
3) Whether the SA as a public authority is under a legal responsibility and liability in the alienation of suitable and fit lands, disposal of land and other relevant land matters for housing development projects that can ensure public welfare, public benefit and well-being of their stakeholders (the housing developers and the purchasers at large)?

### Issue 1

**In the disposals of lands and land matters that are under the absolute and prerogative power of the SA, the SA is not duty-bound or under an obligation to refer or follow the comments and advice of the planning authority, and the technical agencies, as the case may be.**

The FC provides certain powers to the SA on certain subject matters and carries out their execution. These powers are specifically spelt out in List II (State List) and List III (Concurrent List) to the Ninth Schedule of the FC and read together with articles 74 and 80 of the FC.

To ensure coordinated, informed decisions and good governance in dealing with the relevant land matters, the SA **may** refer to certain good and best practices or federal directives/policies issued by the National Land Council ('NLCL'), National Physical Council ('NPC'), technical agencies, planning authority and the standard procedures prescribed by the Federal Director-General of Lands and Mines and Director General of Town and Country Department (PlanMalaysia) such as the federal land administration and planning circulars and guidelines issued from time to time and the NLC land manual and PlanMalaysia, as the case may be. This good practice includes the need to refer to and consult with relevant authorities, for example, the JPBD, JPS, JAS, JMGS, and JKR, and seriously consider these professionals' views before the disposal of lands and other land matters can take place. These referral authorities may consist of the appropriate authorities and/or technical agencies (Koperasi Pegawai Pentadbiran dan Pengurusan Tanah Malaysia Berhad, 2003).

As the power of disposal of land and other land administration subject matters are an absolute power of the SA and the SA is not under an obligation to refer to and complies with the comments, opinions, advice and conditions of the technical agencies, planning authority (LPA, State Planning Council ('SPC') and the National Physical Planning Council ('NPPC')) and the federal authority. It follows that the disposed of lands may not fit and are unsuitable for land development. It can cause soil erosion, soil settlement, and soil problems in housing development areas detrimental to the public, particularly the house residents and their families. This issue is evident in Taman Villa Fettes, Lots 141 and 3622, Mukim 18, North East District ('NED'), Pulau Pinang. In this project, it was found that the project had to be abandoned because the developer had incurred substantial expenditure to extract and remove hidden hard rocks/granite in the soil of the project site. These additional costs and problems were unforeseen and not within the developer's earlier anticipation.

Similarly, this was also the case for Taman Harmoni, Lot 82, Mukim of Cheras, District of Hulu Langat, Selangor, where the developer had to incur additional costs of removing slime soils and replacing them with suitable soils and had to carry out substantial piling works to stabilise the soil structure of the project land. Similar too was the case for Taman Dayang, Mukim Kuah Langkawi (developed by INI Holding Sdn. Bhd.) and Taman Perwira, Jerantut, Fasa II, developed by Yee Hoong Loong Corporation Sdn. Bhd. where the purported housing development project could not be proceeded, as beneath the project land, there was hard granite and geotechnical soil problems resulting in impossibility of carrying out the piling works, earthworks, excavation, foundation works and erection of the purported house buildings (Md Dahlan, 2009).

As the decision-making process is an absolute power of the SA in the land administration, the authors contend that the process might be abused, wrong and inappropriate for development of the state, nation, and economy. This may lead to unwarranted and unsuitable administration of lands, which may later cause soil settlements, soil erosions, landslides, flood disasters, land problems and housing abandonment (Md Dahlan, 2012, 2014a, 2016).

**Issue 2**

**Section 108 of the NLC undermines the role and function of the planning authority and technical agencies.**

Notably, section 108 of the NLC undermines the function of the planning authority and the technical agencies if the restrictions made by the planning authority conflict with the conditions imposed by the SA.

This provision has directly given an absolute power to the SA **not to be bound** by any restrictions, by-laws, or views of the LA and planning authority, let alone by the other technical agencies, which have not been stated in the NLC. It follows that if certain matters fall under the state's jurisdiction, for instance, land, river, water, forest and others, the SA, and its state's agencies, for example, land office, LPA, and SPC, which govern these matters are **not duty-bound** to follow the views and advice of the planning authority and the technical agencies. These technical agencies include JMGS, JKR, LA and JAS (Norazizi Adinan, Personal Communication, January 31, 2021). This, again, may lead to the approval of disposal of lands application made and other land administration subject matters in an unprofessional manner, being made on an *ad hoc* basis and unsuitable from the planning perspective, including the development plans, National Physical Council and National Land Council's policies.

Thus, even though under the NLC, some disposal of lands and other land matters require the SA to be subject to the views of the planning authority, section 108 still provides the SA with the upper hand over the views and restrictions of the planning authority. What more is the position of the technical agencies? Instances of this disposal of lands and land matters include simultaneous application for subdivision and variation of conditions, restriction of interest and category of land under sections 124(1) and 124A NLC, application for subdivision of land under sections 137 NLC, application to partition of any land under section 142 NLC, application for amalgamation of land under section 148 NLC, and land acquisition under sections 3(1) and 3A(1)(d) of the Land Acquisition Act 1960 (Act 486).

As references to the planning authority and technical agencies are not mandatory, this can lead the SA to approve application, on an *ad hoc* basis or politically motivated grounds, for exercising alienation, sub-division, and land use control without referring to the views of the planning authority and the technical agencies.

The absolute power in the disposal of lands possessed by the SA may lead to power abuse. In the practical sense, the meaning of SA is the members of the State Executive Council (Majlis Mesyuarat Negeri or EXCO). The Menteri Besar (Chief Minister) may highly influence EXCO's decisions. Usually, a large number of the members in the EXCO are from the same political party.

Furthermore, a problem may arise as section 8 of the Delegation of Powers Act 1956 (Revised 1988) (Act 358) confers on the Menteri Besar/Ketua Menteri/Chief Minister certain delegated powers without having to be subject to the professional officers' approvals, thus reducing the functions of certain professionals conferred by sections 12–13 of the NLC (State Director and other State Officers and Delegation of Powers of SA to State Director, etc.). Indirectly, all decisions made in the EXCO meetings can be monopolised and manipulated for their self-interests and political interests, which may not be practical and suitable from the view of certain relevant professionals. Thus, it is timely to have a re-look at the definition of SA in the NLC, and its composition as well as the powers granted under the Delegation of Powers Act 1956 (Revised 1988) (Act 358), for possible legal revamp to ensure that the decisions made are not driven purely by political self-interest and considerations but are made subject to valid professional considerations.

The authors also opine that the new section—section 5D (coming into operation of the Electronic Land Administration System in any land Registry) and the 16$^{th}$ Schedule (section 5D) (Electronic Land Administration System) of the NLC— whereby all information regarding lands shall be recorded into a land database by an electronic technology containing land titles, images, documents or spatial and textual data, known as 'digital data', would not improve the above problematic situation. This is because unless all relevant technical agencies and the planning authority have conducted a comprehensive and updated study on the affected land being subject to the land database in question, the existence of the land database in the digital data would still be ineffective insofar as the soil problems in housing projects are concerned. To be effective, the above problems regarding subdivision, land alienation, land disposal, and land use control should first be addressed.

The current establishment of One Stop Centre (‘OSC’) at the SA level and the LA level to coordinate and expedite the approval process of land development applications at the land offices and the LA offices, including the applications for planning permission and plans' approval (for building, infrastructure, etc.) in the opinion of the authors, is still insufficient to solve the soil problems. This is because the guidelines provided for the administration and operation of the OSC issued by the KPKT **shall not bind** the SA, LPA, and LA in approving applications for land development, including applications for planning permission and approved plans. Thus, it is opined that the prevailing shortcomings, such as insufficient

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coordination and inefficient administration, and practices of the SA, SPC and LPA in dealing with the applications for land development in their respective states would continue. There are inadequate curative measures on part of the LPA to deal with the problems of soil problems. It is a fact that the measures in dealing with soil problems implemented by the respective planning authority in Malaysia vary, and their expertise also differs. Some consider the development plans complete and adequate to meet soil problems, but some say they are insufficient. This depends on the respective locations of the LPA. For example, the geographical land in Alor Setar and its vicinity is flat, while Georgetown, Kulim and Ampang Jaya's geographical situations are hilly and have many slopes; thus, the challenges are more compared to Alor Setar and Kangar. Thus, for LPA in Alor Setar and Kangar, they can say that the provisions in the Development Plans are adequate, while for LPA in Georgetown, Kulim, and Ampang Jaya may say otherwise. Further, there is a contention that the information and data provided by the technical agencies, consultants and data sources are inadequate. Thus, the Development Plans, be they Structure nor Local Plans, evidently failed to respond and face the contemporary needs, issues, and challenges that the public face (Norazizi Adinan, Personal Communication, January 31, 2021; Ahmad Sujairi Md Hassan and Ramziah Abd. Rahman, Personal Communication, February 15, 2021);(Awang, 2008; Md Dahlan, 2022).

It is evident that there is still inadequate coordination and insufficient integrated policies and practices (legal and administrative) between the SA, LPA, LA and the Ministry of Local Government Development (‘KPKT’) on housing development policies, legal regime, and practices, including soil fitness and location suitability guidelines, which has, by and large, contributed to soil problems in housing projects. This is illustrated in the absence of comprehensive development criteria for the implementation of housing development projects, even during the approval for alienation of the land, other land disposals and land matters (Md Dahlan, 2009); (Norazizi Adinan, Personal Communication, January 31, 2021; Dhinesh Bhaskaran, Personal Communication, November 18, 2019).

As mentioned above, the SA has the upper hand over the planning authority pursuant to section 108 of the NLC whenever there is any conflict between land and planning legal provisions. Due to this, the purported alienation and land disposals by the SA might have been implemented without considering the views, suggestions or recommendations of the planning authority and the technical agencies. Likewise, there is a possibility of direct intervention of the SA either through unreasonable political interference or through the exercise of their prerogative power by way of alienation of the land and disposal of land relating to housing areas. This can cause a housing development project to be erected on an unsuitable soil location (Md Dahlan, 2016).

Nonetheless, in *Perbadanan Pengurusan Sunrise Garden Kondominium v Sunway City (Penang) Sdn Bhd & Ors and another appeal* [2023] MLJU 98 (Federal Court at Putrajaya) and *Majlis Perbandaran Subang Jaya v. Visamaya Sdn Bhd & Anor* [2015] 5 MLJ 554 (Court of Appeal at Putrajaya), the Federal Court and the Court of Appeal decided that where there is an inconsistency between the category of land use under the NLC and planning control under the TCPA, the TCPA would prevail. This is because, according to both apex courts, TCPA is the later legislation and that being a later legislation, TCPA will prevail over the NLC. Further, the NLC provided, in general terms for land use for agriculture, building and industry. Conditions in individual titles are too cumbersome a means to plan development. Before the NLC, a large number of land titles had been issued. There were other laws and by-laws. It is to these that section 108 was directed. Section 108, however,

cannot apply to laws passed subsequently by Parliament and regulations authorised thereunder. In addition, Nallini Pathmanathan FCJ in *Perbadanan Pengurusan Sunrise Garden Kondominium* said the TCPA explicitly provided the proper control and regulation of town and country planning in Peninsular Malaysia. While the NLC addresses land use in individual titles, the TCPA addresses planning by land use zones. By the time the TCPA was promulgated, large numbers of land titles had been issued, with conditions of use as often as not that differs from the zoning. For planned development to succeed, if the condition of use in the title is in conflict with the zoning, the condition is almost routinely amended to the use authorised by the zoning. Thus, the Federal Court held that the submission that section 108 renders the TCPA and zoning thereunder inconsistent with land use under the NLC titles null and void holds no merit.
Hence, following the reasonings of the apex courts in the above case law, the provisions under the TCPA would prevail over the provisions under the NLC. It follows that the SA would be subject to the approval and restrictions of the planning authority in the land administration in Peninsular Malaysia.

Despite the above fact and laws, the SA will normally refer to and comply with the views of the planning authority and technical agencies. Mr Azmin Zainul Abidin, a land officer of the Kota Setar Land Office, said that the situation where SA is **not following** the views of the planning authority and technical agencies is minimal, and this probability is slim in Kedah, Malaysia. Nonetheless, this issue (the issue of superiority of the land authority and SA undermining the function and role of the planning authority) may also happen, leading to soil problems. He said that in respect of Kedah if the planning authority and technical agencies do not support any development application by housing developers, the SA will not approve the purported application. This contention is supported by Norazizi Adinan, being the JAS Kedah State Director (Norazizi Adinan, Personal Communication, January 31, 2021).

In Kedah, if there is any application to develop states' land, the development application to develop land through alienation must first be examined by the State Economic Development Division (Bahagian Pembangunan Ekonomi Negeri ('BPEN')). BPEN will form a technical committee to examine the proposal and the viability and feasibility of the proposed project. They will assess the viability of the proposed project. This will lessen any problem later that may befall the purported projects. If BPEN does not approve the application, it means the applicant developers cannot proceed with the intended development. After BPEN has approved the project, the proposed project will further be subject to the State Executive Council approval. The applicant developer will commence the proposed project only after the State Executive Council approval (Azmin Zainul Abidin, Personal Communication, August 3, 2017).

Nonetheless, to ensure that the applicant developer is serious about the proposed project, the applicant developer must deposit a certain refundable amount of money in proportionate to the estimated cost of the proposed project to the SA. In other cases (private development), according to Azmin Zainul Abidin, the State Executive Council (SA) must approve all land development applications and further comments from technical agencies are required before approval. These technical agencies include JKR, JPS and JPBD. Apart from these technical agencies, the applications must be examined by the Mineral and Land Office ('PTG') and the State Secretary's Office ('SUK') (Azmin Zainul Abidin, Personal Communication, August 3, 2017).

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It is hoped that the National Land Council ('NLCL') formed pursuant to Article 91 of the FC and mentioned in section 9 NLC can be fully functional in that the federal policies and measures can be made applicable to all states to ensure orderly housing development manner to prevent the occurrences of soil problems, soil erosion, landslides, and soil settlement in housing development projects. Notably, the NLCL members consist of the Prime Minister and the representative of each state in Malaysia. Thus, any misunderstanding and non-acceptability of the federal policies implementation can be potentially lessened.

Similarly, the establishment of the NPPC under section 2A of the TCPA can play its role in ensuring best practices in town and country planning matters and sustainable development concepts and principles issued by the Federal Government can be implemented by the states in housing development, including policies measures and best practices for ensuring soil fitness in housing development projects are carried out in all states. This is because the composition of NPPC includes the Prime Minister and Chief Minister of each state in Malaysia. Hopefully, this platform can reduce the gaps between the Federal Government policies and the states' policies.

It is evident that in the relevant land matters for housing development, the SA fails to get sufficient and appropriate advice and views, inadvertently or otherwise, from the relevant authorities (planning authority and technical agencies) or that the decision of the SA is not grounded on good information and professional considerations. For instance, the SA has failed to alienate land to suitable housing developers to carry out a particular development on the alienated land, or the alienated land is not suitable for housing areas. These may result in the purported housing development failing to the detriment of the stakeholders (for example, the purchaser residents). This problem is evident in the occurrences of problematic housing projects, floods, soil erosions, land problems, soil settlements and landslides, which have resulted in severe injuries, damage and considerable losses to the interested parties and stakeholders, especially the purchaser residents and the developers.

On a dismal note, housing developers with no adequate experience and expertise in handling housing development projects have been given lands by the SA through alienation. Later, it was found that the developers had abandoned the housing development projects, leaving purchasers without any remedies due to their inexperience dan incapability to carry out the housing projects. The projects are left abandoned. This problem happens at Taman Harmoni, Cheras, Kuala Lumpur and Taman Lingkaran Nur, Kajang, Selangor (Md Dahlan, 2009).

In another respect, in the authors' observation, some cases show that the process for approving applications for alienation of land and other relevant land matters is too slow to be finalised by the SA. For example, in an application involving a housing development project in a state in Malaysia, the process took about 3.5 years to complete. This can cause unnecessary waiting costs for the developer. In the authors' opinion, this delay is caused by inefficient administration and inadequate professional staff (for instance, shortage of land tracers and settlement officers) in the land office that can expedite the relevant application for consideration by the SA (Md Dahlan, 2011).

Further, regarding the practice of some land offices in Malaysia (the Land Administrator, the Registrar of Land Titles and the Director of Lands and Mines), there is no compulsory implementation of the International Standard Organisation ('ISO') procedure in their offices. The lack of this internal control and self-regulated administration mechanism will mar the land offices' efficiency in processing land-related applications. Even though there is an

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internal Key Performance Index ('KPI') set by the SA and the State Secretary's office to regulate the works flow and the work procedure internally, the authors are still sceptical on whether this internal governance can be an impartial and independent effective measure that is capable of fully governing the land administrative process. The issue of non-uniformity in the procedure and workflow of disposal of lands and other relevant land matters between the federal agencies and the state agencies is again due to the existence of the separate constitutional jurisdictions of the Federal Government and state government/SA over land matters. Regarding the power of the SA listed under List II, the Federal Government has no say and control over the conduct of all the state government machinery (Md Dahlan, 2014b).

The establishment of PEMUDAH or a taskforce committee by the federal government, consisting of representatives from the government and the private sector to expedite the land development process and approval, including land alienation and other relevant land matters, it is submitted, may not also be effective as it cannot bind the SA in respect of its policies, directives and procedures (Md Dahlan, 2014a).

It is worth mentioning that other problems faced by the land offices and state authorities in some states in Malaysia are shortage of professional staff, inadequate technical and legal knowledge of the land office staff, inadequate funding and infrastructure, staff negligence, breach of duty, and overburdened daily works that the staff cannot adequately and efficiently execute. These are among the prevailing problems plaguing land offices and SAs, undermining their functions and responsibility towards the stakeholders, especially in housing development(Md Dahlan, 2014a)

**Issue 3**

**Whether the SA as a public authority is under a legal responsibility and liability in the alienation of suitable and fit lands, disposal of land and other relevant land matters for housing development projects to ensure public welfare, public benefit, and well-being of their customers/stakeholders (the housing developers and the purchaser residents at large)?**

In the authors' view, the SA has absolute power and is not bound by anybody in the alienation of land and other relevant land matters, not even the NLCL, NPPC, the federal government and federal agencies, unless prescribed by the FC and NLC. The NLCL is a body established under the FC consisting of representatives from the federal and state governments (Article 91(1) of the FC). It has to formulate from time to time in consultation with the Federal Government, the state governments and the National Finance Council ('NFC') a national policy for the promotion and control of the utilisation of land throughout the Federation for mining, agriculture, forestry or any other purpose, and the administration of any laws relating thereto (Article 9(5) and (6) of the FC). Once formulated and the required consultancy has successfully been conducted, the policy so formulated shall become binding on the Federal and state governments to follow (Article 9(5) and (6) of the FC). Unless and until there has been a consultation between the federal and state government over certain land policies, the NLCL's land policies, it is submitted, are not binding on both the federal and state government, including the SA. Further, the NLCL is also obligated to advise the federal and state governments on matters pertaining to the utilisation of land or in respect of any proposed legislation dealing with land or of the administration of any such law if there is a consultation request by the federal or the state government (Article 91(6) of the FC).

Thus pursuant to Article 91 of the FC, the NLCL is conferred with certain constitutional functions, and it comprises state representatives with a Federal Minister as the Chairman. This means that while the states have a choice in this body, the control lies with the federal government. The question is this: since land is a state matter, whether it is mandatory for the SA to abide by the policy and guidelines formulated by the NLCL? Until now, the NLCL has formulated broad-based policies on squatters, land matters, land speculation, and land use for industries. As land is a state matter, it can be expected that each state will want to decide on what it can do with its land rather than be subjected to a national policy. Hence, the grounds for the diversity in land use policy amongst the states in Malaysia (Awang, 1997; Kusin, Akhir, Mohamat-Yusuff, & Awang, 2015).

Thus, even if the NLCL has issued directives to the SA to exercise due diligence and care in the land alienations and other relevant land matters, the directives **do not bind** the SA. For example, even today, many National Land Policies are issued by the NLCL; first was the National Land Policy over alienation of land issued by the NLCL through the directive issued by the Federal Director General of Land and Mines. However, their position is a mere directory, not mandatory for the SA to follow (Jabatan Ketua Pengarah Tanah dan Galian Persekutuan, Kementerian Sumber Asli, 2023).

The "National Land Policy" over alienation of land issued by the NLCL concerns alienation of land in special circumstances for freehold lands under section 76(aa)(iii) of the NLC. However, this land policy does not concern at all alienation of land for housing development purposes, and it does not impose a responsibility and liability on the SA to duly exercise alienation of lands for housing development projects for the benefit and welfare of the stakeholders (housing developers and purchaser residents). For example, this directive policy does not prescribe specific procedures that the SA should comply with in the exercise of alienation of land for housing development projects, for instance, imposing obligation on the SA only to alienate lands to capable developers or be subject to the views of the planning and environmental authorities or that the SA must ensure that the location of the land is suitable for housing development purposes not prone to soil erosion. Equally, there is no responsibility for the SA to be bound by all the views and advice of other technical agencies and appropriate authorities in exercising their decision-making process on relevant land matters for housing development purposes.

However, it is argued that the issue of whether the policy adopted by the NLCL is binding or otherwise may be a political one. In other words, coordination between the federal government's policies in the form of the directive policies issued by the NLCL could be achieved if the state government and the federal are from the same political party. If there are political differences between the states and the federal government, coordination in land administration, policies, and procedures between the states and the federal government may not actualise. This may result in uneven and non-uniformity of the land administration procedures in all states in Malaysia, which can lead to some problematic consequences (Awang, 2008; Prema-Chandra Athukorala; Suresh Narayanan, 2018); Norazizi Adinan, Personal Communication, January 31, 2021).

To Adibah Awang, the governance problems relating to the land development process, including the alienation of land and other relevant land matters, are due to the absence of proper documented national land use planning policy. According to her, this is perhaps grounded on the fact that since land is a state matter, each state has the prerogative of drawing up its own land policy. Thus, there may exist non-coordination and non-uniformity

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between the practices and policies of the federal government and the state governments in land administration, including on matters pertaining to alienation of lands for housing development and other relevant land matters in housing development(Awang, 1997; Prema-chandra Athukorala; Suresh Narayanan, 2018); Norazizi Adinan, Personal Communication, January 31, 2021).

Further, according to Sharifah Zubaidah Syed Abdul Kader Aljunid, to this day, there is yet one “National Land Use Policy” in place. However, the NLCL has issued many circulars relating to amendments of the NLC. As a result, the function of NLCL, it is opined, could be deemed irrelevant in practice by the SA(Awang, 1997; Syed Abdul Kader Aljunid, 2006).

## LIABILITY AND RESPONSIBILITY OF THE SA IN THE LAND ADMINISTRATION

First and foremost, insofar as the knowledge of the authors is concerned, no case law as yet has dealt with the issue of liability and responsibility of the SA to act fairly and reasonably in the alienation of land, disposal of lands and other relevant land matters for housing development projects, particularly involving soil problems, landslides, soil erosions and soil settlement in housing development projects. Likewise, no action has commenced so far by aggrieved housing developers or purchaser residents in the problematic housing development projects due to the wrong-doings, *mala fide* acts and negligent decisions of the SA in alienating lands, disposing lands and other relevant land matters. Be that as it may, certain legal theories may be generated in respect of the issue of liability and responsibility of the SA in alienating lands and other relevant land matters for housing development projects for public benefits and well-being of the stakeholders based on the available legal resources and reported case law.

In the opinion of the authors, despite the absolute power that the SA has in the alienation of land and other relevant land matters and its superiority over the planning, technical agencies and other authorities, it is submitted that the SA is still subject to a legal and equitable duty to act fairly and reasonably in the exercise of alienation of land, disposal of lands and other relevant land matters for housing development purposes and to ensure the soils are fit for housing development. In other words, if it is proven that the SA fails to execute its statutory, legal, and equitable duties fairly and reasonably to the detriment of the housing developers and the purchaser residents, the stakeholders have a cause of action and *locus standi* against the SA. The aggrieved victim parties are entitled to certain legal and equitable remedies pursuant to section 22 NLC. In other words, the SA should not act in such a way as to cause public misfeasance. This contention is made on the following grounds:

a) There exists a **fiduciary duty** on part of the SA towards the public in dispensing their public duties. In respect of housing development, the public is the housing developers and the purchaser residents.
b) There exists a **legitimate expectation** on part of the housing developers and the purchaser residents against the SA in that the SA should exercise its statutory and/or prerogative powers conferred by the FC fairly and reasonably in the alienation of suitable and fit lands, disposal of suitable and fit lands and other relevant land matters for housing development projects and appoint suitable and fit housing developers to carry out housing development for the benefit of its subject (the housing developers and the purchaser residents). The SA could also be liable for misfeasance in public office (Spencer, Paul; O’Brien, 2016).

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c) Even though the SA has a wide discretionary and statutory power to alienate land, dispose lands and other relevant land matters, including appointing developers to carry out housing development projects, this statutory and prerogative power is not unfettered. This power is still subject to **rules of natural justice, equity, good faith, good conscience, and fairness**.

Despite the above 3 contentions that the SA must still comply with and subject to the law and equity in alienation of lands, disposal of lands and carrying out other relevant land administration subject matters, the decided cases show inconsistency of this position. In other words, some cases held that the SA has an absolute power, without any legal and equitable liability, to alienate and dispose lands and carry out other relevant land administration subject matters even though the execution of the power is tainted by elements affronting the law and equity. In contrast, other cases decided otherwise, in that the SA is still subject to the scrutiny of the courts and the law, principles of justice and equity. The following cases illustrate these 2 positions, *viz*:

1) *North East Plantations Sdn Bhd v. Pentadbir Tanah Daerah Dungun & Anor* [2011] 2 CLJ 392 (Court of Appeal at Putrajaya).
2) *North East Plantations Sdn Bhd Lwn Pentadbir Tanah Daerah Dungun Dan Satu Lagi* [2011] 4 CLJ 729 (Federal Court at Putrajaya).
3) *Piagamas Maju Sdn Bhd v Pengarah Tanah dan Galian Negeri Selangor & Anor* [2016] 2 CLJ 824 (High Court of Malaya at Shah Alam).
4) *Pembinaan Batu Jaya Sdn Bhd v Pengarah Tanah dan Galian, Selangor & Anor* [2013] 10 CLJ 570 (High Court of Malaya at Shah Alam).
5) *Pembinaan Batu Jaya Sdn Bhd v Pengarah Tanah dan Galian, Selangor & Anor* [2016] 2 MLJ 1495 (Court Appeal at Putrajaya).

## FINDINGS

The followings are the findings from the above elaboration and discussion.

1) The SA in Malaysia has absolute power in land administration and land matters as enshrined in the FC, as this fall under the jurisdiction and power of the SA.
2) The SA is **not duty bound** and under an obligation to follow the directive and circulars, advice and opinions of the federal authority, including the planning authority and technical agencies, in dispensing their power in the administration of land. This is enshrined under section 108 NLC.
3) Following the above, the SA might have negligently and made a wrong decision in the state's land administration, for example, the alienation of land for housing development projects. Due to the negligence and wrong decisions, the land that has been subject to the disposal by the SA might be subject to soil erosion, soil problems and soil settlements at the housing development project locations. Thus, the purchaser residents and their families will suffer losses and grievances.
4) However, the provision under section 108 NLC that the SA is not bound by the conditions and restrictions of the planning authority **is negated** following the recent decisions of the Federal Court and Court of Appeal in *Perbadanan Pengurusan Sunrise Garden Kondominium* (Federal Court at Putrajaya) and in *Visamaya Sdn Bhd* (Court of Appeal at Putrajaya).

5) Despite the above absolute power, the SA is still subject to the principles of justice, equity, and law. This means that if the SA is proven to have failed to refer for professional advice and opinions of the planning authority and the technical agencies or they have failed to comply with the advice or opinions, the SA **would be liable** in law and at equity. This is premised on the cases such as *Pembinaan Batu Jaya* and *Piagamas Maju*, as discussed above. Further, section 22 NLC states that there is no immunity given to the land officers if they have acted in *mala fide* manner. Section 434(3) NLC states that the SA will pay the compensation to the aggrieved victims due to the negligence, wrong decisions and *mala fide* manner of the land officers and the SA in carrying out their duties in the land administration.

## CONCLUSION

The SA is given a broad and prerogative power and jurisdiction over land within the state territory. This is spelt out in the FC. In the exercise of the power and jurisdiction over land, the SA must emphasise the welfare and justice of the people, economic and social development of the public and ensure the development sustainability. The above discussion highlights that there are *lacunae* in the law, particularly the NLC, in the exercise of the SA's power and jurisdiction over land, which might have been tainted with wrongdoings, unreasonable, negligence, and other *mala fide* acts of the SA. This may cause the decision-making process and its outcomes detrimental to the public. For example, the SA alienates lands unsuitable for housing development and evidently has caused soil erosions, soil problems and soil settlements. The victims would be purchaser residents of the housing areas. Recent case law have to some extent, defined and restricted the limit of the broad power and jurisdiction and emphasised the liability of the SA in the land administration. These include the requirement that the SA must comply with the planning authority restrictions and conditions and that any wrongdoings, unreasonableness, negligence, and *mala fide* acts of the SA in exercising their power and jurisdictions shall still be subject to the court's scrutiny. They could be liable at law and in equity if there is proof.

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**056-044**

# IMPLEMENTATION FINANCIAL TECHNOLOGY TO INCREASE WORKING CAPITAL FOR MICRO, SMALL AND MEDIUM ENTERPRISES IN DELI SERDANG DISTRICT

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**A B S T R A C T**

Financial Technology is a combination of a financial service system and technology that provides the benefits of convenience in using financial applications. Fintech makes a very large contribution in building the development of the Micro, Small and Medium Enterprises (MSME) industry, including in increasing the income of MSMEs. Research conducted by the Demographic Institute (LD) of the Faculty of Business Economics, University of Indonesia (LD FEB UI) stated that the fintech lending, Investree, has helped MSMEs to increase their income from 20% to more than 50%. The results of research conducted by (Marini et al., 2020) state that fintech has an effect on MSME financial inclusion. Deli Serdang Regency is one of the regencies in North Sumatra that has a lot of MSME business actors. In addition to farming, gardening and animal husbandry, abundant natural resources have resulted in residents in the district also opening businesses. However, the existing business opportunities are constrained for business development, namely the source of capital. It is hoped that the introduction of financial technology (fintech) can improve MSMEs in Deli Serdang Regency. The results of research conducted in Deli Serdang Regency are as follows: 1) loans, financing and provision of capital to working capital have a positive and insignificant relationship. 2) Market support for working capital produces a positive and significant relationship. 3) investment management and risk management on working capital have a negative and insignificant relationship and lastly 4) the payment system on working capital produces a negative and insignificant relationship. The role of Fintech for Micro, Small and Medium Enterprises (MSMEs) as a source of business financing and as financial inclusion is highly expected for business actors and the introduction of financial technology (fintech) in Deli Serdang Regency can increase working capital for SMEs in Deli Serdang Regency.

Keyword: Micro,Small and Medium Enterprises (MSMEs), Fintech,Working Capital

## INTRODUCTION

The rapid growth of the financial technology industry brings fresh air to Micro, Small and Medium Enterprises (MSMEs). In an effort to fully support the funding of Micro, Small and Medium Enterprises (MSMEs), the Financial Services Authority (OJK) has two options. The first way is to encourage fintech lending to increase productive funding capacity (quality). While the second way is to encourage the ease of registering productive fintech lending on a massive scale (quantity). Financial Technology is a combination of a financial service system and technology that provides the benefits of ease of using financial applications. (Lee & Low, 2018) states that financial technology is financial technology that offers new solutions by developing innovative applications, products and models for financial services purposes. Research conducted by the Demographic Institute (LD) of the Faculty of

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Business Economics, University of Indonesia (LD FEB UI) stated that fintech lending, Investree, has helped Micro, Small and Medium Enterprises (MSMEs) to increase their income from 20% to more than 50%. The results of research conducted by (Marini et al., 2020) state that fintech has an effect on the financial inclusion of Micro, Small and Medium Enterprises (MSMEs). The use of financial technology can be used to increase working capital or working capital for owners of Micro, Small and Medium Enterprises (MSMEs) in order to smooth the business they have for the future. Micro, Small and Medium Enterprises (MSMEs) have a very large role in developing the economy in Indonesia. (Nazir & Afza, 2009)

Working capital is one of the important aspects in spending a business. The need for working capital is one of the most important asset elements in the company, because without working capital the company cannot meet the funding needs to carry out its activities (Kusmayadi et al., 2019) and (Sartono, 2001). Effective working capital is very important for the sustainability of the company's growth in the long term (Wiagustini & Wiksuana, 2001). This will be able to have a positive impact on increasing the income and welfare of entrepreneurs and society in general. Increasing working capital through fintech makes it easier for Micro, Small and Medium Enterprises (MSMEs) owners to market their products. (Putri & Christiana, 2021).

## LITERATURE RIVIEWS

### 1. Financial Technology

Along with technological developments, financial institutions in Indonesia have also developed into technology-based financial service providers or often referred to as fintech or financial technology (Utama & Ilahiyah, 2018). The existence of fintech facilitates all activities of Micro, Small and Medium Enterprises (MSMEs) with the facilities offered to Micro, Small and Medium Enterprises (MSMEs), so that the government, especially OJK, needs to supervise fintech. As for the benefits of having fintech, namely (1) encouraging the ability of Micro, Small and Medium Enterprises (MSMEs) to innovate in their business, (2) easy access for Micro, Small and Medium Enterprises (MSMEs) in meeting financing needs and others, and ( 3) improve the financial literacy of Micro, Small and Medium Enterprises (MSMEs) (Hamzah & Suhardi, 2020), (Coşkuner, 2016). Financial technology, also known as fintech, is a new financial service model developed through information technology innovation (Miswan, 2019). ]. According to (Muzdalifa et al., 2018) fintech is a very fast and dynamic industry where there are many different business models. The role of fintech is not only limited to financing business capital but there are also those that penetrate into various aspects such as digital payment services as well as financial regulators (Ningsih, 2016). For Micro, Small and Medium Enterprises (MSMEs), Fintech helps Micro, Small and Medium Enterprises (MSMEs). SMEs) to get convenience and efficiency in the financial area (Winarto, 2020). Factors Causing the Development of Fintech: 1) There is a change in consumer mindset; 2) Digital progress Digitization is a change from the old system which is not yet modern; 3) Changes in trends Developments and innovations that are carried out quickly and continuously encourage change and acceleration in a trend in society; 4)


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Decreased loyalty to brands and institutions; 5) Easier access. 6) The products offered are considered profitable, (Ningsih, 2016).

There are several classifications of fintech, namely: 1. Crowdfunding and peer-to-peer lending Crowdfunding is a technique for funding business units or business projects that involves a wide range of people. Peer to peer lending (P2P Lending) is the practice or method of lending money to individuals or businesses and vice versa, applying for loans from lenders who connect lenders to borrowers or investors online. 2. Market Aggregator, which collects and manages data that consumers can use to help make decisions. 3. Risk and Investment or commonly referred to as risk and investment management in financial technology is used as planning in digital form. 4. Payment, Settlement and Clearing Payment is the fintech sector with payment system services, whether organized by the banking industry or Bank Indonesia institutions (Sugiarti et al., 2019), (Harahap et al., 2017). The role of Fintech for Micro, Small and Medium Enterprises (MSMEs): 1) Plays a role as a source of Business Financing, 2) Plays a role in MSME financial inclusion, 3) Plays a role in the financial inclusion of Micro, Small and Medium Enterprises (MSMEs), (HP & J, 2010).

**2. Working Capital**

The basic purpose of working capital management is to manage the company's current assets and current liabilities in such a way. Where working capital is maintained at a satisfactory level. Working capital should ideally be neither more nor less, but only adequate, (Sienatra & Nainggolan, 2018). Many factors, both internal and external, can influence the decision of working capital which is considered optimal for current assets and liabilities. In general, working capital management policies are driven by one of two approaches: the first consists of aggressive policy practices, with high current debt levels and little current asset investment, particularly low cash balances, low inventory levels and very limited receivables to customers. , so it can generate more profit, (Naqi & Siddiqui, 2020)

Working capital is an important part of financial management and contributes significantly to the creation of a company's wealth because it directly affects the profitability and liquidity of the organization (Deloof, 2003). Therefore, many companies that have substantial cash are invested in working capital and some are used as short-term debt as a form of financing, (Ganesan, 2007). Working capital is the total current assets owned by the company, or can also be intended as funds that must be available to finance the daily operations of the company, (Novitasari, 2017) define working capital as a number of funds that used to cover daily operational needs consisting of cash, marketable securities, receivables and inventories as well as current liabilities. Sufficient working capital will assist the financial planning process, enabling business owners to pay off their obligations on time and adjust the amount of inventory that must be available.

**3. Micro, Small and Medium Enterprises (MSMEs)**

One way to develop economic growth centers is to strengthen the micro, small and medium enterprise (MSME) sector. Indonesia is a country that has the most Micro, Small and

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Medium Enterprises (MSME) industry players, which is around 56.54 - 62.92 million units, (Laksono et al., 2022). The growth and role of Micro, Small and Medium Enterprises (MSMEs) can still be improved, not only because of their resilience in the face of various economic shocks, but also their great ability to provide employment opportunities and overcome poverty. With the current strengthening of the government's commitment, the investment climate and business enthusiasm in the national economy, including Micro, Small and Medium Enterprises (MSMEs) will be much better [38]. Micro, Small and Medium Enterprises (MSMEs) in Indonesia are one of the priorities in the development of the national economy, in addition to the fact that Micro, Small and Medium Enterprises (MSMEs) are the backbone of the people's economic system which is not only aimed at reducing the problem of inequality between income groups and between business actors, or poverty alleviation and employment. The development of Micro, Small and Medium Enterprises (MSMEs) will expand the economic base and can make a significant contribution to structural acceleration, namely increasing the regional economy and national economic resilience, (Alimudin et al., 2019)

To become competent Micro, Small and Medium Enterprises (MSMEs), it is necessary to change the pattern of development of Micro, Small and Medium Enterprises (MSMEs) from traditional to professional (complementing with legal aspects and utilizing technology), from relying on conventional performance evaluations, turning into assessments. Information Technology-based performance, (Astriani et al., 2015).

## RESEARCH METHOD

This research will be conducted by identifying, analyzing, implementing and socializing the development of financial technology models to increase working capital for Micro, Small and Medium Enterprises (MSMEs) in Deli Serdang Regency. The analytical method used in the first stage is factor analysis and then in the second stage using Structural Equation Modeling (SEM) based on Partial Least Square (PLS) is an alternative method of model estimation to answer the problem formulation. The stages of the research are carried out as follows: first, survey and collect and identify problems (supporting and inhibiting factors) Development of financial technology models to increase working capital for Micro, Small and Medium Enterprises (MSMEs) in Deli Serdang Regency, then in the second stage conducting trials model by looking at the supporting and inhibiting factors as well as evaluating the development of financial technology models to increase working capital for Micro, Small and Medium Enterprises (MSMEs) in Deli Serdang Regency, and the final stage of this research is socialization and implementation as well as producing journal articles for Micro Enterprises Small and Medium Enterprises (MSMEs) through the development of financial technology models to increase working capital for Micro, Small and Medium Enterprises (MSMEs) in Deli Serdang Regency.

The population in this study were all MSME actors from 22 sub-districts in Deli Serdang Regency. To take a sample, it is done using a convenience technique, namely collecting information from a population that can provide information easily. The research sample was 12 sub-districts in Deli Serdang Regency, namely as follows: Lubuk Pakam

District, Beringin District, Pantai Labu District, Percut Sei Tuan District, Biru-Biru District, Galang District, Batang Kuis District, Deli Tua District, Namorambe District. , Pancur Batu District, Tanjung Morawa District, Bangun Purba District.

In this study, the sample size was adjusted to the analytical model used, namely Structural Equation Modeling (SEM). The sample size for SEM using the maximum Likehood Estimation (MLE) estimation model is 100 - 200 samples, (Intani et al., 2022). Therefore, the sample size in this study was 100 MSME actors in Deli Serdang Regency in North Sumatra. Maximum Likelihood Estimation (MLE) was 100 - 200 samples, (Juliandi, 2018). Therefore, the sample size in this study was 100 SMEs in Deli Serdang Regency in North Sumatra.

## RESULTS

### 1. Structural

Model Design The structural design model in SEM PLS and its manifest variables are as follows: 1) Exogenous latent variables Loan, Financing, and Capital Provision (X1) have 6 manifests (indicators), 2) Market Supporting exogenous latent variables ( X2) has 8 manifest variables (indicators), 3) Investment Management and Risk Management (X3) exogenous latent variables have 6 manifest variables (indicators) and 4) Payment System exogenous latent variables (X4) have 6 manifest variables (indicators) and 5 ) Working Capital (Y) has 10 manifest variables (indicators). Then the endogenous and exogenous variables along with the manifest variables (indicators) used are analyzed for the outer model which aims to ensure the measurement used to be used as a measurement (valid and reliable), by looking at the outer model with several measurement indicators, namely Convergent validity, Discriminant validity. Structural model analysis (inner model) is carried out to ensure that the structural model built in this study is robust and accurate, to analyze the inner model in this study it can be seen with several indicators, namely the coefficient of determination (R2), Predictive Relevance (Q2), Goodness of Fit Index (GoF).

In testing the hypothesis with Structural Equation Modeling Part Least Square (SEM PLS) by looking at the probability values and t-statistics. For probability values, the p-value with 5% alpha is less than 0.05. The t-table value for 5% alpha is 1.96. So the criteria for acceptance of the hypothesis is when t-statistics > t-table.

### 2. Outer Analysis

Technical Model This model specifies the relationship between latent variables and their indicators. or it can be said that the outer model defines how each indicator relates to its latent variable [42]. Tests performed on the outer model:

### 3. Construct Reliability and Validity

Construct Reliability and Validity is a test to measure the reliability of a construct. The reliability of a construct must be high enough. Composite Reliability criteria are > 0.6 according to Bagozzi and Yi; Chin & Dibbern.

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**Tabel 2**
**Hasil *Composite Reliability***

| Variabel | AVE |
|---|---|
| Pinjaman, Pembiayaan, dan Penyediaan Modal ($X_1$) | 0,687 |
| Pendukung Pasar ($X_2$) | 0,782 |
| Manajemen Investasi dan Manajemen Risiko ($X_3$) | 0,728 |
| Sistem Pembayaran ($X_4$) | 0,769 |
| *Working Capital* (Y) | 0,728 |

Thus, it can be concluded based on the values in table 4.7 the Composite Reliability test is as follows:

1. Variable X1 (Loans, Financing, and Provision of Capital) is reliable, because the Composite Reliability X1 value is 0.687 > 0.6
2. Variable X2 (Market Support) is reliable, because the Composite Reliability X2 value is 0.782 > 0.6.
3. Variable X3 (Investment Management and Risk Management) is reliable, because the value of Composite Reliability X2 is 0.728 > 0.6
4. Variable X4 (Payment System) is reliable, because the value of Composite Reliability X2 is 0.769 > 0.6
5. Variable Y (Working Capital ) is reliable, because the Composite Reliability Y value is 0.728 > 0.6

**4. Discriminant Validity**

Discriminant Validity is the extent to which a construct is completely different from another construct (a construct is unique). To measure discriminant validity in the SmartPLS website, the best recent measurement is to look at the Heretroit-Monotraid Ratio (HTMT) value. If the value of HTMT < 0.90 then a construct has good discriminant validity

**Tabel. 3**
**Output Discriminant Validity**

| Variabel | Pinjaman, Pembiayaan, dan Penyediaan Modal ($X_1$) | Pendukung Pasar ($X_2$) | Manajemen Investasi dan Manajemen Risiko ($X_3$) | Sistem Pembayaran ($X_4$) | *Working Capital* (Y) |
|---|---|---|---|---|---|
| Pinjaman, Pembiayaan, dan Penyediaan Modal ($X_1$) | 0,588 | 0,836 | 0,902 | | |
| Pendukung Pasar ($X_2$) | | 0,658 | 0,790 | | |
| Manajemen Investasi dan Manajemen Risiko ($X_3$) | | | 0,599 | | |
| Sistem Pembayaran ($X_4$) | 0,786 | 0,928 | 0,768 | 0,638 | |
| *Working Capital* (Y) | 0,580 | 0,698 | 0,496 | 0,596 | 0,628 |


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Thus, it can be concluded based on the values in table 4.8 Heretroit-Monotraid Ratio (HTMT) testing is as follows:

1. Variable X1 (Loans, Financing, and Capital Provision) to X1 (Loans, Financing, and Capital Provision) has a Heretroit-Monotraid Ratio value of 0.588 < 0.90, meaning that the discriminant validity is good. or completely different from other constructs (constructs are unique).
2. Variable X4 (Payment System) against X1 (Loans, Financing, and Provision of Capital) has a Heretroit-Monotraid Ratio value of 0.786 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
3. Variable Y (Working Capital) against X1 (Loans, Financing, and Provision of Capital) has a Heretroit-Monotraid Ratio value of 0.580 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
4. Variable X1 (Loans, Financing, and Provision of Capital) against X2 (Market Support) has a Heretroit-Monotraid Ratio value of 0.836 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
5. Variable X2 (Market Supporting) against X2 (Market Supporting) has a Heretroit-Monotraid Ratio value of 0.658 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
6. Variable X4 (Payment System) against X2 (Market Support) has a Heretroit-Monotraid Ratio value of 0.928 > 0.90, meaning that the discriminant validity is not good or not really different from other constructs (the construct is not unique).
7. Variable Y (Working Capital) against X2 (Market Support) has a Heretroit-Monotraid Ratio value of 0.698 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
8. Variable X1 (Loans, Financing, and Capital Provision) against X3 (Investment Management and Risk Management) has a Heretroit-Monotraid Ratio value of 0.902 > 0.90, meaning that the discriminant validity is not good or not really different from other constructs (the construct is not unique).
9. Variable X2 (Market Support) against X3 (Investment Management and Risk Management) has a Heretroit-Monotraid Ratio value of 0.790 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
10. Variable X3 (Investment Management and Risk Management) against X3 (Investment Management and Risk Management) has a Heretroit-Monotraid Ratio value of 0.599 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
11. Variable X4 (Payment System) to X3 (Investment Management and Risk Management) has a Heretroit-Monotraid Ratio value of 0.768 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
12. Variable Y (Working Capital) against X3 (Investment Management and Risk Management) has a Heretroit-Monotraid Ratio value of 0.498 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
13. Variable X4 (Payment System) to X4 (Payment System) has a Heretroit-Monotraid Ratio value of 0.638 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
14. Variable Y (Working Capital) against X4 (Payment System) has a Heretroit-Monotraid Ratio value of 0.596 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).
15. The variable Y (Working Capital) against Y (Working Capital) has a Heretroit-Monotraid Ratio value of 0.628 < 0.90, meaning that the discriminant validity is good or completely different from other constructs (the construct is unique).

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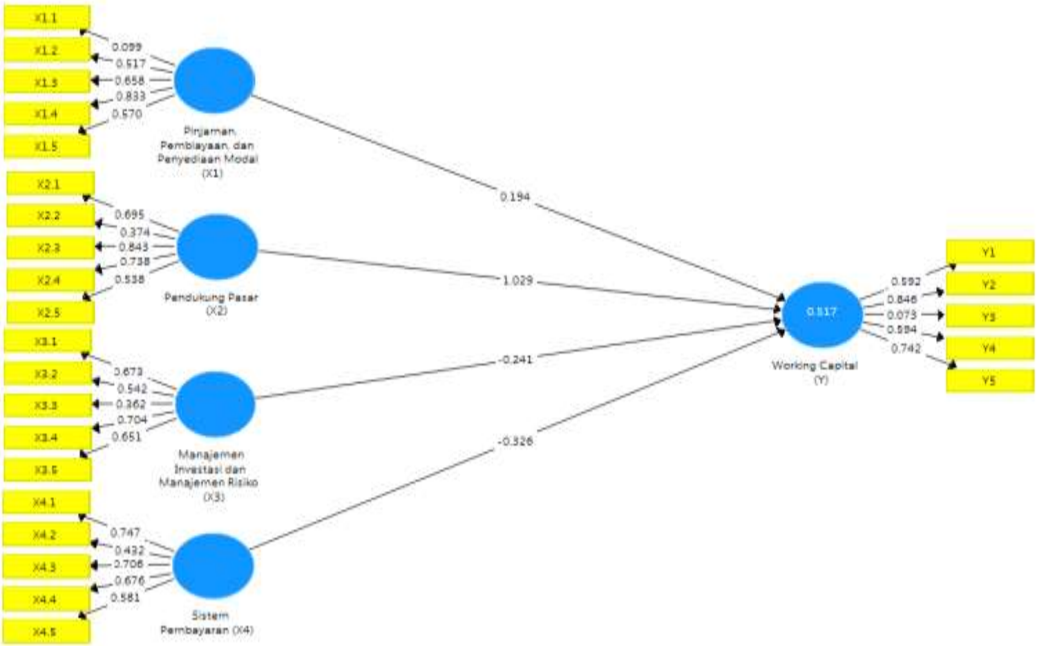


**Figure 1:**

**Output Model (Loading Factor) Research Model**

## 5. Outer Model Analysis

Multiple Linear

Linear Regression intends to analyze the direct effect, both Loans, Financing, and Provision of Capital on Working Capital, Market Support on Working Capital, Investment Management and Risk Management on Working Capital, and Payment System on Working Capital, to assess the significance of Regression Multiple Linearity can be seen from the t test (critical ratio) obtained from the bootstrapping process (resampling method).

R-Square

The definition of R-Square is a measure of the proportion of variation in the value of the affected variable (endogenous) which can be explained by the variable that influences it (exogenous). This is useful for predicting whether a model is good/bad. [43].

The criteria for the R-Square (Juliandi, 2018) are:

1. If the value of R2 (adjusted) = 0.75 → the model is substantial (strong).
2. If the value of R2 (adjusted) = 0.50 → Model is moderate.
3. If the value of R2 (adjusted) = 0.25 → Model is weak (bad)

**Tabel. 4**
**Nilai *R-Square***

| **Variabel** | **Nilai *R-Square*** | R-Square Adjusted |
|---|---|---|
| *Working Capital* (Y) | 0,517 | 0,497 |

This means that the ability of the variables X1,X2,X3,X4 in explaining Y (Working Capital) is 49.7%, thus the model is classified as moderate (poor).

F-Square

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Understanding F2 effect size (F-Square) is a measure used to assess the relative impact of an influencing variable (exogenous) on the affected variable (endogenous). Changes in the value of R2 when certain exogenous variables are omitted from the model can be used to evaluate whether the omitted variables have a substantive impact on the endogenous construct.

The F-Square criteria according to Cohen (Juliandi, 2018) are as follows:

1. If the value of f2 = 0.02 → Small effect of exogenous variables on endogenous.
2. If the value of f2 = 0.15 → Moderate/moderate effect of the exogenous variable on the endogenous.
3. If the value of f2 = 0.35 → The large effect of the exogenous variable on the endogenous.

**Tabel. 3**
**Output Discriminant Validity**

| **Variabel** | **Pinjaman, Pembiayaan, dan Penyediaan Modal ($X_1$)** | **Pendukung Pasar ($X_2$)** | **Manajemen Investasi dan Manajemen Risiko ($X_3$)** | **Sistem Pembayaran ($X_4$)** | ***Working Capital* (Y)** |
|---|---|---|---|---|---|
| Pinjaman, Pembiayaan, dan Penyediaan Modal ($X_1$) | | | | | 0,011 |
| Pendukung Pasar ($X_2$) | | | | | 0,241 |
| Manajemen Investasi dan Manajemen Risiko ($X_3$) | | | | | 0,021 |
| Sistem Pembayaran ($X_4$) | | | | | 0,030 |
| *Working Capital* (Y) | | | | | |

Thus, it can be concluded based on the values in table 3 testing the results of the F-Square test as follows:

1. Financing, and Provision of Capital) to variable Y (Working Capital) has a value of F2 = 0.011, hence the small effect of exogenous variables on endogenous variables.
2. Variable X2 (Market Support) to variable Y (Working Capital) has a value of F2 = 0.241, so the effect of exogenous variables on endogenous variables is large.
3. Variable X3 (Investment Management and Risk Management) to variable Y (Working Capital) has a value of F2 = 0.021, so the moderate effect of exogenous variables on endogenous variables.
4. Variable X4 (Payment System) to variable Y (Working Capital) has a value of F2 = 0.030, so the moderate effect of exogenous variables on endogenous variables.

Direct Effect

The purpose of direct effect analysis is to test the hypothesis of the direct effect of a variable that affects (exogenous) on the variable that is influenced (endogenous) [44].

The criteria for measuring the direct effect include:

c) If the P-Values value is < 0.05, then it is significant

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d) If the P-Values value is > 0.05, then it is not significant.

**Tabel 4**
***Path Coefficients***

| | Original sample | P-value |
|---|---|---|
| X1 – Y | 0,194 | 0,410 |
| X2 – Y | 1,029 | 0,000 |
| X3 – Y | -0,241 | 0,232 |
| X4 –Y | -0,326 | 0.209 |

The conclusion of the direct effect value in table 4 is as follows:

1. Variable X1 (Loans, Financing, and Provision of Capital) on the variable Y (Working Capital) path coefficient = 0.194 and P Values = 0.410 > 0.05, meaning that the effect of variable X1 (Loans, Financing, and Provision of Capital) on variable Y (Working Capital) is positive and not significant .
2. Variable X2 (Market Support) to variable Y (Working Capital) path coefficient = 1.029 and P Values = 0.000 <0.05, meaning that the effect of variable X1 (Loans, Financing, and Provision of Capital) on variable Y (Working Capital) is positive and significant.
3. Variable X3 (Investment Management and Risk Management) on variable Y (Working Capital) path coefficient = -0.241 and P Values = 0.232 > 0.05, meaning the effect of variable X1 (Loans, Financing, and Provision of Capital) on variable Y (Working Capital ) is negative and insignificant.
4. Variable X4 (Payment System) on variable Y (Working Capital) path coefficient = --0,236 and P Values = 0.239 > 0.05, meaning that the effect of variable X1 (Loans, Financing, and Provision of Capital) on variable Y (Working Capital) is negative and insignificant

Graphically the summary of the results of the direct effect can be seen in Figure 2 below:

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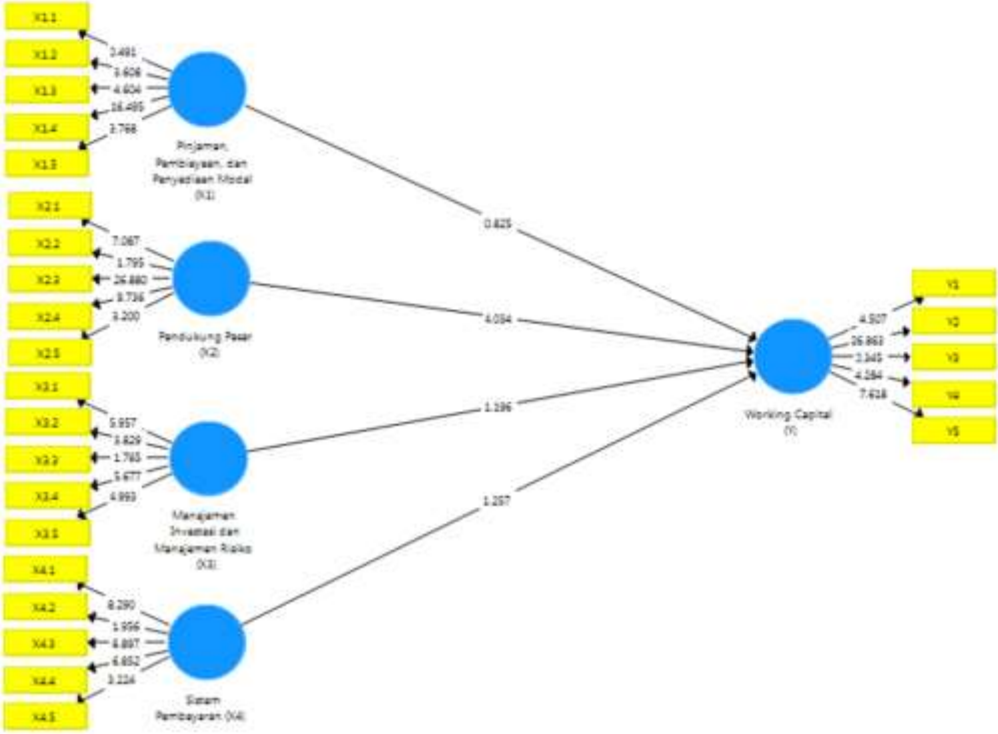


**Figure 2**
**T-Value Inner and Outer Mode**

1. Effect of Loans, Financing and Provision of Working Capital

The effect of Loans, Financing, and Provision of Capital (X1) on (Y) results in obtaining a P-value of 0.410 > 0.05, so the relationship is positive and not significant. Based on previous research according to (Kristianti & Tulenan, 2021), Loans, Financing, and Provision of Capital (X1) on Working Capital (Z) where the indicators of Loans, Financing, and Provision of Capital with the overall experience gained have a small effect on Working Capital.

2. The Effect of Market Support on Working Capital

The effect on Working Capital (Y) results in obtaining a P-Value of 0.000 < 0.05 then the relationship is positive and significant. Based on previous research according to (Mada, 2020), Market Support (X2) on Working Capital (Z) where Market Supporting indicators with the overall experience gained have a major influence on Working Capital.

3. The Influence of Investment Management and Risk Management on Working Capital. The effect of Investment Management and Risk Management (X3) on Working Capital (Y) resulted in obtaining a P-Value of 0.232 > 0.05 then the relationship was negative and not significant. Based on previous research according to (Mada, 2020), Investment Management and Risk Management (X3) on Working Capital (Z) where the indicators of Investment Management and Risk Management with the overall experience gained have a major influence on Working Capital.

4. The effect of Payment System (X4) on Working Capital (Y) results in obtaining a P-Value

of 0.239 > 0.05, so the relationship is negative and not significant. Based on previous research according to (Adi & Siregar, 2022), Payment System (X4) on Working Capital (Z) where the Payment System indicator with the overall experience gained has little effect on Working Capital.

## CONCLUSION

The use of financial technology can be used to increase working capital or working capital for owners of Micro, Small and Medium Enterprises (MSMEs) in order to smooth the business they have for the future. Micro, Small and Medium Enterprises (MSMEs) have a very large role in developing the economy in Indonesia.

Working capital is one of the important aspects in spending a business. The need for working capital is one of the most important asset elements in the company, because without working capital the company cannot meet the funding needs to carry out its activities. Effective working capital is very important for the sustainability of the company's growth in the long term. This will be able to have a positive impact on increasing the income and welfare of entrepreneurs and society in general. Increasing working capital through fintech makes it easier for Micro, Small and Medium Enterprises (MSMEs) owners to market their products.

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**063-050**

# DEVELOPMENT OF FINANCIAL TECHNOLOGY-BASED MSMES

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## ABSTRACT

MSMEs contribute to the digital economy based on financial technology where it is necessary to adopt digital technology. The aim of this paper is the development of SMEs based on financial technology. The data used in this are secondary data that comes from the results of publications on financial technology and MSMEs related to the deepening of this research material. Based on the results of research, the development of MSME based on financial technology, namely Peer to Peer (P2P) lending can reach micro and small businesses (MSMEs) that do not yet have access to banking and bridge the provision of collateral-free financing, and MSME also needs to be developed through a level up MSME program supported by government to promote technology-savvy MSMEs. The conclusion is that financial technology services are needed in the development of the digital economy, especially MSMEs, which can make it easier for MSMEs to solve existing problems.

Keywords: Development, MSMEs, Financial Technology

## INTRODUCTION

Innovation is an instrument to make it more straightforward for individuals to utilize the assets they need. Technology makes resource utilization simpler and more effective. enhancing society's enjoyment and use of technology. One of the creating advancements in the public sector is the utilization of the web. The quick advancement of the web has brought forth different developments, including monetary innovation, to address individuals' issues. Porter's five forces—competition between similar businesses, threat of new competitors, threat of substitute products, bargaining power of buyers, and bargaining power of suppliers—remain in the sufficient or medium category, indicating that SMEs still face certain challenges. Indicators supporting innovation and technological capabilities as well as government attention are also included in the sufficient or moderate category in addition to Porter's Five Strengths indicators, which demonstrates that supporting these indicators still encounters challenges or issues. (Julita, 2021). Financial services are made simpler and more effective by technology. The use of innovation in monetary administrations extraordinarily helps local area exercises in exchanges (H. Kusuma & Asmoro, 2021). MSMEs, especially teens, do not need to be exposed to finance; one reason for this is because a millennial is typically characterized as someone who is unable to live without a technology. Furthermore, millennials frequently choose to shop online. That's because the millennial generation appreciates technology that makes their life easier. Online shopping is quite popular among millennials. This is evident from the proliferation of online shopping sites and the rising number of people starting online companies on social media (Astuti et al., 2019). outlined how Fintech is a new business model that genuinely benefits the community rather than a service offered by banks. In contrast to traditional banking, fintech offers services in the form of financial transactions without requiring an account. Despite not being a financial institution like banking, fintech is nonetheless subject to regulation by Bank Indonesia. This is done to safeguard the public or customers (Bi.go.id). Companies that implement fintech are required by Bank Indonesia to register with either the Financial Services Authority or Bank Indonesia. The benefits of fintech that have driven its rapid growth among Indonesians. First, reaching a wide range of people by making it simpler for MSME business actors to grow their businesses and secure funding. In addition, Indonesians are most interested in the simplicity of the requirements Apart from that, MSMEs can also be developed through human resources and HR is the most important thing in developing these MSMEs so that they can create independent entrepreneurs in the community (Prayogi & Siregar, 2017). Second, when compared to conventional banks, practical and quick online loan services only require a single minute to complete the requirements. Third, there is a security ensure for fintech enlisted by the OJK, fintech organizations have progressed security techniques as biometric information, tokenization and encryption to guarantee that client information stays safe and isn't abused by flighty people (Bank Indonesia), chances to make pay for Sharia banking through joint effort with monetary innovation organizations. And can make things like fund transfers, payments, capital loans, and credit to asset management easier for customers. In addition, because of financial technology, the prevalence of crime in the information and technology sectors presents a barrier for Islamic banking (Mujiatun et al., 2022) .

The number of MSMEs under the guidance of the Medan City Government has increased significantly from 27,000 in 2021 to 90,000 in 2022. The increase in the number of MSMEs pays attention to MSME players so that they can be properly equipped to run their business smoothly.

Table 1 Number of MSME actors in Medan City

| No | Year | Number of Actors |
|---|---|---|
| 1 | 2021 | 27,000 |
| 2 | 2022 | 90,000 |

City Office of Cooperatives and UKM Data (2022)

MSMEs refer to the type of business established by individuals and having a maximum net worth of IDR 200,000,000.00 (not including land and buildings) (Liliana et al., 2021) . Therefore, the role of Financial Technology is very important in developing MSMEs in Indonesia especially the city of Medan to become a *level Up* MSMEs.

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According to previous research, not all business actors comprehend fintech completely. Fintech exercises in monetary administrations can be arranged into 5 (five) classifications, to be specific Installment, move, clearing, and repayment (installment, clearing, and repayment). Micro, Small and Medium Enterprises (MSMEs) play a major part in efforts to increment monetary improvement in Indonesia. Financial literacy, digital entrepreneurship, and sources of business financing are all factors that FinTech can help MSMEs develop. Peer to Peer Lending (P2PL), which was previously unavailable to banks, is one of the goals of MSME players involved in business development (Susilowati, 2020) .

## LITERATURE REVIEWS

### MSME classification

The phrase MSME, sometimes referred to as small and medium enterprises (SME), refers to a certain type of firm that was established by individuals and has total assets of little more than Rp. 200,000,000 (excluding buildings and land). According to Regulation Number 20 of 2008, "Micro, Small and Medium Enterprises" (MSMEs) are defined as follows: A small business is an independent, productive economic enterprise run by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become a part of a medium-sized business either. Micro endeavors are useful organizations claimed by people as well as individual business elements that meet the requirements for micro ventures as specified in regulation no. 20 of 2008, specifically (Bank Indonesia, 2020) .

### Technology Finance

The job of Monetary innovation overall is Installment administrations, for example, PayPal consequently change cash trade rates, so those in America can purchase products from Indonesia effectively, Fintech additionally plays a significant part in changing customer conduct and assumptions including: a) Having access to data and information at any time and from any location. b) Level enormous and independent companies so they will generally have elevated standards in any event, for recently assembled private ventures.

The Fintech business can create because of a few elements including:

a. The way consumers think has changed. This change is characterized by an increasing number of needs in society, but people want them to be easy to get and practical. People are more likely to use Fintech services to quickly meet their needs and move away from the traditional system in which the seller is involved.

b. Digital progress Digitization is a change from the old framework

not yet present day. In this time, digitization has been utilized in numerous items for local area needs. It will make it simpler for people to support their activities and requirements, just as smartphones, which have become increasingly sophisticated and have spread throughout society, have done. Trend shifts Rapid and ongoing innovations and developments foster social shifts and the acceleration of a trend. In this day and age, schools are no longer influenced by a brand or an institution; rather, millennials make purchases more quickly and with greater caution than in the past.

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c. Easier access Receptiveness of administrations and data frameworks will progressively give simple access in exchanges. Earlier technological advancements that would open up new market shares preceded this access's development.

d. Profitable product offerings Customers will change and be more likely to purchase a product if it offers benefits and is profitable.

e. Policy support from the public authority. For this situation the public authority giving strategies in management is essential to assist with propelling the Fintech business and give consolation to keep on creating. The Financial Services Authority (OJK) is the organization in Indonesia that has been given authority over Fintech supervision in financial institutions (Winarto, 2020).

## RESEARCH METHOD

The data used in this study come from library research where The results of publications on financial technology and MSMEs that are connected to the in-depth analysis of this research material serve as secondary data. Primary data, meantime, came from observing the development of SMEs. Focusing on the development of financial technology-based MSMEs. Furthermore, data and information obtained from research libraries with accredited journals and national and international reputations.

## RESULTS and DISCUSSION

Table 2 Development of Number of Electronic Financial Transactions in Indonesia in 2016-2021 in Volume and Nominal (Rp)

| Period | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Volume | 683,133,352 | 943,319,933 | 2,922,698,905 | 5,226,699,919 | 4,625,703,561 | 602,293,039 |
| Nominal | 7,063,688.97 | 12,375,468.72 | 47,198,616.11 | 145,165,467.60 | 204,909,170 | 35,100,099.84 |

Source: Bank Indonesia

Electronic monetary exchanges in volume are units of exchanges while ostensible qualities are in rupiah. From table 1 it very well may be seen that consistently the quantity of transaction has expanded consistently. The results, which we believe, suggest a typology of crowdfunding campaigns for future consideration, come from research that is more focused on social-based entrepreneurship, or crowdfunding campaigns. a) Communicator: This kind uses online marketing and public relations to build a large social network and a following. The project will "turn heads" as a result of this. b) Organizer: The project gradually gained more attention as the founders were able to present their offerings in a way that appealed to their audience through blogs and updates, and funders began to spread the word through their personal networks and the community. c) A self-starter: With an active support community, an appealing product boosts virality; effective media send off, huge number of remarks, and got extra fans to the venture expansion to possible clients (Ardiansyah, 2019) .

Every MSMEs feels the convenience of technological finance because Fintech makes it easy to access various types of financial services. For example, mobile applications installed by banks and savings and loan cooperatives make it easy to access services using a cellphone (P et al., 2021). Fintech makes it easier for MSMEs to access services through features like mobile money and electronic wallets, peer-to-peer (P2P) lending and crowdfunding, alternatives for credit scoring, payment technology that uses digital KYC processes, and regulatory technologies like digital signatures. Especially those who were previously underserved by financial service schools are now beginning to be served.

P2P's significance for entrepreneurial endeavors is confirmed by additional research. Despite the fact that distributed (P2P) selling stages permit business visionaries to set up virtual organizations, the plan of action inside P2P stages stays an under-concentrated on region. The author's analysis indicates that providing funding assistance is the most crucial aspect of developing level-up MSMEs. Sharia loaning is characterized as the arrangement of monetary administrations in view of sharia rules that associate funding suppliers and supporting beneficiaries to go into supporting agreements through electronic frameworks with the assistance of web organizations. The distinction among sharia and customary P2P loaning lies in the exchange framework utilized. Sharia P2P lending operates according to Islamic or sharia principles and regulations. For instance, employing sharia contracts and the profit-sharing principle. In contrast to conventional peer-to-peer lending, which only makes use of positive law, tadlis (concealing imperfections), dharar (hurting the other party), and haram; ( 2) In accordance with the sharia and any applicable laws and regulations, adhere to the principles of fairness, justice, and balance; ( 3) The used contract conforms to the characteristics of financing services like al-bai', ijarah, mudharabah, musyarakah, wakalah bi al ujrah, and qardh; ( 4) An electronic certificate serves as proof of the transaction and has been validated; 5) exchanges should make sense of benefit imparting arrangements that are in understanding to sharia, and (6) administration conveyance might charge an expense (ujrah) with the ijarah guideline (Lova, 2021) , solving several problems related to the welfare of MSMEs. P2P lending can help increase the level of inclusion finance for the people of Indonesia. Around 80% of MSEs have not had access to or bank financing (BPS, 2016).

This is because business capital loans have conditions to include collateral or guarantees in the process. P2P lending can reach micro and small businesses (MSEs) that do not yet have access to banking and bridge credit-worthy MSEs to get loans either with or without collateral. P2P lending also provides a solution to the uneven availability of financing services (Harp et al., 2021) .

Opportunities in Fintech for the Growth of MSMEs Fintech, or financial technology, has the potential to significantly advance MSMEs in Indonesia. In general, MSMEs encounter capital and financial issues. With Fintech, it can assist MSMEs with getting comfort and effectiveness in the monetary region(Yahya et al., 2020) . Opportunities in Fintech for the Growth of MSMEs Fintech, or financial technology, has the potential to significantly advance MSMEs in Indonesia. In general, MSMEs encounter capital and financial issues. With Fintech, it can assist MSMEs with getting comfort and effectiveness in the monetary region (Rizal et al., 2018) . Opportunities for implementing Fintech in MSMEs are in the form of market expansion, namely targeting unreached people. Communities who do not have good literacy skills but have national financing needs for MSMEs are also an opportunity for Fintech business people (Romadhon & Fitri, 2020) . One of the opportunities for the Fintech industry to grow is the shift in consumer mindset, which includes the desire to obtain goods or services in a practical and simple manner, advancements in digitalization, and a decline in brand and institution loyalty. The Covid pandemic has also made it easier for Fintech companies to enter MSMEs. This is because the pandemic situation has affected consumers' declining purchasing power as a result of higher unemployment as a result of company closures. Furthermore, shoppers feel more secure making buys from home. Subsequently, MSMEs should think about involving Fintech with an end goal to increment deals. Fintech, or financial technology, plays a crucial role in Indonesia's MSMEs' growth.(NP Kusuma, 2020) . In terms of technology-based financial management, fintech can offer convenience and efficiency through the digitalization of financial reports, payment technology, and online-based loans.

With easy-to-use digital financial transaction services, fintech can make it easier for the unbanked community to gain access to new customers through market expansion. In Indonesia, the growth of micro, small, and medium-sized enterprises (MSMEs) is also fraught with difficulties for fintech. Problems with the infrastructure, legislation, inadequate human resource capabilities, and a lack of financial literacy are among these obstacles. In terms of infrastructure, Fintech services can only work at their best if they are connected to a reliable and adequate internet network. In order to avoid fraud and financial crime, Fintech must be able to educate and educate the general public about legal products and services in accordance with applicable legal provisions. Regarding the limited capacity of human resources due to a lack of financial literacy, which keeps people trapped in illegal Fintech and reduces the level of protection offered to Fintech users. Furthermore, the public authority needs to furnish a monetary application framework with better application improvement and simple to use by MSMEs.

## CONCLUSION

In developing MSMEs in the long term to fulfill the welfare of MSMEs, the limited funds experienced by MSME actors are the main problem in their business, so it is necessary to develop MSME based on financial technology by offering financing in accordance with existing provisions and laws, namely Peer to Peer (P2P) lending can reach micro and small businesses (UMK) that do not yet have access to banking and bridge MSMEs that are actually eligible to get loans either with or without collateral. P2P lending also provides a solution to the uneven availability of financing services and the MSMEs *level up program* to be able to create MSMEs that help increase competitiveness, innovation in the digital world.

## ACKNOWLEDGMENTS

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## DECLARATION OF CONFLICTING IN TERESTS

There is no conflicting interest in this study.

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**062-049**

# STRENGTHENING CHARACTERISTICS AND COMPETENCIES ENTREPRENEURSHIP TO ENHANCE MSME PERFORMANCE

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## ABSTRACT

Entrepreneurial characteristics and competencies are two important factors needed by Micro, Small and Medium Enterprises (SMEs) entrepreneurs to face the environmental challenges in the dynamic world of business and achieve high business performance. This study aimed to examine the effect of the entrepreneurial characteristics and entrepreneurial competencies on SMEs performance. The study was conducted on SMEs in Deli Serdang District. The research sample was 184 SMEs were determined through purposive sampling method. Data were collected through a survey with questionnaires. The data were analyzed using structural equation modeling with Partial Least Square (PLS) approach. The results showed that entrepreneurial characteristics have significant positive effect on entrepreneurial competencies, but entrepreneurial characteristics have not significant effect on the performance of SMEs and entrepreneurial competencies have significant positive effect on the performance of SMEs. The results also indicate that entrepreneurial competence fully mediates the relationship between entrepreneurial characteristics and SMEs performance.

Keywords: entrepreneurial characteristics, entrepreneurial competencies, SMEs performance

## INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are a very vital sector as a support for the regional economy in creating growth and jobs. However, the importance of this sector has not been matched by its contribution to the value of Gross Domestic Product (GDP) and the export value is still relatively low when compared to the population of MSMEs at 99.9% (Bank Indonesia, 2015). This condition is not too surprising, because many studies and national data show that the performance of MSMEs is relatively poor compared to large businesses, even with MSMEs in developed countries (Tambunan, 2012). Likewise, the results of the APEC MSME Innovation Center's study regarding the global competitiveness of MSMEs in
13 countries including Indonesia, shows that Indonesia is a country whose MSMEs have low competitiveness compared to other ASEAN countries such as Singapore, Malaysia, Thailand and the Philippines (Susilo, 2010).

The low performance produced by MSMEs in Indonesia is due to the low quality of human resources (HR) (Dipta, 2012) or in other words low entrepreneurial competence (Susilo, 2010). , technology, marketing and other competencies needed to manage a business. What's more, the entrepreneurial spirit. Apart from that, the unprofessional culture of MSMEs is an obstacle in itself for improving the quality of human resources. In addition to the conditions faced by MSMEs with low educational background, MSME actors find it difficult to understand or master how to improve product quality and standardization, expand and improve access to financing, strengthen and improve access to technology for MSME development, increase access to promotions at home and abroad. , and building global business networks.

The low quality of human resources has an impact on the low performance of MSMEs. In fact, human resources are one of the main factors in determining the level of business competitiveness to face rapid changes in the business environment, ASEAN-China free trade (ACFTA), and the ASEAN single market through the Economic Community.

ASEAN (MEA) must be the driving force to increase the competitiveness of its business.

The successful performance of small businesses is determined by individual factors and environmental factors (Attahir, 1995). Specifically for individual factors, business actors must have good entrepreneurial characteristics and certain competencies. Entrepreneurial characteristics that have been tested for their relationship with business performance are classified into several types (Li, 2009), namely demographic characteristics (gender, age, ethnicity, and parental background), psychological and behavioral characteristics (motivation, personal attributes, values, goals, and attitudes), and human capital characteristics (education, experience, training, skills and technical knowledge). These characteristics include personality traits and individual competencies in the entrepreneurial process which will influence MSME business performance. For this reason, MSME actors are required as much as possible to be able to apply an entrepreneurial spirit in controlling their business to increase competitiveness and defend their business from failure (Zulfadil, 2006) and utilize their competencies to be successful. The findings of Sarwoko et al . (2013) indicated that if small business actors have entrepreneurial characteristics and competencies, this will have an impact on achieving business performance.

A person can act like entrepreneurial characteristics, including self-confidence, task and results oriented, risk taking, leadership, originality and future orientation, but only entrepreneurial people are able to act using these characteristics in their work (Meredith et al., 2000 ) . Previous research results show that entrepreneurial characteristics can improve business performance and success in small businesses in the UK (Hall, 1994), SMEs in Bangladesh (Islam et al ., 2011), and SMEs in Indonesia (Sarwoko et al ., 2013). . Entrepreneurial characteristics are also able to increase entrepreneurial optimism in America (Liang & Dunn, 2010). The characteristic of optimistic entrepreneurs, even in adverse situations, is an important factor in driving success (Kuratko & Hodgetts, 2004). High entrepreneurial characteristics are positively related to business success (Ardichvili et al ., 2003). However, the research results of Begley & Boyd (1987) show a low relationship between entrepreneurial characteristics and the financial performance of small businesses in the UK. Based on theoretical and empirical studies, the hypothesis in this research is that entrepreneurial characteristics have a positive effect on the performance of MSMEs (Hypothesis 1).

Entrepreneurial characteristics such as individual entrepreneurial traits (motivation, intention, and experience) can also be factors that influence entrepreneurial competence (Segal et al ., 2009). An understanding of entrepreneurial characteristics is necessary to assess technical and managerial competence in starting, developing and sustaining small businesses (Adegbite et al ., 2006). The research results of Sarwoko et al . (2013) shows that there is a significant positive influence between entrepreneurial characteristics and entrepreneurial competence. The hypothesis in this research is that entrepreneurial characteristics have a positive effect on entrepreneurial competence (Hypothesis 2).

Entrepreneurial competence is needed to face local and global competition (Ng & Kee, 2013). Entrepreneurial competence becomes more important in order to take proactive steps towards the challenges of the business environment. This is because small business owners generally act as managers, organizers and also business leaders who lead businesses and lead people (Zimmerer & Scarborough, 2004), so competencies as managers which

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include planners, organizers, administrators and communicators are needed to improve their business performance. (Cyhe et al ., 2010). The nature of entrepreneurial competence is indicated as an important concept for enhancing entrepreneurship (Wickramaratne et al ., 2014). In other words, the managerial competence of entrepreneurs plays an increasingly significant role in the success of MSMEs.

Boyatzis (2009) defines competency as a capability or ability. According to Kaur & Bains (2013), competency is a number of experiences, knowledge, skills and attitudes needed throughout life for effective performance in a task or job. Spencer & Spencer (1993:9) define competence as a fundamental characteristic of each individual that is linked to criteria referenced to effective and/or superior performance in a job or situation. Meanwhile, Baum et al . (2001) explains competence as individual characteristics such as the knowledge, skills and abilities needed to do certain jobs. Competency is a concept related to a person's knowledge, skills and ability to achieve performance.

Baum et al . (2001) focuses on two general competencies and two specific competencies. General competencies include organizational skills and opportunity skills, while specific competencies include industry skills and technical skills. Specific competencies (industrial and technical competencies) should receive more attention from researchers in entrepreneurial settings because of the research results of Baum et al. shows that special competencies have a significant direct effect on business growth (business performance). In fact, these special competencies are an important form of mastery of skills that facilitate the implementation of entrepreneurial vision and strategy.

According to Ng and Kee (2013), the competencies that MSMEs must ideally possess are entrepreneurial competencies (focus on business opportunities and value creation), managerial competencies (focus on human management and the complexity of planning, organizing, coordinating and monitoring effectively), and competencies technical (focus on science and technology, and customer needs innovation). Entrepreneurial competence indicates the ability to observe the environment to select promising opportunities and formulate strategies, while managerial competence requires conceptual, interpersonal and technical skills.

Man et al . (2002) identified six main competency areas that SMEs must have, namely opportunity, organization, strategy, relationships, commitment, and conceptual. Opportunity competency relates to the identification and development of market opportunities through various means. Organizational competence is recognized as the same as managerial competence, including the ability to lead, control, monitor, organize and develop external and internal resources to guarantee the company's capabilities. Strategic competency includes setting, evaluating and implementing company strategy. Relationship competency concerns interactions to build cooperation and trust that require persuasive abilities, communication and interpersonal skills. Commitment competency is an entrepreneurial strength to advance in business. Conceptual competency is related to entrepreneurial behavior such as a short-term perspective. , quickly solve problems, or require an intuitive response. Entrepreneurial competency is seen as important for business growth and success.

According to Man & Lau (2005), entrepreneurial competence has two sources; first, components that stem from an entrepreneurial background (such as traits, personality, attitudes, self-image, and social roles) and second, components that can be obtained on the job or through theory or practical learning (such as skills, knowledge, and experience). Man et al . (2002) consider entrepreneurial competence as a higher level characteristic that includes personality traits, skills and knowledge, and can therefore be seen as the entrepreneur's total ability to perform a job role successfully.

Competency is a set of success factors that contribute to achieving high performance and real results (Wu, 2009). Previous research results (Ardiana et al., 2010; Barazandeh et al

., 2015; Baum et al ., 2001; Hormiga et al ., 2010; Karami, 2004; Man & Law, 2008; Mohamad & Sidek, 2013; Sarwoko et al ., 2013; Tanoira & Valencia, 2014) supports that entrepreneurial competence can contribute to the performance of MSMEs. Therefore, MSME actors are needed who have adequate competence to increase their competitiveness. Based on theoretical and empirical studies, the hypothesis in this research is that entrepreneurial competence has a positive effect on MSME performance (Hypothesis 3).

The problems faced in Deli Serdang Regency include, among other things, the weak development of entrepreneurial characteristics and the low competency (knowledge, skills and abilities) of human resources in business management. For this reason, there needs to be concrete efforts that must attract the attention of both regional governments, universities, stakeholders and MSME players themselves in making the most of market liberalization to improve the ability of MSMEs so that they can become strong and reliable MSMEs and able to face the highly competitive global market business competition.

Efforts needed to strengthen or empower MSMEs so that they are not left behind by other business actors both at home and abroad can be done through improving the entrepreneurial characteristics and competencies of MSMEs (Dipta, 2012). Through strengthening entrepreneurial characteristics and competencies, it is hoped that MSMEs will be able to improve the quality and standardization of products that are equivalent in the ASEAN region, expand and improve access to MSME financing, strengthen and increase access to technology for MSME development, increase promotional access at home and abroad, build global business networks. , and ultimately able to improve the performance of MSMEs.

Based on this background, to understand the relationship between entrepreneurial characteristics and HR competencies and MSME performance, it is necessary to conduct research that examines the influence between these variables, as a basis for formulating strategic policies in developing MSME entrepreneurship in Kubu Raya Regency. This is because entrepreneurial characteristics and HR competencies are potential business functions which are key elements of the strategy of every MSME in its efforts to build and maintain a competitive advantage in the global market.

## RESEARCH METHODS

The research approach uses quantitative research by conducting causal research to examine the relationship between entrepreneurial characteristics and competencies and MSME performance. The variables analyzed include entrepreneurial characteristics, entrepreneurial competence and MSME performance.

Entrepreneurial characteristics, namely the characteristics inherent in MSME actors. The measurement of entrepreneurial characteristics is based on the opinion of Meredith et al . (2000) include self-confidence, task and results oriented, risk taking, leadership, originality, and future oriented. Entrepreneurial competency, namely the knowledge, skills and abilities needed by MSMEs to achieve superior performance. The measurement of entrepreneurial competence is based on the opinion of Baum et al . (2001) includes knowledge, skills and abilities. MSME performance, namely the success or success of MSMEs compared to the previous year. MSME performance measurement consists of four indicators. Three indicators adopted from several opinions (Amage et al ., 2014; Baum et al ., 2001; Driessen & Ende, 2006; and Lee & Tsang, 2001), consisting of sales growth, profit growth and asset growth. Equipped with one other indicator, namely customer growth.

All research variables were measured using a five-point Likert scale with a scale of 1 = strongly disagree and 5 = strongly agree. The conceptual framework of the research is shown in Figure 1.

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Research was conducted on MSMEs in Kubu Raya Regency, West Kalimantan. Because the number of MSMEs has not been identified with certainty, sample selection was carried out using a purposive sampling technique based on characteristics productive economic efforts. The recommended sample size is based on the opinion of Ghozali & Latan (2015:51) in using the partial least squares (PLS) method of at least 30-100 samples, so the research sample is 250.

The data collection technique is through distributing questionnaires. The questionnaires distributed have been tested for the level of validity and reliability through questionnaire trials on 30 MSME players. The results of validity testing carried out with Pearson's Product Moment Correlation show all research indicators valid with a correlation value above 0.5 and a significance level at the 0.01 level, while reliability testing with Cronbach's Alpha shows that each variable is reliable with an alpha coefficient value greater than 0.8. Table 1 and Table 2 show the results of the validity and reliability tests.

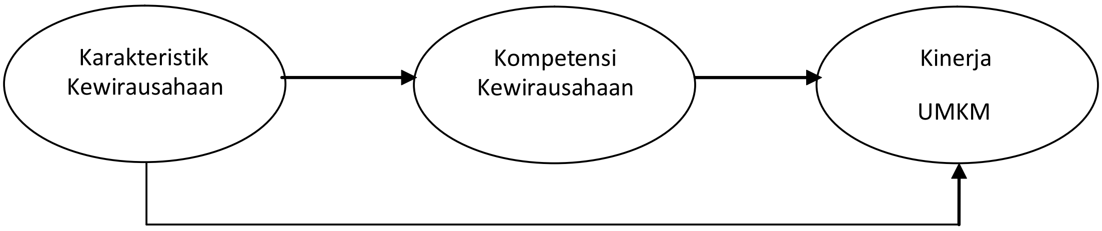


**Figure 1. Conceptual framework of research.** *Source* : Conceptual and empirical study.

**Table 2. Reliability Test of Research Variables**

| Variable | Alpha Coefficient | Information |
|---|---|---|
| Characteristics of entrepreneurship | 0.813 | Reliable |

**Table 1. Validity Test Results**

| Variable | Indicator | Correlation | Information |
|---|---|---|---|
| Characteristics of Entrepreneurship | Self-confident | 0.684 | Valid |
| | Task and Results | 0.814 | Valid |
| | Orientation | 0.739 | Valid |
| | Risk Taking | 0.814 | Valid |
| | Leadership | 0.767 | Valid |
| | Originality | 0.587 | Valid |
| | Future Orientation | | |
| Competence Entrepreneurship | Knowledge | 0.874 | Valid |
| | Skills | 0.929 | Valid |
| | Ability | 0.846 | Valid |
| Business Performance | Sale | 0.917 | Valid |
| | Profit | 0.956 | Valid |
| | Asset | 0.923 | Valid |
| | Customer | 0.819 | Valid |

*Source* : Results of research data processing

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| | | |
|---|---|---|
| Entrepreneurial competency | 0.847 | Reliable |
| Business performance | 0.923 | Reliable |

*Source* : Results of research data processing

The data analysis model used is the *partial least squares* (PLS) approach. PLS is *component* or *variance- based structural equation modeling* (SEM) and can be used to confirm theory and explain whether there is a relationship between latent variables.

## RESULTS AND DISCUSSION

The research was conducted on MSMEs in Deli Serdang Regency, North Sumatra with the criteria of being a productive economic enterprise and having a workforce of less than 100 people. Research data was collected through a survey by distributing 250 questionnaires. Of the 250 questionnaires distributed, 184 questionnaires were returned. and can be processed further.

An overview of the characteristics of respondents including gender, age and final education is shown in Table 3. The characteristics of these respondents show that the number of MSME actors based on gender is almost equal, men are 53.26% while women are 46.74%. Most of the respondents were relatively young, between 21-30 years, 35.33% and the respondents' education level was high school, 41.85%.

Profile of businesses run by MSMEs in Deli Serdang Regency. includes business field, number of employees, and length of business. Based on Table 4, it shows that the majority of respondents are engaged in service and trade businesses (51.63%), with the number of employees being less than 5 people (80.98%) and the length of business being less than 5 years (56.52%).

Equation model analysis was carried out using a partial least squares (PLS) approach via SmartPLS software. PLS is used to confirm theories and explain whether they exist or not relationship between latent variables. PLS includes measurement models and structural models.

**Table 3. Respondent Characteristics**

| **Variable** | **Frequency** | **Percentage** |
|---|---|---|
| **Gender** Male | 98 | 53.26 |
| Woman | 86 | 46.74 |
| Amount | 184 | 100 |
| **Age (years)** □ | | |
| 20 | 4 | 2.17 |
| 21 – 30 | 65 | 35.33 |
| 31 – 40 | 47 | 25.54 |
| 41 – 50 | 52 | 28.26 |
| > 50 | 16 | 8.70 |
| Amount | 184 | 100 |
| Elementary **education** | 18 | 9.78 |
| JUNIOR HIGH SCHOOL | 20 | 10.87 |
| SENIOR HIGH SCHOOL | 77 | 41.85 |

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| | | |
|---|---|---|
| Diploma | 19 | 10.33 |
| Bachelor | 50 | 27.17 |
| Amount | 184 | 100 |

*Source* : Results of research data processing

**Table 4. Respondent's Business Profile**

| Variable | Frequency | Percentage |
|---|---|---|
| Craft Business | | |
| Sector | 17 | 9.24 |
| Food Processing | 54 | 29.35 |
| Services and Trade | 95 | 51.63 |
| Convection | 6 | 3.26 |
| Agribusiness | 7 | 3.80 |
| Farm | 5 | 2.72 |
| Amount | 184 | 100 |
| Number of Employees | | |
| < 5 | 149 | 80.98 |
| 5 – 19 | 34 | 18.48 |
| > 20 | 1 | 0.54 |
| Amount | 184 | 100 |
| Length of Business | | |
| < 5 | 104 | 56.52 |
| 6 – 10 | 38 | 20.65 |
| 11 -15 | 24 | 13.04 |
| 15 – 20 | 12 | 6.52 |
| > 20 | 6 | 3.26 |
| Amount | 184 | 100 |

*Source* : Results of research data processing

The measurement model analysis was carried out in three stages. The first stage tests convergent validity on each reflexive indicator, the second stage tests discriminant validity on the reflexive indicators, and the third stage tests composite reliability on latent variables.

Convergent validity assessment is based on the correlation between item scores/component scores and construct scores as indicated by the loading factor of the indicators that measure the construct. An indicator is considered valid if it has a loading value above 0.5 and/or a T-statistic value above 1.96.

Based on the results of convergent validity testing in Table 5, it shows that all indicators of entrepreneurial characteristics, entrepreneurial competence and MSME performance meet convergent validity with a T-statistic value above 1.96 and there is no loading factor ( original sample estimate ) whose value is below 0. 5.

**Table 5. Convergent Validity Test Results**

| Variables | Original Sample Estimate | Mean of Subsamples | Standard Deviation | T-Statistics |
|---|---|---|---|---|
| Characteristics | | | | |
| Self-confident | 0.744 | 0.744 | 0.047 | 15,964 |
| Task and Results Orientation | 0.876 | 0.871 | 0.027 | 31,912 |
| Risk Taking | 0.764 | 0.759 | 0.050 | 15,171 |
| Leadership | 0.851 | 0.851 | 0.026 | 33,089 |
| Originality | 0.729 | 0.729 | 0.051 | 14,312 |
| Future Orientation | 0.708 | 0.706 | 0.063 | 11,236 |
| Competence | | | | |
| Knowledge | 0.900 | 0.901 | 0.015 | 58,260 |
| Skills | 0.910 | 0.909 | 0.019 | 48,056 |
| Ability | 0.849 | 0.845 | 0.032 | 26,558 |
| Business Performance | | | | |
| Sale | 0.889 | 0.890 | 0.022 | 40,678 |
| Profit | 0.910 | 0.910 | 0.017 | 52,062 |
| Asset | 0.797 | 0.792 | 0.052 | 15,378 |
| Customer | 0.887 | 0.887 | 0.031 | 28,932 |

*Source* : Results of research data processing

Discriminant validity testing can be carried out using two methods, namely cross loading values and comparison of average variance extracted (AVE) roots with correlation between latent variables. The cross loading value is obtained from the correlation between the constructs with measurement indicators. If the correlation of a construct with measurement items is greater than other constructs, it means that the latent construct predicts the measures in their block better than the measures in other blocks (Ghozali, 2008:25).

**Table 6.** ***Cross Loading Values***

| Variable | Characteristics | Competence | Performance |
|---|---|---|---|
| Characteristics | | | |
| Self-confident | 0.744 | 0.200 | 0.148 0.191 |
| Task and Results Orientation | 0.876 | 0.196 | 0.051 0.116 |
| Risk Taking | 0.764 | 0.292 | 0.043 |
| Leadership | 0.851 | 0.297 | 0.151 |
| Originality | 0.729 | 0.227 | |
| Future Orientation | 0.708 | 0.224 | |
| Competence | | | |
| Knowledge | 0.204 | 0.900 | 0.332 0.293 |
| Skills | 0.197 | 0.910 | 0.279 |
| Ability | 0.199 | 0.849 | |

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| | | | |
|---|---|---|---|
| Performance | | | |
| Sale | 0.148 | 0.380 | 0.889 0.910 |
| Profit | 0.176 | 0.514 | 0.797 |
| Asset | 0.108 | 0.241 | 0.887 |
| Customer | 0.127 | 0.486 | |

Source : Results of research data processing

The cross loading results in Table 6, it shows that the indicators of entrepreneurial characteristics have the highest cross loading values in the latent variable column of entrepreneurial characteristics, as do the indicators of entrepreneurial competence and MSME performance. This indicates that the indicator predicts the latent variable better than other latent variables. Thus, discriminant validity is met.

The second method for testing discriminant validity can be done by comparing the root of the AVE for each latent variable with the correlation coefficient between the latent variables. If the root of the AVE is greater than the correlation between latent variables, then discriminant validity is met. Table 7 shows that the AVE root value of the latent variables entrepreneurial characteristics, entrepreneurial competence and MSME performance is greater than the correlation between latent variables.

**Table 7. AVE, AVE Root, and Correlation Between Latent Variables**

| Variable | AVE | AVE Root | Characteristics | Competence | Performance |
|---|---|---|---|---|---|
| Characteristics | 0.610 | 0.781 | 1,000 | | |
| Competence | 0.786 | 0.887 | 0.285 | 1,000 | |
| Performance | 0.760 | 0.872 | 0.179 | 0.439 | 1,000 |

Source: Results of research data processing

Thus it is concluded that discriminant validity is met.

Composite reliability testing was carried out to test the consistency of the research instrument items according to respondents' assessments. A research instrument is said to have good composite reliability if the value is above 0.70. Reliability testing results The composite in Table 8 shows that each latent variable has a composite reliability value above 0.70.

**Table 8. Composite Reliability Test Results**

| Variable | Composite Reliability |
|---|---|
| Characteristics | 0.903 |
| Competence | 0.917 |
| Performance | 0.927 |

Source : Results of research data processing

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The assessment of the goodness of fit of the structural model can be seen from the R- square value of the endogenous latent variable in the structural equation, the Q- square predictive relevance measure , and the t test as well as the significance of the structural path parameter coefficient. R- square functions to see how big the diversity of the endogenous variables is. explained by exogenous variables. Table 9 shows the results of R- square estimation for endogenous latent variables. The model of the influence of entrepreneurial characteristics on entrepreneurial competence has an R- square value of 0.081, meaning that the variability of the entrepreneurial competence variable that can be explained by the variability of the entrepreneurial characteristic variable is 8.1%, while 91.9% is explained by other variables outside the research model. For MSME performance, the R- square value is 0.196, meaning that 19.6% of the variability in the MSME performance variable can be explained by the variables of entrepreneurial characteristics and entrepreneurial competence, the remaining 80.4% is explained by other variables outside the research model.

Q- square predictive relevance is used to measure how well the observed values are produced by the model and also the estimated parameters. The Q- square value is: Q 2

**Table 9. RS *quare value of* endogenous variables**

| Endogenous Variables | RS *quare* |
|---|---|
| Competence | 0.081 |
| Performance | 0.196 |

Source : Results of research data processing

$= 1 - (1 - R_1^2)(1 - R_2^2)$ where $R_1^2$ and $R_2^2$ are the R- *square* endogenous variables in the research model. Thus the value of $Q^2 = 1 – (1 – 0.081) (1 – 0.196) = 0.261$, meaning that the model is able to explain 26.1% of MSME performance, while the remaining 73.9% is explained by other variables that have not been included in the model and *error* .

To assess the significance of the structural path, it can be seen from the T- *statistic value* . If the T- *statistic value* is more than 1.96 then there is a significant influence between the latent variables, but if the T- *statistic value* is less than 1.96 then there is no significant influence between the latent variables. The test results in Table 10 show that in the direct effect estimation, there is an influence of the entrepreneurial characteristics variable on the performance of MSMEs, while in the indirect effect estimation, there are two significant paths, namely the influence of entrepreneurial characteristics on entrepreneurial competence and the influence of entrepreneurial competence on the performance of MSMEs.

The coefficient value and T- *statistic* for each path can be explained that the estimated direct influence of entrepreneurial characteristics on MSME performance has a coefficient value of 0.205 with a T- *statistic value* of 3.234. Thus, there is a significant influence of entrepreneurial characteristic variables on MSME performance variables. A positive coefficient value indicates a unidirectional relationship between entrepreneurial characteristics and MSME performance.

Simultaneous estimates of indirect effects show that the influence of entrepreneurial characteristics on entrepreneurial competence has a coefficient value of 0.285 with a T- *statistic value* of 4.095. Thus, the model is acceptable, meaning there is a significant influence entrepreneurial characteristic variables on entrepreneurial competency variables. A positive coefficient value indicates that the stronger the entrepreneurial characteristics, the higher the entrepreneurial competence possessed by MSME actors. The influence of entrepreneurial characteristics on MSME performance has a coefficient value of 0.058 with a

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T- *statistic value* of 0.896. Thus, the model cannot be accepted, meaning that there is no significant influence of entrepreneurial characteristic variables on MSME performance. A positive coefficient value indicates a unidirectional relationship between entrepreneurial characteristics and MSME performance. The influence of entrepreneurial competence on the performance of MSMEs has a coefficient value of 0.423 with a T- *statistic value* of 5.892. Thus, the model is acceptable, meaning that there is a significant influence of the entrepreneurial competency variable on the MSME performance variable. A positive coefficient value indicates that the higher the entrepreneurial competence, the higher the performance of MSMEs.

**Table 10. Test Results**

Source : Pr

| Relationship Between Variables | Direct Influence T-Statistic | Direct Influence Coefficient | Indirect Influence T-Statistic | Indirect Influence Coefficient |
|---|---|---|---|---|
| Characteristics -> Competencies | | | 0.285 | 4,095 |
| Characteristics -> Performance | 0.205 | 3.234 | 0.058 | 0.896 |
| Competency -> Performance | | | 0.423 | 5,892 |

The research results prove that the coefficient of the direct influence of entrepreneurial characteristics on performance is positive and significant, while the coefficient of the indirect influence of entrepreneurial characteristics on the performance of MSMEs is not significant. This shows that entrepreneurial competence fully mediates *the* influence of entrepreneurial characteristics on MSME performance. The model in this research supports the research of Sarwoko *et al* . (2013) which shows that competence is a mediating variable between entrepreneurial characteristics and MSME performance.

Research findings indicate that entrepreneurial characteristics play a role in increasing the entrepreneurial competence of MSME players. These results are consistent with research conducted by Sarwoko *et al* . (2013) and supports the opinion of Adegbite *et al* . (2006) and Segal *et al* . (2009) that entrepreneurial characteristics are an important factor in forming and assessing the existence of MSME entrepreneurial competence. Strong entrepreneurial characteristics are needed by MSME players to form entrepreneurial competencies so that they are expected to be able to improve the performance of MSMEs by carrying out efficient business and being able to produce high quality products and being able to survive in the domestic and regional markets.

The influence of entrepreneurial characteristics on the performance of MSMEs is not significant. Even though the average score for the description of entrepreneurial characteristics is 4.10, this means that respondents perceive themselves as having high entrepreneurial characteristics, but they have not been able to contribute to improving the performance of MSMEs. This happens because the entrepreneurial characteristics inherent in MSME actors have not been able to fully contribute to the business or in other words, MSME actors have not been able to translate, use or integrate these entrepreneurial characteristics into their business (Meredith et al., 2000 *)* . This result is in accordance with research by Begley & Boyd (1987) which shows a low relationship between the two. However, these results differ from several previous research findings (Hall, 1994; Islam *et al* ., 2011; Sarwoko *et al* ., 2013; Liang & Dunn, 2010).

The research results prove that entrepreneurial competence has a significant positive effect on the performance of MSMEs. This result is consistent with previous research which shows the important role of entrepreneurial competence in driving business progress. Among them, research by Hormiga *et al* . (2010) which proves that *human capital* (entrepreneurial team interaction, commitment, business knowledge, and problem solving) is related to business success. Research by Man & Lau (2008) shows that the competence of 153 owners/managers of SMEs in the service sector in Hong Kong directly and indirectly influences the long-term performance of SMEs through the competitive scope and organizational capabilities. Karami's (2004) research on 132 SMEs in the electronics industry in the UK shows that increasing competence, especially the company's human resource capacity, is positively related to increasing organizational performance. Research by Barazandeh *et al* . (2015) stated that entrepreneurial competence had a positive impact on business performance among 125 budding entrepreneurs selected from Global Entrepreneurship Monitor (GEM) data from 59 countries. Research by Sarwoko *et al* . (2013) proves that entrepreneurial competence has an impact on the business performance of 147 SMEs in Malang, East Java. Research by Tanoira & Valencia (2014) shows that there is a strong relationship between entrepreneurial competence and performance in 374 MSEs operating in the field of corporate information systems in Mexico. Research by Mohamad & Sidek (2013) shows that entrepreneurial competence is significantly related to the growth of small businesses from 243 microfinance *companies* in Malaysia. However, research by Baum *et al* . (2001) shows that general competence is not a predictor of business growth, but specific competence has a significant effect on the business growth of 307 companies operating in the wood architecture industry in the United States.

## CONCLUSIONS AND SUGGESTIONS

Based on the results of the research and discussion, several conclusions can be drawn. First, entrepreneurial characteristics have a significant positive effect on entrepreneurial competence, meaning that strong entrepreneurial characteristics will increase the entrepreneurial competence needed by MSMEs. Second, entrepreneurial characteristics do not have a significant effect on the performance of MSMEs, meaning that strong entrepreneurial characteristics will not affect the level of performance produced by MSMEs. Third, entrepreneurial competence has a significant positive effect on the performance of MSMEs, meaning that the high level of entrepreneurial competence possessed by MSME actors will improve the performance of MSMEs. Fourth, entrepreneurial competence is a variable that acts as a complete mediator between entrepreneurial characteristics and MSME performance.

### Suggestion

Based on the conclusions of the research results above, several suggestions can be given. First, strengthen the entrepreneurial characteristics and competencies of MSME actors through training and mentoring as well as follow-up in order to improve the performance of MSMEs. Second, increasing the role of the government and other related institutions in providing assistance or convenience facilities for MSMEs in accessing economic resources to develop their businesses. Third, future researchers can develop research by exploring various variables that make it possible to improve performance
MSMEs.

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**068-059**

# MULTI-PURPOSE APPS AND THE SOCIAL MEDIA: WHAT'S IN IT FOR THE SUSTAINABLE DEVELOPMENT GOALS AND COMMERCE TO A SOCIAL ENTERPRISE?

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## ABSTRACT

The growth rate of Social Enterprises (SE) in Malaysia marks a significant change in the development of young enterprising leaders and in their innovation to salvage for the needy towards a sharing economic model in the well-being for the underprivileged society. This paper explores the support of Social Media (SM) and other web applications used by a social enterprise in Kuala Lumpur Malaysia in a case study approach looking into (1) the influences of SM and web apps in current business ways of work (2) readiness of the SE staff and beneficiaries to adapt and use these technologies (3) approaches to sustain business production by digital means which are investigated based on preliminary data gathered from a semi-structured interview and an online survey using the social media platform following a qualitative research framework. Findings from the study found high staff readiness to adapt and adopt information technologies however, these tools are found functionally single purposed to the needs of a work process given the choices of software variability and its' low-cost impact. A positive correlation is noticeable with small orders in production and delivery handling on a variety of these web and mobile platforms to the worker productivity. While the support of social media makes significant impact to the digital community of its beneficiaries, to keep informed of the SE social impact and the 'Sustainable Development Goals'(SDGs) while providing them support and work opportunities. A web portal to streamline the SE activities is proposed to facilitate order placement, processing, and delivery. Further the web system is expected to offer personalized customer experience in order customization, and for improvement feedback that goes in line with the causes for the SDGs in consideration of sustainably sourced and made products ie. pre-loved items.

Keywords**:** Sustainable development goals, social enterprise, case study, social media, web portal

## INTRODUCTION

Social Media (SM) sites like Instagram and Facebook predominantly are notable personal touchpoints in engaging with customers, and a platform to operate business thus making online buying, selling activities presented in the friendly, and sociable way. For a Social Enterprise (SM), the impact to create web connections and awareness imply the importance

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that SM sites could bring while remaining conscientious to its social values in the decisions for resources ie. sustainably sourced and managed materials in production operations for the business bottom line. This paper objectifies the presence of SM to a SE within the variability of market ready mobile based web applications discussed upon its influences in the working ways by a SE. The paper aims to (1) identify the types of SM sites web application used by the SE in consideration of its variability and needs (2) assess the readiness of a Small and Medium SE to engage and adapt collaborative apps in business activities along a value chain process flow juxtaposed economic value and job opportunities for the beneficiaries (3) propose a web portal in improving the many apps approach as a strategy to scale up business within sustainable production means and resources. Waste negatively impacts behaviour of the reasonable consumer, according to Huang et al. (2022) invoking responsible consumerism involves many stakeholders and one that particularly outlines the business model of a SE. The emphasis of SDGs is told in the benefit for the underprivileged and should be explored through purposeful ways. While lacking in perception is the action and people roles for the SDGs, digital tools are found to help improve the visibility of SDGs along with leadership direction, employee commitment, empowered control in decisions and performance for the business goals (Smith et al., 2022) in the social impact and value creation. Observing from needs of business operations in the activities, interview data and a survey was conducted with 30 respondents to gauge the perception of sustainable consumerism in the concept of pre-loved items and the SDGs. In the elements, the SDGs can be practiced in the craft, and people willingness to buy used items. In an example, the SE was able to complete a small, targeted user upcycling project within a shorter time span as these orders were not catered for a large consumer base.

## LITERATURE REVIEW

### Digital End-User Engagement

Apart from digitalisation, information technologies that encompasses of computing elements for the people has challenged the conventional norms of work practices as small enterprises turn to mainstream media as an attempt to embrace the digital bandwagon label in the pursuits of end-user engagement to remain competitive due to the lack in experience outcomes particularly for the young business (Adhiatma et al., 2022). With web development and the internet medium serving as the backbone infrastructure and platform for the products and services delivery (Malhotra et al., 2021), communicating sustainability using digitally enhanced work activities has improved business visibility and mobility over an end-end supply chain to allow businesses to tap into new markets for customer and talent development in return of stakeholder benefits. However, the adverse impact from the recent pandemic situation created uncertainties to all business types, wherein Social Enterprises (SEs), 'goto' digital media and collaborative apps lends as shortcuts to access and implement a type of cloud service that could bear between zero or little operating cost when planned according to a simpler operating model, bearing importance for its social value proposition (Chauhan et al., 2022).

*"We knew about all these shortcuts of ways to reach out, to get things done using systems, free team apps, like team working apps like Trello, like Air Table, like Canva. I think all those things was only known when we pushed ourselves beyond the comfort zone where we had to work together but somehow apart.", CEO of SE X.*

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Being a vertically challenged organization, the SEs have limiting resources to spare and under these circumstances perform multifaceted tasks while acquiring and developing skillsets over a digital learning curve. Similarly, the multi-purpose apps present a variety of functionalities for the end-user experience but are mostly found mostly underutilized to process custom-specific tasks seamlessly than anticipated (Elsantil, 2020). Although these cloud conduit public domain and multi-functional web-apps offer a unified platform for the mass user, work routines are still found silo operational for the goals, user-experience, and performance of the business operating model (Mink, 2023). In contrast to single tasking apps, the versatility of multi-purpose apps supports an agile, and responsive product design process, as it improves stakeholder engagement, from ideation to the deployment of a minimum viable product while facilitating communication in commerce and United Nation's Sustainability Development Goals (SDGs) (Smith et al., 2022). Furthermore, the integration of multi-purpose apps with social media platforms contribute to the development of responsible consumerism and commerce to advance the SE commitment and causes for a sustainably developed business.

**Social Enterprise Call for Action in Alignment with the Sustainable Development Goals (SDGs) – The Digital Alternative**

Cavalcanti (2020) regards the occupation of a social entrepreneur in pursuant of a social mission who plays an essential role to advocate the causes of both business and societal values through encouraged collaboration and interactive communication (Sebhatu & Enquist, 2022) in the context of smaller work settings. However, the reality often blurs when business survival needs ie. resources and capital (Smith et al., 2022) conditions the growth trajectory of the SE solely for their social causes. Ideally, a social enterprise operates with a triple-bottom-line approach, considering social, environmental, and the economic impact simultaneously. While the SE social impact can be measured in both the positive influences that considers choices like empowering the underserved society and taking action to safeguard the planet, it is also said that alternatively within the context of commerce platforms, these SDG elements can be infused in design and deployed as a framework to guide an organization's commitment to sustainability and social responsibility (Friedrich, 2019). In retrospect, it takes a team to pulls off an extraordinary task into action for their beneficiaries in reducing inequalities when the situation warrants it. Coincidently, having the representation of a SE to advocate ethical consumerism that improves with the availability of free cloud-serviced digital platforms to choose from in consideration of SDG 12 Sustainable Consumption and Production ('*THE 17 GOALS*',n.d.).

*"'It's not something that we normally do. It's just that when we see dim fit, because when our tailor akka is super, super committed, we want to empower her in a certain way. She knows that she can earn an income if she has a better machine and that's what the team comes together to do. And then we decide you know what, let's do it, let's squeeze the little bit of our cash flow and get her sewing machine" , CEO of SE X.*

Rashid et al. (2019) suggests conscious consumerism is influenced by the presence and extensive social media reach when in use as a cost-effective marketing strategy (Pakura & Rudeloff, 2020) able improved customer interaction and brand experience. In fact, leveraging on popular social media as a commerce platform improves direct sales besides offering micro-entrepreneurship opportunities to the marginalized communities in the access of untapped and competitive markets (Wang & Xie ,2020). Inadvertently, social commerce creates a conducive space for consumer engagement and dialogue among peers in the support

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of digital communities and call for action by the SE's shared objectives in alignment with the SDGs like Goal 8 Decent Work and Economic Growth ('*THE 17 GOALS*',n.d.). Additionally, value creation can be enhanced through the when used as a framework to guide the implementation of work practices to encourage a learning culture that follows; a priority order of action and impact measured in the efforts to communicate sustainability commitment to the stakeholders (Climent and Haftor, 2021) while addressing environmental and societal challenges (Gigauri & Damenia, 2021).

*"She will share me videos of the Akka sewing and they themselves when they meet up to the at the Community Center to discuss how to do a certain product, they are laughing, they are enjoying their time, they gossip, they have girls, women's time not just as colleagues, they talk about family, they talk about hardship", CEO of SE X.*

## METHOD

### Research Design

A mixed method design approach was implemented in the study using an online survey as primary data source based on a Likert scale (1-Strong Disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly Agree) that was developed with 5 close-ended questions on the awareness of the SDGs, perceived quality of second-hand purchases like pre-loved items and the buyer motivation. Additionally, a semi-structured interview with the SE was carried out to further understand the implications of SM, in sales and marketing and operations management using current web app tools. The questions delved on the types of web tools used to engage with clients and staff, tools for work collaboration, production operations and delivery. Table 1 lists some of the web app tools identified and their specific functions in addition to SM customer engagement web systems.

**Table 1: Collaborative apps used by Social Enterprise X**

| App Name | Purpose |
|---|---|
| Trello | Organize projects, and task built in list prioritized to handle work completion and deadlines used collaboratively by three members of the SE. Links with Teams, Google Drive, and other applications. |
| Canva | Platform used in integration with AirTable for projects and product orders apart from events planning using SM platforms that embed visualization and design clarity, quick and effortlessly. Links with pre-recorded audio, video, with attractive designs. |
| AirTable | App that manages customer orders, with a feature to track orders, over premade CRM template finishing sales to delivery workspace and performance records start to finish. |
| Easy Parcel with Lalamove | App that offers a scheduled last-mile delivery of orders with real-time tracking, as flexible and cost-efficient solution |

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Using a thematic analysis, interview data gathered are interpretated for ideas to derive suggestive themes by creating a relationship of concepts that runs in an overview of steps such as code work, generating and naming themes for the reporting of data investigated (Ho, et al., 2023). Table 2 and 3 each presents the recorded data.

**Table 2: Online Survey Responses**

| **Factors** | *(N=30)* | | | | | **%** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Awareness of SDGs** | | | | | | | | | | |
| **1. Recognise SDGs from targets** | 6 | 6 | 2 | 11 | 5 | 20 | 20 | 6.7 | **36.7** | 16.7 |
| **2. SDG influences shopping online and choices.** | 12 | 10 | 2 | 4 | 2 | **40** | 33.3 | 6.7 | 13.3 | 6.7 |
| **Perceived Online Product Quality** | | | | | | | | | | |
| **3. Expectations in the quality of online purchases.** | | | | | | | | | | |
| **- Durable and long lasting** | 5 | 1 | 2 | 14 | 8 | 16.7 | 3.3 | 6.7 | **46.7** | 26.7 |
| **- Meets and exceeds expectations.** | 7 | 7 | 1 | 10 | 5 | 23.3 | 23.3 | 3.3 | 33.3 | **16.7** |
| **- Represent good value for the product price** | 6 | 3 | 4 | 10 | 7 | 20 | **10** | 13.3 | 33.3 | 23.3 |
| **- Satisfactory product review** | 10 | 5 | 0 | 5 | 10 | 33.3 | 16.7 | 0 | 16.7 | 33.3 |
| **Buyer Motivation** | | | | | | | | | | |
| **4. Motivation to buy second-hand products.** | | | | | | | | | | |
| **- Environmental sustainability** | 12 | 8 | 2 | 8 | 10 | **40** | 26.7 | 6.7 | 26.7 | 33.3 |
| **- Unique style and vintage appeal.** | 4 | 9 | 2 | 7 | 8 | 13.3 | **30** | 6.7 | 23.3 | 26.7 |
| **- Supporting local charities or causes.** | 7 | 12 | 1 | 6 | 4 | 23.3 | **40** | 3.3 | 20 | 13.3 |
| **- Cost effectiveness** | 10 | 5 | 2 | 8 | 5 | **33.3** | 16.7 | 6.7 | 26.7 | 16.7 |
| **5. Recommend others to shop sustainably.** | 10 | 6 | 1 | 6 | 7 | **33.3** | 20 | 3.3 | 20 | 23.3 |

*Bold-font indicate high, and low inclinations towards factor agreeableness and disagreeableness*

**Table 3: Social, Mobile, Sustainability and Digital Apps (SMSDA) Factors and Themes**

| **Themes** | **Description** | **Interview Excerpts** |
|---|---|---|
| **Social** | | |
| **Decision making and collaboration.** | Collaborative team decision-making in cohesion follows through with discussions, evaluation, and a feedback | *"It takes Hasna to* ***discuss*** *with the tailor, it takes Chad to look through the products* |

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| | | |
|---|---|---|
| | process. | *and say wow, she's good, she's fast, she commits and then the **whole team feeds back** to me and Gunn, who is also our cofounder.”* |
| **Community centric SE** | People centric business model will improve community development when relevant work tools are used to improve customer-first interactions and deliver for the business repeatability expectation. | *“We are **very people business**, which means we **deal** with our **customers**. Personally, we **speak to every one** of them.”* |
| **Social media for commerce convergence.** | Refocusing SM support moving from dynamic content design to a platform that allows handling of orders, production, and delivery tailored according to the needs and demands of customers within resources conditions and constraints. | *“I would say our **content** on **our SM** like **Instagram, FB** and our website is very much **random**. We try our best to just squeeze in **time to do content** to be honest because we technically don't have the time to.”* |
| **Mobile** | | |
| **Digital transformation** | Using web application tools beyond the comfort zone would enhance tech-savviness and allow creative problem solving. | *“We all had to get **creative**. That was when **we knew** about LaLaMove; we engaged LalaMove. We knew about Easy Parcel; we engaged Easy Parcel. We knew about all these shortcuts of ways to reach out, to get things done using systems”.* |
| **Adaptable learning culture** | Adapting the business model with a pivot strategy that depends on the team dynamics, level of adaptability in the work task priorities and its approaches. | *“If one client A/B and C come at the same time, we have 3 different new products that have yet to be produced in our line. So, which means **R&D,** purchasing of new fabric, **testing** of the sewing are done. Then,* |


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| | | |
|---|---|---|
| | | *once it's done by approval, then only we send to* ***production****. After production,* ***QC*** *is done. And then comes the* ***packaging****, the logo, the* ***delivery****, and every other bit of details from A to Z So, every* ***new project*** *comes a* ***new challenge****."* |
| **Sustainability** | | |
| **Community empowerment** | Acknowledging beneficiaries with multiple roles; potential trainers and self-employment for a career prospects. | *"They still run the show as part of as beneficiaries to receive* ***job orders****. However, we also* ***empower them*** *to be* ***trainers*** *themselves, which means that a tailor isn't just a tailor and when the pandemic hit, we easily did* ***30000 bucket face masks*** *in a span of* ***11/2 years.****"* |
| **Training and skills building.** | Teaching new skills free of charge to enhance capabilities and provide beneficiaries with job opportunities. | *"Then you can see them* ***teaching the other akaks*** *their skill sets of what they already learned and what they have already improved. And then they impart this knowledge to others. And then we also pay them a* ***training fee*** *as a trainer".* |
| **Sustainable income generation** | Product line that balances income strategy when business can be self-sustaining if focused on sustainable choices ie. upcycled or new materials strictly customizable in design, production and quality control, client centric. | *"If sustainable impact is what our clients are looking for, we can make it happen and our* ***akak-akak gets the job*** *at the end of the day,* ***earning for themselves*** *then that's where we are at."* *"We are very* ***strict, we are QC****. Even though we are known as a social* |

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| | | |
|---|---|---|
| | | *enterprise, we don't get our jobs out of pity"* |
| **Digital Apps** | | |
| **SME Systems & Approach** | Access to cost-effective web applications helps determine potential systems fit for a SME against the existing, available larger built, which are typically custom suited systems. | *"We run on very **free** what's available and what's out there and **easily available** for **smaller SME** like us."* |
| **Operations Efficiency** | Managing operations using web tools to design, track orders and delivery for the organizational success. | *"So**, like Canva**, it **helps us** design air table, it helps us **track orders**, **Easy Parcel helps us** do **deliveries**. So, all this was definitely picked up on during **the pandemic** and yeah, that's **just how we work**."* |
| **Resourceful Systems Use** | Availability of free and easy to utilise systems improves managing production and deliveries given easy implementation in coherence with the work practice. | |

*Bold-font marked code words identified for themes derivation.*

## FINDINGS AND ARGUMENTS

### General Survey Findings

Based on the anonymous survey data out of the 30 respondents, 36.7% disagree to being familiar with the targets of the SDGs 17-goals, but 40% from the same group strongly agree in the influences of SDGs in their online buying decisions. A high 46.7% disagree that online items purchased are durable and long lasting, corresponding to a low total 30% of them agreeing in expectation of product quality and its' price than anticipated. Additionally, based on online buying motives, 40% of the responses indicate commitment to support local charities and 33.3% believe in shopping responsibly and sourced cheaply (33.3%) online. It becomes easy to discuss their online purchases (33%) on SM sites as platforms to listen to every customer, understand their product experience and encourage feedback (Huang et al, 2023). A moderate difference of 6.7% from the group agreed to buying products online that have unique and vintage styles than others. Similarly, in the reflection of environmental sustainability considerations in buying behavior and influence find 40% of the respondents strongly agreeing to its importance.

### Interview Findings

Based on the gathered survey responses, online buying is perceived in a favorable light when observed in the context for a social cause, where in the aspects of SDGs and social consumerism these are recognized as important to the acceptance of conscious consumerism which betters with an influencer marketing strategy (Sheikh, 2023). Factors that relate to SDGs and commerce were categorized as themes; social, mobile, sustainability and digital apps and to each relevant themes as shown in Table 3 that derived from interview data with the founder of SE X, where firstly in (1) SM and web apps influence in ways of work associates with sub-themes of Digitals Apps where all three sub-themes derived ie. resourceful systems, SME systems approach and operations efficiency are found to associate with the SE's choice in using free web apps to manage workflow and activities that associate in favorably with the SME when having access to these tools. Additionally, the mobile factor in view of work flexibility at the SE find the digital web apps as a support to enhance creative means in problem solving as these apps are implemented as *shortcuts* to work execution from stages like *R&D, purchasing, testing, production, QC, packaging to delivery* influences decision for the right web technology adoption (Climent & Haftor, 2021). However being mobile transformative, digitally adaptive influences may appear to impair (3) sustaining business production effectively where in the implementation process of secure and suitable apps for multiple needs (Elsantil, 2020) challenges are significantly present on how to remain adaptable with its *people business* work culture and the right tools in a multi-tasking work environment as opposed to single-tasking work performance relating sub-theme adaptable learning culture when in consideration of time, cost while maintaining expectation of quality standards (Adhiatma et al, 2022).

Next, when trying to adjust with relevant functions of multi-service-oriented apps used in the work routines, the social factor addresses sub-themes; collaborative decision making, and social media for commerce convergence that share in common the traits of (2) SE staff readiness for technology use especially when *new projects and new challenges* presents the SE with client-focused project iterations irrespective of independent work involvement alike the silo workers to manage all handling orders, production and delivery when the *whole team feedbacks* brings to question to the coping mechanism on using a variety of these web apps to ensure input continuity flow for the outputs delivered especially when handling the process for larger projects and tracking purposes (Mink, 2023).

Further to this, with growing trends of SM as a commerce platform in view of SE's expanding social network circles, the need to refocus its social selling formats is necessary not only for brand awareness, connecting communities and conversations (Friedrich et al., 2019) but as an approach for the business to drive-up average order value (Glaspie-Lundstrom, 2023) based on customer online buying preferences (Huang et al., 2022). Similarly, in (3) sustaining the business income sub-theme, producing sustainably made products provides the SE with an up-sell motive to diversify its product-line and assurance for business repeatability, here *strictly QC akak-akak gets the job, earning for themselves* however, such order requests cater a target segment from the SE's own client-base. On a positive note, skills building and training underlie as the sub-theme of sustainability where stakeholder relationships are developed here in the (2) readiness of the SE to provide job opportunities; to the beneficiaries and community with gains in economic values and work productivity when additional income is earned *teaching other akaks, paying them a training fee, producing 30000 face marks in 1½ years*, as ways used by the SE in their role to support B40 single mothers and homemakers and helping to the underserved community contributing to a circular economy following an adjustable business model in its value proposition to empower these woman which associates with sub-theme community empowerment.

It is observed, in both (1) and (2) the SDG goals imply the working social mission governs operations within SE and succinctly told in their sustainability actions. With growing public awareness and acceptance of ethical consumerism, more efforts need to be taken to tell the story right here through the SE and in their social impact measures (Dayangku, 2020).

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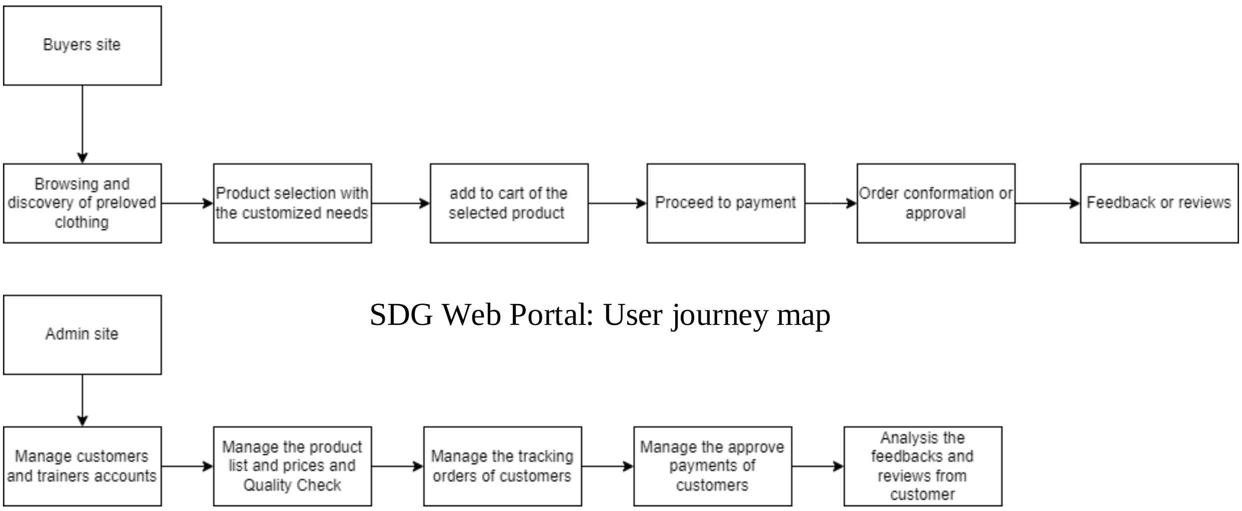
## PRESENTING AN SDG THEMED WEB PORTAL

A web portal is proposed that would improve the approaches of sales and marketing for the SE where the system is expected to standardize how orders are processed from a system's end point to avoid situations of staff working in silo and improving production capacity with large orders using a backend database system that will seamlessly pick up a sales order, added to cart, tracked until delivery using secure payment methods managed electronically. The system allows personalized orders integrating SDGs in the product designs and a feedback trail for quality improvement purposes. The portal is expected to reduce dependence over the use of multiple functional apps by the SE staff; improve communication with clients and visualize better of the current working ways in a proposed journey map in Figure 1 below.

**Figure 1: Current vs. Proposed journey in an automate system flow from sales order to delivery.**




## CONCLUSION

The anticipation for the right or required web tools exemplifies the need to visualize the working process of an employee in consideration of factors like learning aptitude, flexibility, and timeliness. Having choices of web apps can be daunting to a new learner and detrimental when external factors such as competition and the disruptive nature of technologies alters the digitalization process and operational needs of a social enterprise in view of market demands. Here the paper limits for large data sampling than anonymous, while the survey observes anticipation and acceptability for the SDGs by consumers, the interview data represents management perception and expectation of business over social, mobile, sustainability and digital adaptable in a SME in their work practices by staff as values delivered. While important to ensuring the values of business is built for the causes underserved society, the role of a growing still SE steers in the direction and values of volunteerism while addressing a triple bottom line target. Business survivability improves with technology uses as demands becomes personalised, without compromising on quality, security where in the instance of a web system, authenticated access supplements with authorized end-users. Cost impact hinders most decisions for a full-fledged comprehensive system given the setting and scale of users where for the SE; smaller and for the limited users. Incorporating a web portal, would enhance opportunities with a new market, reach of customers and increasing demand however the limiting structure and production capacity does this away as with probability of enhancing order within the SE current market segment and significant client base. The other is ensuring that the values of SE can be transpired for greater acceptance and promotion of sustainable products and social consumerism positively.

## ACKNOWLEDGEMENT

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**Appendix 1**

Interview Protocol.
Role / Position of interviewee:
Location of the interview: …………..
Date of the interview: ……………… Time of the interview : ……………….

Thank you for participating in this study. The purpose of this research is to:


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- understand the current roles of a social enterprise in supporting the underprivileged communities.
- influences of technologies, to transform and to scale in business ways of working.
- refocusing social impact through social consumerism and social media within the sustainability context.

1. What really got you started on this idea? (1) teaching a skill (2) building a skill (3) sustaining a skill (to transform)
2. How did you identify your team and who they are? Are they also your beneficiaries? Could you share some of incidents that you could not forget, if not forgive when it comes to work and how they must be done?
3. How much of social media is engaged by KTG and how has it changed since covid and the now the new internet normal (going all mobile the instant AI perhaps) today? How important is it for the current ways of working (ie. orders, production, delivery besides marketing)
4. What are the challenges that you have faced in handling orders, production, and delivery? How have you and your team been coping, with more business clients, the supplies for materials and bringing a more visible end-to-end process from a business perspective and customer perspective?
5. Do you feel the need to change the product line – from an exclusive edition to an affordable version for a wider customer base, hence changing the strategy for product pricing, managing cost and quality?  How is business moving closer with technology in this aspect?
6. Can you foresee production moving the entire supply chain itself changing towards upcycling and recycling alone as a long-term approach. How do you see the suppliers growing support if this shift happens.
7. What are your hopes and future for your business?

**080-070**

# THE EFFECT OF FINANCIAL LITERACY, CONFORMITY, FINANCIAL BEHAVIOR, AND FINANCIAL ETHICS ON CONSUMPTIVE BEHAVIOR IN STUDENT UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA

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## ABSTRACT

This study aims to identify and analyze the effect of financial literacy on consumptive behavior, identify and analyze the effect of conformity on consumptive behavior, identify and analyze the influence of financial behavior on consumer behavior, identify and analyze the effect of financial ethics on consumer behavior consumptive knowing and analyzing the simultaneous influence of financial literacy, conformity, financial behavior, and financial ethics on purchasing decisions. The population in this study were final semester students of the Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara. The total population is 520 students with a sampling technique using the Slovin method with a total sample of 84 respondents. The data collection technique used an instrument in the form of a questionnaire. The data analysis technique used multiple linear regression methods using the SPSS 16 application. Based on the results of the study, it was found that financial literacy, financial behavior, and financial ethics did not significantly affect consumptive behavior. Furthermore, the conformity variable has a significant effect on student consumptive behavior.

Keywords: Consumptive behavior, financial literacy, conformity, financial behavior

## INTRODUCTION

The world is being hit by the worst economic crisis since 1998 caused by the outbreak of the Covid-19 virus. Where, each country issued a large-scale social restriction policy to avoid the spread of the Covid-19 virus. This causes the cessation of a number of production processes and economic activities which have an impact on economic growth. This condition also applies in Indonesia, where according to a Bank Indonesia report, Indonesia's GDP growth in 2020 only reached -2.97%, the lowest since 2001. From this fact, everyone is required to have a sense of crisis, by preparing financial conditions to face growth uncertainty. economy.
However, the facts that occur are inversely proportional to the existing conditions, where there is an increase in online shopping consumers in Indonesia. Furthermore, the statistical data states that the item categories that are spent the most are fashion and accessories at 34.7%, followed by body care and beauty at 17.1%. From this data it can be seen that the categories of items spent are not primary commodities or main needs for humans. This is certainly quite worrying because in this age range, people are required to be able to have good financial management to prepare for a better future. Consumptive behavior can be defined as the activity of purchasing a product that is not based on functional needs but rather on factors of desire, prestige, status or lifestyle (Siregar & Simatupang, 2022). (Suriani, 2022)

define consumer behavior as a tendency for an individual to purchase a product unplanned and excessively. From this description, consumer behavior can be concluded as an individual activity in purchasing a product that is not based on need, is not planned and is carried out excessively.

According to (Tanjung & Putri, 2019), consumptive behavior can be caused by internal and external factors, one of the important internal factors being the ability to manage one's financial resources effectively. Financial management skills must be accompanied by knowledge of basic financial and economic concepts. According to (Jufrizen & Ariza, 2022) knowledge of basic financial and economic concepts and being able to use this knowledge in managing personal finances effectively can be defined as financial literacy. According to (Kusumaningtuti & Setiawan, 2018) financial literacy can help someone make decisions related to financial management based on knowledge and contribute to future prosperity.

According to (Ismanto et al., 2019), people who have a higher level of financial literacy will have financial rencana for a better future. Where, financial management is not only managing personal financial balances but being able to plan and utilize financial resources for the future. A part from internal factors in the form of level of knowledge and ability, consumer behavior can also be caused by external factors in the form of the influence of the surrounding environment. (Baron & Branscombe, 2012) define conformity as a form of social influence that refers to the behavioral preferences and expectations of other people as a guide in making purchasing decisions. (Halim et al., 2020) a person's consumption pattern is a psychological aspect that is influenced by behavior, lifestyle and the influence of the surrounding environment. Based on the description above, a person's motivation and consumption patterns can be influenced by environmental factors obtained from the behavioral preferences and expectations of other people.

Another factor that influences consumption patterns is financial ethics. Ethics itself can be defined as an attitude or action taken by someone which can be right or wrong based on morals (Gunawan et al., 2021). In finance, ethics relates to a person's attitude towards the money they have, namely how a person spends, plans and saves the financial resources they have (Sukma et al, 2022). The absence of financial rencana makes it difficult for individuals to prioritize the products they will spend on in their monthly budget. Even though the majority of respondents answered that saving is a necessity, without rencana and complying with the correct financial attitude it can lead to an increase in consumption patterns in these individuals.

## METHODS

This research is explanatory research (Explanation Research) using a quantitative approach and a causal associative approach (Sugiyono, 2018). Causal associative research is research that uses problem characteristics in the form of a causal relationship between two or more variables. This research examines the relationship between the independent variable (X) and the dependent variable (Y) (Azuar et al., 2015). Where this research aims to see how much the independent variable influences the dependent variable (Effendi, 2012). The research was conducted at the Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara, Jl Captain Muchtar Basri No 3, East Medan District, Medan City, North Sumatra Province. This research was conducted from February 2023 to June 2023. The population in this research was Stambuk 2019 students from the Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara, totaling around 520 students. The sample size was determined using the Slovin method with an error rate of 10%. 84 people

$$.n = \frac{N}{1+Ne^2}$$

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$$n = \frac{520}{1 + (520 \text{ x } 0{,}1^2)} = \mathbf{84}$$

Where:

N = population (people)

n = number of samples (people)

e = error rate

## RESULTS

### 1. Classic assumption test

This analysis was carried out to determine the description and frequency of respondents' opinions based on the questions given to each research variable. The following are the results of respondents' opinions on each variable. After descriptive analysis is carried out, the next stage is testing the accuracy and precision of the research data. This test avoids bias in the regression coefficients obtained and increases the accuracy of the regression contoh estimation results. The classical assumption tests used in this research include normality tests, heteroscedasticity, multicollinearity and auto correlation tests.

### 2. Normality Test

The normality test is used to determine the distribution of data for each normally distributed variable. This test is important to carry out to see whether or not there are outlier data in the sample data set, which is the main prerequisite in parametric tests. In this study, two normality tests were used, namely the non-parametric graph normality test and the non-parametric Kolmogrov-Smirnov (KS) test.

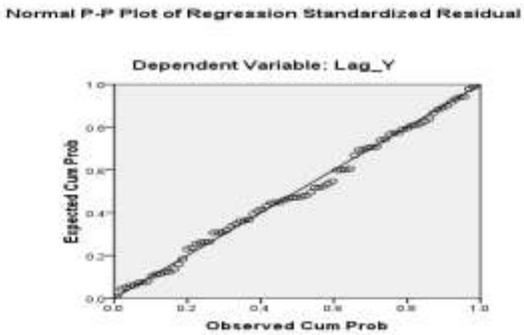


**Figure 1 P Plot Graph Normality Test**

In the normality test using a p plot graph, plotting is carried out on the residual values in the data. The condition for the normality test is that the plotting points in the data must be located and follow the diagonal line. In Figure 1, you can see that the plotting points in the residual research data are around the diagonal line and follow the direction of the diagonal line. From the results of this analysis, it can be concluded that the data is normally distributed. From table 1, the results of the KS normality test can be seen as the asymp sig (2 tailed) value in the research data is 0.830. Where this value is greater than the significance value of 0.05 (0.830>0.05), it can be concluded that the data is normally distributed.


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**Table 1. Kolmogrov-Smirnov normality results**
**One-Sample Kolmogorov-Smirnov Test**

| | | Unstandardized Residual |
|---|---|---|
| N | | 84 |
| Normal Parameters[a] | Mean | .0000000 |
| | Std. Deviation | 3.77034095 |
| Most Extreme Differences | Absolute | .068 |
| | Positive | .068 |
| | Negative | -.047 |
| Kolmogorov-Smirnov Z | | .625 |
| Asymp. Sig. (2-tailed) | | .830 |

a. Test distribution is Normal.

*Source: 2023 processing data*

**3. Heteroscedasticity Test**

The heteroscedasticity test functions to see differences or similarities in value variants from one observation point to another. The similarity of the variance in the residual values for each observation will reduce the accuracy of the regression model formed, so that symptoms of heteroscedasticity in the data must be eliminated. In this study, the heteksdaticity test was carried out using a scatterplot test on the residual values.

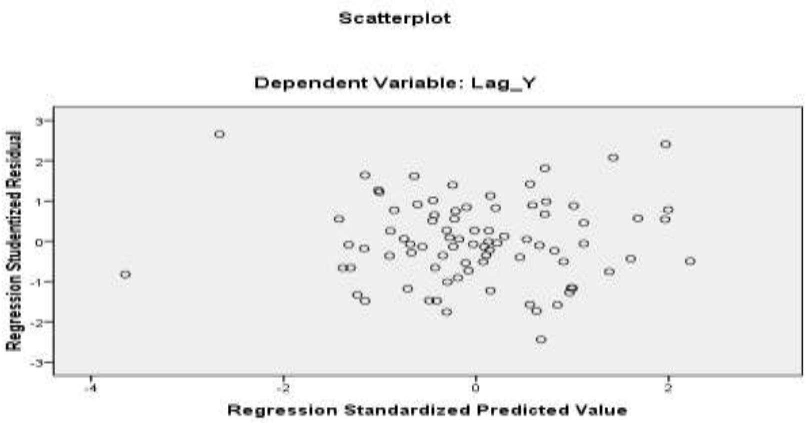


**Figure 1** Uji Scatterplot

It can be seen in Figure 2 that the scatterplot test results show that the data distribution is above and below the number 0 on both the x and y axes. It can also be seen in Figure 2 that the residual values do not form a particular pattern and have the same variations. From the results of the scatterplot analysis test, it can be concluded that the data is not infected with symptoms of heteroscedasticity so that it can be continued with testing the regression model.

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**4. Multicollinearity Test**

The muticoliniarity test aims to determine the variability and correlation between selected independent variables that cannot be explained by other independent variables. Testing is carried out by looking at the tolerance value and the variance inflation factor (VIF) value. A good regression contoh is indicated by the absence of correlation between independent variables which can cause inaccuracies in the example prediction value.

**5. Autocorrelation Test**

The autocorrelation test aims to determine whether there is a correlation between confounding errors in the ti observations and the ti-1 observations. In a good regression contoh, the observation value at ti should not be influenced by the observation value ti-1, or there is no correlation between the two observation values

**Table 2. Auto correlation test results**

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .644[a] | .415 | .385 | 3.73525 | 2.090 |

a. Predictors: (Constant), Lag_X4, Lag_X2, Lag_X1, Lag_X3

b. Dependent Variable: Lag_Y

*Source: 2023 processing data*

In this study, the autocorrelation test was carried out using the Durbin Watson (DW) test, with the condition that the du<d<4-du value. The du value is obtained from the Durbin Watson table based on k = number of independent variables, n = number of observations and a significance value of 0.05. In table 3 it can be seen that the results of the autocorrelation test show a DW value of 2.090. From the DW table, the du value at k = 4, n = 84 and a significance of 0.05 shows that the du value is 1.743. From the results of the analysis, the results of the autocorrelation test were 1.743<2.090<2.257, so it can be concluded that there were no symptoms of autocorrelation in the research dataset.

**6. Multiple Linear Regression Analysis**

After the classical assumption test was carried out and the data was concluded to meet the prerequisites for each test, the test continued with the multiple linear regression model. Multiple linear regression analysis aims to determine the direction and influence of more than one independent variable on the independent variable. In this study the independent variables are financial literacy, conformity, financial behavior and financial ethics with the independent variable being consumer behavior.

From table 4, the results of multiple linear regression analysis show the coefficients for each independent variable. So we get the multiple linear regression equation shown in equation 4 as follows:

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**Table 3. Multiple linear regression test results**

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients |
|---|---|---|---|---|
| | | B | Std. Error | Beta |
| 1 | (Constant) | 7.365 | 2.937 | |
| | Lag_X1 | .069 | .141 | .060 |
| | Lag_X2 | .806 | .145 | .569 |
| | Lag_X3 | .275 | .250 | .159 |
| | Lag_X4 | -.162 | .182 | -.113 |

a. Dependent Variable: Lag_Y

*Source: 2023 processing data*

From table 4, the results of multiple linear regression analysis show the coefficients for each independent variable. So we get the multiple linear regression equation shown in equation as follows:

$Y = 7{,}365 + 0.069(X_1) + 0{,}806(X_2) + 0{,}275(X_3) – 0{,}162(X_4) + e$

Where:

Y = Consumptive behavior

X1 = Financial Literacy

X2 = Conformity

X3 = Financial Behavior

X4 = Financial Ethics

e = Error

Based on equation 8, it is known that the b1 coefficient value is 0.069, this shows that if there is an increase in the financial literacy value by 1 unit, there will be an increase in the consumer behavior value by 0.069 units. The b2 coefficient value is obtained at 0.806, where if there is an increase in the conformity value of 1 unit, there will be an increase in the consumer behavior value of 0.806 units. The b3 coefficient value is 0.275, this shows that if there is an increase in financial behavior by 1 unit, there will be an increase in the value of consumer behavior by 0.275 units. The b4 coefficient value is -0.162, this shows that if there is an increase in financial ethics by 1 unit, there will be a decrease in the value of consumer behavior by 0.162 units.

**7. Hypothesis test**

After knowing the value and direction of the coefficient on each variable, then testing the influence of each independent variable on the dependent variable is carried out through research hypothesis testing. Hypothesis testing is a method for making research decisions that have been assumed at the beginning of the research. Hypothesis testing is carried out through two methods, namely partially (t test) on each independent variable on the dependent variable, and simultaneously (F test) through testing all independent variables together on the dependent variable.

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**8. Partial influence test (t test)**

Partial influence testing (t test) aims to determine the direct and partial influence of each independen variable on the dependent variable.

**Table 4. t test results**

**Coefficients[a]**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 7.365 | 2.937 | | 2.508 | .014 |
| | Lag_X1 | .069 | .141 | .060 | .487 | .627 |
| | Lag_X2 | .806 | .145 | .569 | 5.557 | .000 |
| | Lag_X3 | .275 | .250 | .159 | 1.101 | .274 |
| | Lag_X4 | -.162 | .182 | -.113 | -.890 | .376 |

a. Dependent Variable: Lag_Y

*Source: 2023 processing data*

The basis for decision making in the t test is as follows:

If the value -ttable<tcount<ttable then H0 is accepted which can be concluded that there is no influence on the independent and dependent variables. If the value of tcount>ttable or -tcount<ttable then H0 is rejected which can be concluded that there is a significant influence on the independent variable and the dependent variable.

The basis for decision making can also be seen from the probability value with a value of α=5%, where if the probability value is <0.05 then the independent variable partially has a significant effect on the dependent variable. However, if the prob value is > 0.05 then the independent variable does not have a significant effect on the dependent variable.

1) There is an influence of financial literacy on consumer behavior

From the results of the t test analysis, the calculated t value was 0.487 and the significance value was 0.627. From the data df=(n-2) or 84-2 and α=0.05, the t table is 1.9889. The basis for decision making is as follows:

a) The value obtained is -1.9889<0.487<1.9889, so H0 is accepted, where the financial literacy variable does not have a partially significant effect on consumer behavior.

b) Obtained a significance value of 0.627>0.05, so H0 is accepted, where the financial literacy variable does not have a partially significant effect on consumer behavior.

From these two bases for decision making, it can be concluded that H0 is accepted where the financial literacy variable does not have a partially significant effect on consumer behavior among Universitas Muhammadiyah Sumatra Utara students.

2) There is an influence of conformity on consumer behavior

From the results of the t test analysis, the calculated t value was 5.557 and the significance value was 0.00. From the data df=(n-2) or 84-2 and α=0.05, the t table is 1.9889. The basis for decision making is as follows:

a) The value obtained is -5.557>1.9889 or 5.557>1.9889, so H0 is rejected, where the conformity variable has a partially significant effect on consumer behavior.

b) If the significance value is 0.00 <0.05, H0 is rejected, where the conformity variable has a partially significant effect on consumer behavior.

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From these two bases for decision making, it can be concluded that H0 is rejected, where the conformity variable has a partially significant effect on consumer behavior among Universitas Muhammadiyah Sumatra Utara students.

**1**) There is an influence of financial behavior on consumer behavior
From the results of the t test analysis, the calculated t value was 1.101 and the significance value was 0.274. From the data df=(n-2) or 84-2 and α=0.05, the t table is 1.9889. The basis for decision making is as follows:
a) The value obtained is -1.9889<1.101<1.9889, so H0 is accepted, where the financial behavior variable does not have a partially significant effect on consumer behavior.
b) Obtained a significance value of 0.274>0.05, so H0 is accepted, where the financial behavior variable does not have a partially significant effect on consumer behavior.
From these two bases for decision making, it can be concluded that H0 is accepted where the financial behavior variable does not have a partially significant effect on consumer behavior among students at Universitas Muhammadiyah Sumatra Utara.
2) There is an influence of financial ethics on consumer behavior
From the results of the t test analysis, the calculated t value was -0.890 and the significance value was 0.376. From the data df=(n-2) or 84-2 and α=0.05, the t table is 1.9889. The basis for decision making is as follows:
a) The value obtained is -1.9889<0.890<1.9889, so H0 is accepted, where the financial ethics variable does not have a partially significant effect on consumer behavior.
b) Obtained a significance value of 0.376>0.05, so H0 is accepted, where the financial ethics variable does not have a partially significant effect on consumer behavior.
From these two bases for decision making, it can be concluded that H0 is accepted, where the financial ethics variable does not have a partially significant effect on consumer behavior among students at Universitas Muhammadiyah Sumatra Utara

**9. Simultaneous influence test (F test)**
The F test aims to determine the effect of independent variables simultaneously on the dependent variable. The basis for decision making in the F test is carried out by looking at the F table value at Df (n-1)= 84-1 and the number of independent variables at α=5%.
If the value -Ftable<Fcount<Ftable then H0 is accepted which can be concluded that the independent variable has no significant effect on the dependent variable.
If the value of Fcount> Ftable or -Fcount> -Ftable then H0 is rejected which can be concluded that the independent variable has a significant effect on the dependent variable.
The basis for decision making can also be seen from the probability value with a value of α=5%, where if the probability value is <0.05 then the independent variable simultaneously has a significant effect on the dependent variable. However, if the prob value is > 0.05 then the independent variables simultaneously do not have a significant effect on the dependent variable.

**Table 5. F test results**
**ANOVA[b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 770.907 | 4 | 192.727 | 13.813 | .000[a] |
| | Residual | 1088.265 | 78 | 13.952 | | |

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| | | | | | |
|---|---|---|---|---|---|
| Total | 1859.172 | 82 | | | |

a. Predictors: (Constant), Lag_X4, Lag_X2, Lag_X1, Lag_X3

b. Dependent Variable: Lag_Y

*Source: 2023 processing data*

From the results of the F test analysis, the calculated F value was 13.813 and the significance value was 0.000. From the data df=(n-1) or 84-1 and α=0.05, the t table is 2.48. The basis for decision making is as follows:

a) The value obtained is 13.813>2.48, so H0 is rejected, where the variables financial literacy, conformity, financial behavior and financial ethics have a significant effect simultaneously on consumer behavior.

b) A significance value of 0.000 <0.05 is obtained, so H0 is rejected, where the variables financial literacy, conformity, financial behavior and financial ethics have a significant effect simultaneously on consumer behavior.

From these two bases for decision making, it can be concluded that H0 is rejected and H1 is accepted, where the variables of financial literacy, conformity, financial behavior and financial ethics simultaneously have a significant effect on consumer behavior among students at the Universitas Muhammadiyah Sumatra Utara.

**10. Analysis of the coefficient of determination (R2)**

The coefficient of determination describes the percentage of the regression model's ability to explain the relationship between the influence of the independent variable on the dependent variable. The following are the results of the coefficient of determination in the research:

**Table 6. Coefficients of Determination (R2)**

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .644[a] | .415 | .385 | 3.73525 |

a. Predictors: (Constant), Lag_X4, Lag_X2, Lag_X1, Lag_X3

b. Dependent Variable: Lag_Y

*Source: 2023 processing data*

Based on the test results above, it can be seen that the coefficient of determination (adj R2) in the model is 0.385 = 38.50%. From these results it can be concluded that the model can describe 38.50% of the value of consumer behavior which is influenced by financial literacy, conformity, financial behavior and financial ethics, while the remaining 100% -38.50% = 61.50% is influenced by other variables outside of study.

## DISCUSSION

**1. The Influence of Financial Literacy on Consumptive Behavior**

In the results of the partial independent variable test (t test), the calculated t value was -1.9889<0.487<1.9889, with a significance value of 0.627 > the value α = 0.05. From these results it can be concluded that Ho is accepted and H1 is rejected, indicating that the financial literacy variable does not have a partially significant effect on consumer behavior among

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students at the Universitas Muhammadiyah Sumatra Utara. In the study, the financial literacy measurement indicators used are basic insight into financial concepts and knowledge of financial products which include savings, investment and insurance products. The research results showed that the majority of respondents had good financial literacy, as evidenced by the majority of respondents' answers knowing about each financial indicator. However, in consumer behavior, it was found that respondents considered consuming a product in the form of a developing trend and purchasing to increase self-confidence. The research results also show that the majority of respondents agree with purchasing products without prior planning. According to (Pohan et al., 2022), understanding financial literacy is an important factor in determining the priority of products to be consumed. However, apart from educational factors, other factors that influence consumption behavior are environmental factors. These environmental factors can come from families, groups or the surrounding environment which can influence social, psychological and spiritual attitudes which will have a positive influence on consumption patterns (Ismanto et al., 2019). In the adolescent phase, they have a tendency to choose friends or groups with the same interests, and will adopt the values espoused by that group (Wahyuni, Radiman, Jufrizen, et al., 2022). One of these values is a trend that is currently developing, where the use of products with the latest trends will certainly increase the individual's self-confidence. From this description, financial literacy has no effect on consumption behavior, where consumption behavior is more influenced by environmental factors. The results of this research are in line with (Arifin N, 2013), where financial literacy does not have a partially significant effect on the consumer behavior of students at the State Islamic Universitas Muhammadiyah Sumatera Utara. In a different study (Gunawan & Chairani, 2019), it was also concluded that financial literacy had no significant effect on consumer behavior. From the description and discussion above, the researcher concludes that the financial literacy variable does not have a partially significant effect on the consumer behavior of Universitas Muhammadiyah Sumatra Utara students.

**2. The Influence of Conformity on Consumptive Behavior**

In the results of the partial independent variable test (t test), the calculated t value was -1.9889>5.557>1.9889, with a significance value of 0.000 <from the value $\alpha = 0.05$. From these results it can be concluded that Ho is rejected and H1 is accepted, showing that the conformity variable has a partially significant effect on consumer behavior among students at the Universitas Muhammadiyah Sumatera Utara. Conformity is a social influence obtained from the surrounding environment by using this influence as a guide in personal consumption patterns (Lesmana et al., 2022). In the research results, it was found that respondents used the opinions and recommendations of other people as guidelines for making purchasing decisions. Respondents are also influenced by normative influences in the form of paying attention to and adapting group habits as a guide for making purchasing decisions. These results are in line with respondents' answers to the consumer pattern variable where respondents tend to see trends and buy products that can increase their self-confidence in the group. Based on these results, environmental influences, both informative and normative, have a significant effect on respondents' consumptive behavior. From the description and discussion above, the researcher concludes that the conformity variable has a partially significant effect on the consumer behavior of Universitas Muhammadiyah Sumatera Utara.

**3. The Influence of Financial Behavior on Consumptive Behavior**

In the results of the partial independent variable test (t test), the calculated t value was -1.9889<1.101<t table 1.9889, with a significance value of 0.274 > the value α = 0.05. From these results it can be concluded that Ho is accepted and H1 is rejected, indicating that the financial behavior variable does not have a partially significant effect on the financial behavior of students at the Universitas Muhammadiyah Sumatera Utara.

Financial behavior is a form of individual ability to manage finances and use the financial resources they have (Ardila et al., 2021). From the research results, it was found that the majority of respondents already had good financial behavior. This is proven by the majority of respondents already having financial planning and savings for emergencies. However, this result is in contrast to the answer to consumer behavior, where respondents still buy goods without planning. This can be caused by the individual's lack of self-control in not buying goods outside the plans that have been prepared. Good financial behavior must be accompanied by a financial control system that is according to plan (Wahyuni, Radiman, & Nara, 2022). From the results, it was found that financial behavior had no significant effect on consumer behavior of Universitas Muhammadiyah Sumatera Utara**.**

**4. The Influence of Financial Ethics on Consumptive Behavior**

In the results of the partial independent variable test (t test), the calculated t value was -1.9889<-0.890<1.9889, with a significance value of 0.376 > the value α = 0.05. From these results it can be concluded that Ho is accepted and H1 is rejected, indicating that the financial ethics variable does not have a partially significant effect on consumer behavior among students at Universitas Muhammadiyah Sumatera Utara.

Financial ethics or attitudes are actions regarding how a person manages, plans, spends or views the financial resources they have. From the research results, respondents already have good financial ethics, as evidenced by respondents who routinely make plans and set aside a portion of their income. Respondents also have good self-confidence regarding their financial management abilities and have a good perception about money. However, good financial ethics must be accompanied by self-control to achieve good financial management according to plan (Putri et al., 2021). From the results obtained, respondents' consumer behavior still makes impulsive purchases of unplanned products. This shows poor self-control which is not in accordance with financial planning (Gunawan & Chairani, 2019). From the results, it was found that financial attitudes did not have a significant effect on consumer behavior of Universitas Muhammadiyah Sumatera Utara.

## CONCLUSION

This research aims to determine the influence of financial literacy, conformity, financial behavior and financial ethics on consumer behavior among students at Universitas Muhammadiyah Sumatera Utara. Based on the research results, several conclusions were obtained which will be described as follows: The results of the research partially show that the financial literacy variable does not have a significant effect on consumptive behavior among Muhammadiyah University of North Sumatra students, where a high or low level of understanding of financial literacy will not reduce or increase consumptive behavior among students, The results of the research partially show that the conformity variable has a significant effect on consumptive behavior among students at Universitas Muhammadiyah Sumatera Utara, where the higher the influence of conformity, the higher the consumptive behavior among students, The results of the research partially show that financial behavior variables do not have a significant effect on consumptive behavior among Universitas Muhammadiyah Sumatera Utara students, where better financial behavior will not reduce or increase consumptive behavior among students, The results of the research partially show that the financial ethics variable does not have a significant effect on consumptive behavior among students at the Universitas Muhammadiyah Sumatera Utara, where the better financial ethics they have will not reduce or increase consumptive behavior towards students, The research results show that simultaneously the variables of financial literacy, conformity, financial behavior and financial ethics have a significant effect on consumer behavior among students Universitas Muhammadiyah Sumatera Utara, where the higher the understanding of financial literacy, the lower the influence of conformity, the higher the implementation of financial behavior and the higher the implementation of financial ethics will reduce consumptive behavior in students, conversely the lower the understanding of financial literacy, the higher the influence of conformity, the lower the implementation of financial behavior and the lower the implementation of financial ethics will increase consumptive behavior in students**.**

## IMPLICATIONS

This research has several limitations both in terms of the variables used and the population. However, it is hoped that this can be a suggestion and consideration for future researchers. Some limitations to this research are: The use of external factors is only limited to conformity variables, Testing is only carried out on students at the Universitas Muhammadiyah Sumatera Utara, a larger population is needed to get more accurate results, Variable testing is carried out using multiple linear regression analysis without any moderating variables. To get more in-depth results, moderating variables are needed to determine the factors that influence consumer behavior.

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**083-071**

# FACTORS INFLUENCING PERSONAL FINANCIAL PLANNING IN STUDENTS OF PRIVATE ISLAMIC UNIVERSITY IN MEDAN CITY

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## ABSTRACT

The purpose of this study was to identify and analyze the effect of financial behavior, financial literacy, income, education and gender on personal financial planning, both partially and simultaneously. The approach used in this study is an associative approach. The population in this study were all students of the private Islamic university in Medan. The sample in this study used the Lemeshow formula, totaling 100 students at the private Islamic university in Medan. Data collection techniques in this study used interview techniques, documentation studies, observations, and questionnaires. Data analysis techniques in this study used Multiple Liner Regression Analysis Test, Hypothesis Test (t test and F test), and the Coefficient of Determination. Data processing in this study used the SPSS (Statistics Package for the Social Sciences) software version 24.00. The results of this study prove that partially and simultaneously financial behavior, financial literacy, income, education and gender have a significant effect on personal financial planning in private Islamic students in the city of Medan.

Keywords: Financial Behavior, Financial Literacy, Income, Education, Gender, Financial Planning

## INTRODUCTION

Students are a microcosm of the youth population who are very vulnerable to the impacts of modernization and social development. Adolescents, according to (Pulungan & Febriaty, 2018) begin to appreciate and even prefer this behavior as they grow older into adulthood. They are also quite active on several social media sites. Apart from that, survey data shows that students have a tendency to make wasteful expenditures (Koto & Pulungan, 2017).

Due to unprepared financial resources, many people experience disorientation and anxiety when real results differ from their expectations (Gunawan et al., 2020). The role of financial behavior is a crucial factor in the entire financial planning process. Financial Management Behavior is related to an individual's ability to manage various aspects of financial management well, including planning, budgeting, auditing, controlling, as well as obtaining and preserving daily financial resources (Gunawan & Syakinah, 2022).

Financial behavior includes an individual's ability to skillfully handle various aspects of financial problems, such as strategizing, budgeting, evaluating, supervising, controlling, researching, and safeguarding financial resources (Gunawan et al., 2018). The integration of financial literacy is very important in the field of financial education. (Koto & Pulungan,

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2017) underscore the importance of having a thorough understanding of financial literacy levels in effectively communicating the challenges and complexities associated with successful financial education.

Financial literacy refers to the acquisition of specific skills and knowledge that enable individuals to make appropriate and effective decisions regarding financial matters (Wahyuni et al., 2022).

A person's income mainly depends on their work in the service or production industry, as well as the number of hours worked and the level of hourly compensation received (Nel Arianti, 2016). This phenomenon can be attributed to the fact that individuals with larger amounts of funds have the opportunity to participate in responsible financial behavior (Suriani, 2022).

Implementing financial education will be critical in fostering financial literacy among the younger generation, thereby equipping them with the essential skills to navigate and monitor their personal finances independently. According to (Pohan et al., 2017), research shows that when parents instill the importance of frugality and wise financial management in their children at a young age, it is likely that these children will develop a tendency to be frugal and smart in making financial decisions.

## METHODS

This study used a research methodology called survey research, which involves collecting data from a representative sample population. The current research uses explanatory research methodology to clarify the causal relationships between the variables studied and assess the hypotheses formulated (Nasution et al., 2020a). This research uses quantitative descriptive research methodology. The purpose of this descriptive research is to provide a comprehensive understanding of actual events related to the problem being investigated. Descriptive research, as described by (Sugiyono, 2018), involves the use of observations, interviews, or questionnaires to collect information regarding the current state of the problem being investigated.

This research uses a quantitative research methodology known for its adherence to positivist philosophy. Quantitative research methods are used to research certain populations or samples by collecting data through research instruments and then carrying out quantitative/statistical analysis (Juliandi et al., 2015). The main goal of this approach is to evaluate previously established hypotheses. This research took place at the Medan City Private Islamic University.

## RESULTS

### Normality test

The purpose of carrying out a normality test is to assess whether the variables in the regression model, both dependent variables and independent variables, are normally distributed.

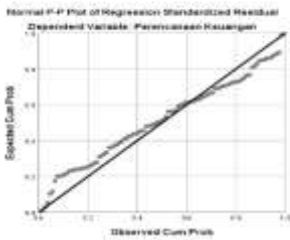

Figure 1 Normality Test Results
Source: Data processed by SPSS version 24.0

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The figure depicts a p-plot graph showing a discernible pattern, characterized by dots scattered randomly around a diagonal line. The alignment of the points along the diagonal line indicates that the regression model meets the normality assumption.
The Kolmogorov-Smirnov test is a statistical test that assesses whether a data set adheres to a normal distribution. This test specifically evaluates the asymptotic significance level (Asymp. Sig.) to make this determination. The value is less than 0.05 for Asymp. Sig. indicates that the observed data does not follow a normal distribution.

**Table 1 Kolmogrov-Smirnov Test Results**

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| | | Unstandardized Predicted Value |
| N | | 100 |
| Normal Parameters[a,b] | Mean | 24.3100000 |
| | Std. Deviation | 2.59190344 |
| Most Extreme Differences | Absolute | .086 |
| | Positive | .042 |
| | Negative | -.086 |
| Test Statistic | | .086 |
| Asymp. Sig. (2-tailed) | | .064[c] |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |
| c. Lilliefors Significance Correction. | | |

Source: Data processed by SPSS version 24.0

Based on the data in Table 1, the variables financial behavior, financial literacy, income, education, gender and financial planning show a normal distribution. The conclusion is obtained from the observation that each variable has a probability greater than 0.05, namely 0.086, which exceeds the significance threshold.

**Multicollinearity Test**

The purpose of carrying out a multicollinearity test is to evaluate the existence of a significant correlation between independent variables in a regression model. A regression model is said to be of quality if it does not show multicollinearity, that is, there is no correlation between independent variables. An approach to ensure multicollinearity is carried out by assessing the Variance Inflation Factor (VIF) value. Generally, the Variance Inflation Factor (VIF) figure does not exceed 10, indicating the absence of multicollinearity. The processed data was subjected to a Multicollinearity Test, and the test results obtained are presented below.

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**Table 2 Multicollinearity Test Results**

| Coefficients[a] | | | |
|---|---|---|---|
| Model | | Collinearity Statistics | |
| | | Tolerance | VIF |
| 1 | (Constant) | | |
| | Behavioral Finance | .176 | 5.694 |
| | Financial Literacy | .214 | 4.678 |
| | Income | .478 | 2.094 |
| | Education | .292 | 3.422 |
| | Gender | .175 | 5.701 |
| a. Dependent Variable: Financial Planning | | | |

Source: Data processed by SPSS version 24.0

Based on the data presented in table 2, it can be seen that the financial behavior variable shows a tolerance value of 0.215 > 0.10. Apart from that, it should be emphasized that the variable under consideration shows a VIF (Variance Inflation Factor) value of 5.694 < 10. The financial literacy variable shows a tolerance value of 0.214 > 0.10. In addition, the variable under consideration shows a Variance Inflation Factor (VIF) value of 4.678 < 10. The income variable has a tolerance value of 0.478 > 0.10. In addition, the variable under consideration shows a Variance Inflation Factor (VIF) value of 2.094 < 10. The tolerance value for the education variable is 0.292 > 0.10. Furthermore, it is important to know that the variable VIF value is 3.422 < 10. The gender variable has a tolerance value of 0.175 > 0.10. Furthermore, it is worth mentioning that the variable under consideration shows a Variance Inflation Factor (VIF) value of 5.701 < 10. Based on the information provided, no indication of multicollinearity was detected in the investigation. The conclusion obtained from observations is that all variables show a tolerance value greater than 0.1 and a VIF value below 5.

**Heteroscedasticity Test**

The main purpose of performing a heteroscedasticity test is to evaluate the presence of statistically significant heterogeneity in the residual variance across various observations in the regression model. Homoscedasticity refers to a statistical concept that denotes a situation in which the spread of residuals across observations remains constant. Heteroscedasticity relates to the scenario when the distribution of residuals shows variation across different observations. This research will use a graphical approach, with special emphasis on Scatterplot Diagrams.

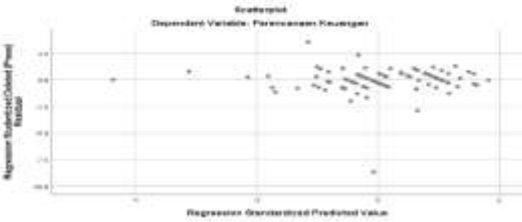

**Figure 2 Heteroscedasticity Test Results**

Source: Data processed by SPSS version 24.0

After examining Figure 2, it is clear that the data points show a uniform distribution both above and below the zero line, indicating no discernible grouping or pattern. Based on

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existing information, it can be concluded that there is no heteroscedasticity in the regression analysis.

**Autocorrelation**

Autocorrelation is a statistical technique used to evaluate the existence of correlation between residuals in a linear regression model in a certain time period and residuals in a previous time period. Autocorrelation problems arise when correlation is apparent. Durbin Watson (DW) statistics is a tool for distinguishing good analytical techniques. The table presented displays the results of the autocorrelation test.

**Table 3. Autocorrelation Test Results**

| Model Summary[b] | | | | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .921[a] | .849 | .841 | 1.12189 | 1.261 |
| a. Predictors: (Constant), Gender, Income, Education, Financial Literacy, Financial Behavior | | | | | |
| b. Dependent Variable: Financial Planning | | | | | |

Source: Data processed by SPSS version 24.0

The Durbin-Watson (DW) statistic calculated from the table is 1.261, indicating the presence of positive autocorrelation in the data set. Identifying autocorrelation in a regression model can be done by analyzing the Durbin-Watson (DW) statistic, which is ideally estimated to be in the -2 to +2 interval. These calculations indicate the absence of substantial autocorrelation.

**Multiple Linear Regression**

This research uses multiple linear regression analysis techniques to test and interpret the data collected. This study aims to examine the relationship between five separate elements, namely financial behavior, financial literacy, income, education, and gender, as well as their influence on the dependent variable financial planning.

**Table 4. Multiple Linear Regression Results**

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .880 | 1.715 | | .513 | .609 |
| | Behavioral Finance | .305 | .119 | .246 | 2.568 | .012 |
| | Financial Literacy | .545 | .093 | .509 | 5.874 | .000 |
| | Income | .191 | .063 | .175 | 3.014 | .003 |
| | Education | .293 | .076 | .284 | 3.828 | .000 |
| | Gender | .305 | .132 | .220 | 2.304 | .023 |
| a. Dependent Variable: Financial Planning | | | | | | |

e ISBN : 978-967-2072-44-7

Source: Data processed by SPSS version 24.00

The values that have been identified come from the data shown in table 4 :
1. Constant = 0.880
2. Financial behavior = 0.305
3. Financial Literacy = 0.545
4. Income = 0.191
5. Education = 0.293
6. Gender = 0.305

The findings obtained are used to create a multiple linear regression equation, which can be expressed mathematically as follows:
Y = 0.880 + 0.3051 + 0.5452 + 0.1913 + 0.2934 + 0.3055

**Hypothesis Testing**

**1. t Test (Partial Test)**

The t-test applied in this research was used to evaluate the reliability of each independent variable. The t-test is used to assess the existence of a statistically significant relationship between the independent variable (X) and the dependent variable (Y), either partially or individually.

**2. F Test (Simultaneous Significant Test)**

The F statistical test is used to determine whether there is a statistically significant relationship between the independent variable (X) and the dependent variable (Y). The following results are presented based on data analysis carried out using SPSS version 24 software

**Coefficient of Determination Test (R-square)**

The R-square value, also called the coefficient of determination, is a statistical measure used to assess the extent to which changes in the dependent variable can be associated with changes in the independent variable. The coefficient of determination is a statistical measure that quantifies the relationship between variables and ranges from 0 to 1. A higher R-square value indicates a stronger correlation between the independent variable and the dependent variable. The following information is the result obtained through statistical analysis:

**Table 5. Coefficient of Determination Test Results**

| Model Summary[b] | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .921[a] | .849 | .841 | 1.12189 |
| a. Predictors: (Constant), Gender, Income, Education, Financial Literacy, Financial Behavior | | | | |
| b. Dependent Variable: Financial Planning | | | | |

Source: Data processed by SPSS version 24.00

D = R2 X 100%
D = 0.849 X 100%
= 84.9%

e ISBN : 978-967-2072-44-7

Based on the data presented in the table, an R square value of 0.849 is obtained, indicating that around 84.9% of the data variation can be explained by the model. The results show that financial behavior, financial literacy, income, education, and gender collectively explain 84.9% of the impact on financial planning variables. The difference between a value of 100% and a value of 84.9% can be calculated as 15.1%. Based on the data provided, it appears that a variable with a magnitude of 15.1% does not have a statistically significant influence on financial planning studies.

## DISCUSSION

### 1. The Influence of Financial Behavior on Financial Planning

Based on the analysis, the calculated $t_{value}$ obtained for the financial behavior variable is 2,568 which is known to exceed the $t_{table}$ with $\alpha = 5\%$ which is known to be 1,985. Statistical analysis shows that there is a significant relationship between financial behavior and personal financial planning among students at private Islamic universities in Medan City. The significant value of financial behavior is $0.012 < 0.05$, so it can be concluded that H0 is rejected (Ha is accepted) indicating that financial behavior has a big influence on personal financial planning among students registered at the private Islamic University located in Medan City.

Data shows that there is a significant correlation between financial behavior and personal financial planning among students at the private Islamic University in Medan City. Improved student financial behavior is directly correlated with their ability to strategize and manage financial resources efficiently. These findings indicate that there is a potential correlation between improving financial behavior and improving students' financial planning and management abilities.

A person's financial decision-making process is influenced by various factors, such as organizational skills, planning abilities, budgeting techniques, audit practices, management strategies, control mechanisms, and methods of disbursing and storing daily funds. In addition, it is important to consider the influence of psychological and sociological factors on their behavior in this specific context. (Putri et al., 2019) found that individuals who have a proactive tendency in acquiring new information and abilities are more likely to be influenced by external events that act as catalysts to initiate change. These behavioral changes have the possibility of improving performance in financial activities, as well as other financial habits.

Financial behavior is a term used to describe the habits and consistent actions that individuals take in managing their own money. Managing income and expenses is a universal challenge that everyone faces. In some cases, people may experience a discrepancy between income and expenses, which may be caused by their financial behavior. (Mukmin et al., 2021) suggests that there is a correlation between positive financial behavior and a higher level of wisdom and intelligence in managing financial resources. One important aspect of managing finances is effective spending management. This involves carefully monitoring and controlling how money is spent. Additionally, it is important to carefully document all fees and expenses to maintain clear records of financial transactions. Lastly, making the right investment decisions is another key factor in managing finances successfully. This requires thorough research and analysis before committing to any investment opportunity.

A person's financial behavior is closely related to their level of financial responsibility, which is related to their ability to manage their financial resources effectively. Financial behavior refers to the way a family or individual effectively handles and allocates their financial resources, which includes activities such as financial planning, savings, budgeting, investment, and insurance (Nasution et al., 2020b).

e ISBN : 978-967-2072-44-7

Financial Management Behavior includes the strategic planning, organizing, directing, and controlling of an organization's financial resources, which refers to an individual's capacity to effectively handle many daily financial tasks, such as planning, budgeting, auditing, organizing, and managing the search and storage of resources. financial power (Gunawan & Syakinah, 2022).

**2. The Influence of Financial Literacy on Financial Planning**

Based on the analysis, the calculated $t_{value}$ obtained for the financial literacy variable is 5,874 which is known to exceed the $t_{table}$ with $\alpha = 5\%$ which is known to be 1,985. Statistical analysis shows that there is a significant relationship between financial literacy and personal financial planning among students at private Islamic universities in Medan City. The significant value of financial behavior is 0.000 < 0.05, so it can be concluded that H0 is rejected (Ha is accepted) indicating that financial literacy has a big influence on personal financial planning among students registered at the private Islamic University located in Medan City.

This research shows that there is a positive relationship between financial literacy and personal financial planning among students studying at one of the private Islamic universities in Medan City. As college students' financial literacy levels increase, their ability to engage in effective financial planning also increases. Additionally, increasing financial literacy will equip students with the skills necessary to allocate their financial resources to meet their needs. It is important for students to engage in developing a financial plan as a means of managing their personal money effectively.

A lack of understanding regarding financial planning, especially among the younger generation, makes them vulnerable to falling into consumerism, hedonism and individualism. These ideologies emphasize momentary gratification at the expense of long-term consequences, resulting in detrimental outcomes (Gunawan et al., 2018).

The acquisition of new knowledge and skills is often enhanced by engaging stimuli, which serve to inspire individuals to make modifications and cultivate new habits. The importance of this learning lies in its capacity to address the problem of lack of financial literacy, which has the potential to encourage financial fraud and harm competitiveness in the financial sector. According to (Kaswan, 2017), certain variables have the potential to hamper the overall effectiveness of financial intermediation.

Financial literacy encompasses a broad range of skills and knowledge that empower individuals to effectively navigate different financial options, engage in discussions regarding money and financial issues, engage in proactive planning for the future, and skillfully respond to life events that impact their daily financial decisions . This event may be influenced by economic factors (Gunawan & Chairani, 2019).

The idea of financial literacy is an important element in the domain of financial education. It is important to evaluate the importance of a certain level of financial literacy to encourage the dissemination of comprehensive information regarding the challenges and complexities associated with achieving effective financial education (Koto & Pulungan, 2017).

**3. The Influence of Income on Financial Planning**

Based on the study, the calculated $t_{value}$ obtained for the income variable is 3,104, which is known to exceed the $t_{table}$ with $\alpha = 5\%$, which is known to be 1,985. Statistical analysis shows that there is a significant relationship between income and personal financial planning among students at private Islamic universities in Medan City. The significant value of income is 0.003 < 0.05, so it can be concluded that $H_0$ is rejected (Ha is accepted) indicating that income has a big influence on personal financial planning among students registered at the private Islamic University located in Medan City.

Individuals with significant income and a comprehensive understanding of financial matters are more likely to implement their financial planning goals well. The combination of a large salary and a strong understanding of financial concepts allows individuals to allocate a percentage of their income to savings, investments, and life insurance, thereby ensuring their long-term financial stability (Setiyono et al., 2021).

Income is an important measure for evaluating individual well-being and provides valuable insight into a country's economic progress more broadly. According to (Salvatore & K.Rastogi, 2020), several factors, including job characteristics, working hours, and hierarchical position in a company, industry, or organization, often have an impact on a person's salary. Determining a person's income is influenced by several aspects, including the type of work, level of performance, and length of work (Nasution et al., 2020a).

A person's gross income consists of various sources, such as income from employment, profits from commercial ventures, and returns from investments. Income refers to the total amount of income received before tax deductions, which includes funds coming from various sources. Of all the sources mentioned, wages and salaries are the elements that contribute the most to overall income. Additionally, it is important to know that there are various categories of additional income, including rental income, government subsidy payments, interest income, and dividend income. Family income is defined as the total income obtained from various sources, especially the combined income of husband and wife. Families with discretionary income are more likely to demonstrate responsible financial behavior, as having funds to spend allows them to handle their finances effectively and carefully. Additionally, individuals in these households show a proactive tendency to actively seek relevant information with the aim of maximizing their financial results (Koto & Pulungan, 2017).

**4. The Influence of Education on Financial Planning**

The calculated $t_{value}$ obtained for the education variable is 3.828 which is known to exceed the $t_{table}$ with $\alpha = 5\%$ which is known to be 1.985. Statistical analysis shows that there is a significant relationship between education and personal financial planning among students at private Islamic universities in Medan City. The significant value of financial behavior is $0.000 < 0.05$, so it can be concluded that $H_0$ is rejected (Ha is accepted) indicating that education has a big influence on personal financial planning among students registered at the private Islamic University located in Medan City.

This research highlights the positive impact on the relationship between education and personal financial planning on students enrolled in private Islamic colleges in Medan City. Acquiring an education equips students with valuable knowledge and skills to prepare and manage their financial plans effectively. The provision of education has a significant impact on students' financial planning abilities.

The correlation between achieving a significant level of education and developing financial literacy is critical in encouraging the adoption of financially responsible behavior among individuals. The effectiveness of financial ideas and instruments in supporting well-informed financial decision making depends on a person's level of education. Educational institutions offer educational programs that focus on teaching financial literacy and increasing understanding of business practices among the younger generation. According to (Tanjung & Putri, 2019), acquiring knowledge through education plays an important role in increasing understanding of financial planning, especially among young individuals.

Family education places great emphasis on understanding the importance of financial resources and developing children's attitudes and behavior regarding money management (Council, 2003). (Ismanto et al., 2019) describes a metaphorical comparison between education and a platform that crosses the vast realm of existence. The above statement encompasses the core idea of education as a sustainable endeavor, starting with the impact on the family. Based on the opinion of (Nawawi, 2006), the results show that the financial knowledge possessed by one partner has the potential to influence their behavior in managing household finances. Based on (Heijdjracmhan R, 2009), there is a positive correlation between the level of education achieved and the ability to manage personal finances in the household effectively.

## 5. The Influence of Gender on Financial Planning

Based on the analysis, the calculated $t_{value}$ obtained for the gender variable is 2,304 which is known to exceed the $t_{table}$ with $\alpha = 5\%$ which is known to be 1,985. Statistical analysis shows that there is a significant relationship between gender and personal financial planning among students at private Islamic universities in Medan City. The significant value of financial behavior is $0.023 < 0.05$, so it can be concluded that $H_0$ is rejected (Ha is accepted) indicating that gender has a big influence on personal financial planning among students registered at the private Islamic University located in Medan City.

The research conducted emphasizes the existence of a gender gap in the implementation of financial planning. In society's perception, men tend to show dominant, independent, aggressive, strong focus on achievement, and persistent traits. On the other hand, there is a general perception that women tend to show more caring, sociability, lower levels of self-confidence, and a stronger tendency to help those facing difficulties.

Today there is a marked difference in the level of engagement between men and women in achieving their financial goals. There is a tendency for men to hold more prominent positions in this field, but it is important to recognize that women also have the ability to enhance their personal growth and advancement. There is a tendency for men to have higher motivation and discipline in developing their personality than women. The various obligations that men have in everyday life include meeting the needs of themselves and their families. The personal development process generally appears to progress more quickly in men. On the other hand, women are often in a situation where the husband assumes full responsibility for all aspects of life's needs after marriage. According to (Handoko, 2016), women's personality development may occur more slowly than men**.** Gender is a comprehensive framework that includes various social, cultural and economic dynamics that influence the roles and relationships between individuals, especially in relation to men and women. The scope of influence goes beyond biological determinants and includes a wide range of factors, including cultural norms, government policies, and economic structures. The concept of "gender" refers to a sociocultural construct that includes the unique roles, behaviors, and expectations assigned to individuals based on their identification as male or female in a particular society. "Gender" functions as a differentiating factor between men and women, which is characterized by anatomical and physiological differences that include variations in physical condition, size and function. These differences have the potential to impact various aspects of behavior, cognition, clothing, and emotions of individuals in different societal groups. (Gunawan et al., 2020).

## 6. The Influence of Financial Behavior, Financial Literacy, Income, Education and Gender on Financial Planning

The analysis carried out previously shows that the $F_{count}$ is 105.683 which shows a statistical significance of 0.000. Furthermore, $F_{table}$ was obtained 3.09, so it was concluded that $F_{count} > F_{table}$, H_0 was rejected. Research findings show that various factors such as financial behavior, financial literacy, income, education, and gender have a significant

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influence on the development of personal financial planning among students at the Medan City Private Islamic University.

The findings of this research show that there is a relationship between financial behavior, financial literacy, income, education and gender, as well as their impact on personal financial planning among students at one of the private Islamic universities in Medan City. This statement shows that there is a correlation between students who show positive financial behavior, have a high level of financial literacy, and have a good educational background. These students are more likely to gain knowledge and skills in managing their income effectively. College students are more likely to manage their finances effectively because they tend to be motivated to create and implement thorough financial plans.

Financial planning is a methodical process that requires categorization and examination of various factors, with the aim of achieving personal goals within a specified time period (Gunawan et al., 2018). Financial plans are designed to support households in managing their income and expenses effectively. Financial planning is a methodical and strategic process that individuals or groups undertake to achieve their financial goals. The process requires the development of a comprehensive financial plan that acts as a guide to effectively managing one's financial situation and simplifies the financial planning process (Siswandi, 2011). Financial planning for the household is a proactive approach to prepare for future conditions. The main goal is to achieve certain financial goals through deliberate, systematic and wise management of financial resources (Arianti, 2021). The first step in financial planning is to evaluate and analyze a person's financial situation, taking into account income and expenses. The process begins with identifying the right investment choices, setting financial goals, and knowing the investment strategy that will be pursued (Lukman Syamsuddin, 2010)

## CONCLUSION

Based on the results of the research and discussion previously stated, the following conclusions can be drawn. Financial behavior has a significant influence on personal financial planning among students at a private Islamic university in the city of Medan. Financial literacy has a significant effect on personal financial planning among students at a private Islamic university in the city of Medan. Income has a significant effect on personal financial planning for students at a private Islamic university in the city of Medan. Education has a significant effect on personal financial planning for students at a private Islamic university in the city of Medan. Gender has a significant effect on personal financial planning for students at a private Islamic university in the city of Medan. Financial behavior, financial literacy, income, education and gender together have a significant influence on personal financial planning among students at a private Islamic university in the city of Medan.

## IMPLICATIONS

This research was conducted following scientific protocols, but this research still has its limitations, namely: A limitation that needs to be considered is the lack of representation in the sample of students studied, because the sample may not accurately reflect the entire student population at a private Islamic university in the city of Medan. There are still many students at private Islamic universities in the city of Medan who were not included in this research. The author is aware of the existence of external variables that have an impact on financial planning, including self-efficacy, financial anxiety, financial management practices, financial socialization agents, financial difficulties, influence of parents and peers, banking, risk, and insurance. These factors are assumed to have the capacity to influence the financial planning process.

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**085-073**

# THE EFFECT OF WORK ENVIRONMENT AND ORGANIZATIONAL COMMITMENT ON EMPLOYEE PERFORMANCE WITH ORGANIZATIONAL CITIZENSHIP BEHAVIOR AS AN INTERVENING VARIABLE AT PT MASAJI TATANAN CONTAINER INDONESIA MEDAN BRANCH

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## ABSTRACT

The purpose of this study was to examine and analyze the influence of the Work Environment and Organizational Commitment on Employee Performance with Organizational Citizenship Behavior as an intervening variable for PT Masaji Tatanan Kontainer Indonesia, directly or indirectly. The approach used in this study is an associative approach. Data analysis techniques in this study used a quantitative approach using statistical analysis using the Auter Model Analysis test, Inner Model Analysis, and Hypothesis Testing. Data processing in this study uses the PLS (Partial Least Square) software program. The results of this study prove that the work environment directly has a significant effect on employee performance. Organizational Commitment has a significant effect on Employee Performance. Work Environment has a significant effect on Organizational Citizenship Behavior. Organizational Commitment has a significant effect on Organizational Citizenship Behavior. Organizational Citizenship Behavior has a significant effect on Employee Performance. And indirectly the Work Environment has a significant effect on Employee Performance with Organizational Citizenship Behavior as an intervening variable. Organizational Commitment has a significant effect on Employee Performance with Organizational Citizenship Behavior as an intervening variable at PT Masaji Tatanan Kontainer Indonesia.

Keywords: Work Environment, Organizational Commitment, Employee Performance and Organizational Citizenship Behavior

## INTRODUCTION

Performance is a work result that can be achieved by an employee in accordance with their respective authority and responsibilities, in order to achieve organizational goals (Jufrizen, 2017). The success of a company is greatly influenced by the performance of its employees. Employees who have high performance will always be fully aware of their respective responsibilities and try to carry out all tasks given to them well according to their abilities to get maximum work results.

One of the factors that influences performance is Organizational Citizenship Behavior (Farisi et al., 2021). Organizational Citizenship Behavior (OCB) refers to behavior that goes beyond the normal obligations of what employees should do. Organizational Citizenship Behavior (OCB) is manifested in individual attitudes by helping co-workers, volunteering to help organizational effectiveness, being loyal to the company, volunteering to do extra activities at work, avoiding conflicts with co-workers, using time effectively at work. This

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behavior is a form of prosocial behavior, namely positive social behavior. Individuals who display Organizational Citizenship Behavior (OCB) well can be called good employees (Jufrizen, J., & Sitorus, 2021)

In order to increase Organizational Citizenship Behavior (OCB) in workers, it is very important for companies or organizations to know what causes the increase or emergence of Organizational Citizenship Behavior (OCB). (Jufrizen & Noor, 2022) said that there are several variables that influence employee Organizational Citizenship Behavior (OCB), including job satisfaction, justice, intrinsic motivation, leadership style, organizational culture and climate, gender, length of service, perceptions of organizational support.

Another factor that influences performance is the work environment (Marbun & Jufrizen, 2022). The work environment is all physical conditions found around the workplace that can affect employees either directly or indirectly. Meanwhile, the non-physical work environment is all conditions that occur related to work relationships, both relationships with superiors and colleagues, or relationships with subordinates (Sedarmanyanti, 2018).

The existence of a comfortable work environment will make a positive contribution to the implementation of various work activities easily, so that it can maintain a balance in the facilities run by the company (Farisi & Utari, 2020).And another factor that influences performance is organizational commitment (Farisi et al., 2021). Organizational commitment is an important factor in realizing better employee performance. Where an employee who has high organizational commitment will always try to develop themselves for the betterment of the organization (Farisi et al., 2021). A person's high involvement in a job means siding with an individual's particular job, while high organizational commitment means siding with the organization that recruits the individual (Nasution et al., 2019)

## METHODS

The research approach used in this research is an associative approach. Associative research according to (Sugiyono, 2019) is "research that aims to determine the relationship between two or more variables". The location of this research was carried out at PT Masaji Tatanan Kontainer Indonesia which is located at JL Raya Pelabuhan Belawan II, Medan, Belawan City, Medan City, North Sumatra.

Population is a generalized area consisting of objects/subjects that have certain quantities and characteristics determined by the researcher to be studied and then conclusions drawn. (Azuar et al., 2015a) The population and sample of this research were all employees of PT Masaji Tatanan Kontainer Indonesia, totaling 39 people. The sampling technique in this research is saturated sampling (total sampling). Saturated sampling is a sample that represents the total population. Usually done if the population is less than 100 (Hendrayadi, 2015).

This data will be analyzed using a quantitative approach using statistical analysis, namely partial least squares – structural equestion model (PLSSEM) which aims to carry out path analysis with latent variables. This analysis is often referred to as the second generation of multivariate analysis (Ghozali, 2013). Variant-based structural equation analysis (SEM) can simultaneously test measurement models as well as test structural models. The measurement model is used to test validity and reliability, while the structural model is used to test causality (testing hypotheses with prediction models)

PLS (Partial Least Square) is a powerful analysis method because it is not based on many assumptions and the data does not have to have a multivariate normal distribution (indicators with categorical, ordinal, interval to ratio scales can be used in the same model). Structural model testing in PLS is carried out with the help of Smart PLS software ver. 3 for Windows. The following is a structural model formed from the problem formulation:


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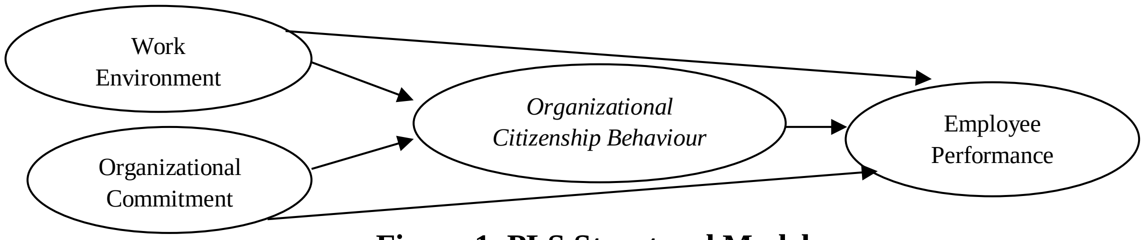


**Figure 1. PLS Structural Model**

According to (Joseph F. Hair et al., 2023) There are two group stages for analyzing SEM-PLS, namely

1. Analysis of the measurement model (Outer Model), namely
   a. convergent validity (Convergent Validity);
   b. construct reliability and validity (Construct Reliability And Validity);
   c. discriminant validity (Discriminant Validity)
2. Structural model analysis (Inner Model), namely
   a. Coefficient of determination (R-Square);
   b. f-square; And
   c. Hypothesis test

**Hypothesis Testing**

In hypothesis testing, it can be seen from the t-statistic value and probability value. To test the hypothesis, namely by using statistical values, for alpha 5% the t-statistic value used is 1.96. So the criteria for accepting/rejecting the hypothesis are Ha accepted and H0 rejected when the t-statistic > 1.96. To reject/accept a hypothesis using probability, Ha is accepted if the probability value is <0.05.

**Model Specifications and Structural Equations**

The relationships between variables in a flow diagram can help in assembling causal relationships between constructs from previous theoretical models. The complete structural model in this research can be seen in the image below:


**Figure 2. Structural Equation Analysis Model**

**Testing (Testing Fit)**

Testing of the inner model or structural model is carried out to test the relationship between latent constructs. The inner model includes inner relations, structural models and substantive theory describing the relationship between latent variables based on substantive theory. The inner model is tested by looking at the Rsquare, Q-square and path coefficient values to get information on how much the dependent latent variable is influenced by the independent latent variable, as well as a significance test to test the significance value of the relationship or influence between variables (Sanusi, 2014).

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**1. R-Square Test**

The R-square value or coefficient of determination shows the diversity of exogenous constructs that are able to explain endogenous constructs simultaneously. The R-square value is used to measure the level of variability in changes in the independent variable towards the dependent variable. This parameter is also used to measure the feasibility of the prediction model with a range of 0 to 1. The higher the R-square value, the greater the influence of the exogenous latent variable on the endogenous latent variable. Changes in the R-square (r2) value are used to substantively assess the influence of certain independent variables on the dependent latent variable (Suryabrata, 2012)

**2. Path Coefficient Test.**

The path coefficient shows how big the relationship or influence of the latent construct is carried out using the bootstrapping procedure. Between constructs there is a strong relationship if the path coefficient value is more than 0.01. And the relationship between latent variables is said to be significant if the path coefficient is at the level of 0.050

## RESULTS

### Measurement Model Analysis (Outer Model)

### Convergent Validity

Convergent validity is used to see the extent to which a measurement correlates positively with alternative measurements of the same construct. To see whether an indicator of a construct variable is valid or not, look at the outer loading value. If the outer loading value is greater than (0.4) then an indicator is valid (Burhan Bungin, 2013).

**Table 1**
**Convergent Validity**

| | X1 Work Environment | X2. Organizational Commitment | Y. Employee Performance | Z. *Organizational Citizenship Behavior* |
|---|---|---|---|---|
| X1.1 | 0.897 | | | |
| X1.2 | 0.920 | | | |
| X1.3 | 0.981 | | | |
| X1.4 | 0.948 | | | |
| X1.5 | 0.964 | | | |
| X1.6 | 0.950 | | | |
| X2.1 | | 0.747 | | |
| X2.2 | | 0.740 | | |
| X2.3 | | 0.887 | | |
| X2.4 | | 0.865 | | |
| X2.5 | | 0.890 | | |
| X2.6 | | 0.765 | | |
| Y.1 | | | 0.838 | |
| Y.2 | | | 0.689 | |
| Y.3 | | | 0.913 | |
| Y.4 | | | 0.782 | |

| | | | | |
|---|---|---|---|---|
| **Y.5** | | | **0.746** | |
| **Y.6** | | | **0.871** | |
| **Y.7** | | | **0.893** | |
| **Y.8** | | | **0.888** | |
| **Z.1** | | | | **0.803** |
| **Z.2** | | | | **0.794** |
| **Z.3** | | | | **0.829** |
| **Z.4** | | | | **0.859** |
| **Z.5** | | | | **0.870** |
| **Z.6** | | | | **0.934** |
| **Z.7** | | | | **0.767** |
| **Z.8** | | | | **0.767** |

Based on the table above it can be seen that
1. The outer loading value for the Work Environment variable is greater than 0.4, so all indicators in the Work Environment variable are declared valid.
2. The outer loading value for the Organizational Commitment variable is greater than 0.4, so all indicators on the Organizational Commitment variable are declared valid.
3. The outer loading value for the Employee Performance variable is greater than 0.4, so all indicators in the Employee Performance variable are declared valid.
4. The outer loading value for the Organizational Citizenship Behavior variable is greater than 0.4, so all indicators in the Organizational Citizenship Behavior variable are declared valid.

**Internal Consistency Analysis**

Internal consistency analysis is a form of reliability used to assess the consistency of results across items on the same test. Internal consistency testing uses composite reliability values with the criteria that a variable is said to be reliable if the composite reliability value is > 0.600 (Sujarweni, 2018)

**Table 2. Internal Consistency Analysis**

| | Cronbach's Alpha | rho_A | Reliabilitas Komposit | Rata-rata Varians Diekstrak (AVE) |
|---|---|---|---|---|
| **X1. Work Environment** | **0.975** | **0.977** | **0.980** | **0.891** |
| **X2. Organizational Commitment** | **0.900** | **0.902** | **0.924** | **0.670** |
| **Y. Employee Performance** | **0.935** | **0.945** | **0.946** | **0.690** |
| ***Z. Organizational Citizenship Behavior*** | **0.935** | **0.945** | **0.946** | **0.688** |

Sumber : SEM PLS (2023)

Based on the internal consistency analysis data in the table above, the results obtained are variable
1. Work Environment has a composite reliability value of 0.980 > 0.600, so the Work Environment variable is reliable

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2. Organizational Commitment has a composite reliability value of 0.924 > 0.600, so the Organizational Commitment variable is reliable
3. Employee Performance has a composite reliability value of 0.946 > 0.600, so the Employee Performance variable is reliable
4. Organizational Citizenship Behavior has a composite reliability value of 0.946 > 0.600, so the Organizational Citizenship Behavior (Z) variable is reliable.

**Discriminant Validity**

Discriminant validity aims to assess whether an indicator of a construct variable is valid or not, namely by looking at the Heterotrait - Monotrait Ratio of Correlation (HTMT) value < 0.90, then the variable has good discriminant validity (valid) (Widodo, 2017).

**Table 3. Discriminant Validity**

| | **X1. Work Environmen t** | **X2. Komitmen Organisasi** | **Y. Employee performanc e** | ***Z. Organizational Citizenship Behavior*** |
|---|---|---|---|---|
| **X1. Work Environment** | | | | |
| **X2. Organizational Commitment** | **0.567** | | | |
| **Y. Employee Performance** | **0.712** | **0.754** | | |
| ***Z. Organizational Citizenship Behavior*** | **0.657** | **0.658** | **0.754** | |

Sumber : SEM PLS (2023)

Based on the table above, the results of the Heterotrait - Monotrait Ratio of Correlation (HTMT) correlation are obtained :

1. Work Environment Variable with Organizational Commitment of 0.567 < 0.900, correlation between Heterotrait - Monotrait Ratio Of Correlation (HTMT) variables. Work Environment with Employee Performance is 0.712 < 0.900, the Heterotrait - Monotrait Ratio of Correlation (HTMT) variable Work Environment with Organizational Citizenship Behavior is 0.657 < 0.900, thus all Work Environment correlation values are declared valid.
2. The correlation value of the Heterotrait - Monotrait Ratio Of Correlation (HTMT) variable of Organizational Commitment with Employee Performance is 0.754 < 0.900, the correlation value of the Heterotrait - Monotrait Ratio Of Correlation (HTMT) variable of Organizational Commitment with Organizational Citizenship Behavior is 0.658 < 0.900, thus all The correlation value of Organizational Commitment is declared valid.
3. The Heterotrait - Monotrait Ratio of Correlation (HTMT) correlation value for the Employee Performance variable towards Organizational Citizenship Behavior is 0.754 < 0.900, thus all Employee Performance correlation values are declared valid.

**Collinearity (Collinearity / Variance Inflation Factor / VIF)**

Collinearity testing is to prove whether the correlation between latent variables/constructs is strong or not. If there is a strong correlation, it means that the model contains problems from a methodological point of view, because it has an impact on the estimation of statistical significance. This problem is called collinearity. The value used to analyze it is by looking at the Variance Inflation Factor (VIF) value (Sutrisno Hadi, 2011).

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If the VIF value is greater than 5.00, it means there is a collinearity problem, and conversely there is no collinearity problem if the VIF value is <5.00 (Azuar et al., 2015a).

**Table 4. Collinearity**

| | **X1. Work Environment** | **X2. Organizational Commitment** | **Y. Employee Performance** | **Z. *Organizational Citizenship Behavior*** |
|---|---|---|---|---|
| **X1. Work Environment** | | | **1.815** | **1.432** |
| **X2. Organizational Commitment** | | | **1.765** | **1.432** |
| **Y. Employee Performance** | | | | |
| **Z. *Organizational Citizenship Behavior*** | | | **2.108** | |

Sumber : SEM PLS (2023)

From the data above it can be described as follows:
1. VIF for the correlation between Work Environment and Employee Performance is 1.815 < 5.00 (no collinearity problems occur)
2. VIF for the correlation between Organizational Commitment and Employee Performance is 1.765 < 5.00 (no collinearity problems occur)
3. VIF for the correlation between Work Environment and Organizational Citizenship Behavior is 1.432 < 5.00 (no collinearity problems occur)
4. VIF for the correlation between Organizational Commitment and Organizational Citizenship Behavior is 1.432 < 5.00 (no collinearity problems occur)
5. VIF for the correlation between Organizational Citizenship Behavior and Employee Performance is 2.108 < 5.00 (no collinearity problems occur)

Thus, from the data above, the structural model in this case is not all correlations that are free from collinearity problems.

**Structural Model Analysis (Inner Model)**

In this test there are two stages, namely testing the direct influence hypothesis and testing the indirect influence hypothesis. The hypothesis testing path coefficients are in the image below:

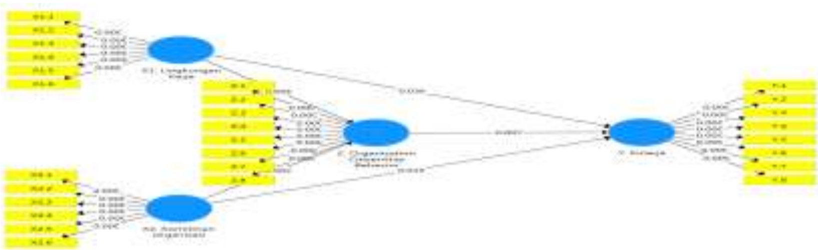

**Figure 3. Hypothesis Testing**

**Direct Effect Testing**

Direct influence hypothesis testing aims to prove the hypotheses of the influence of a variable on other variables directly (without intermediaries), namely:
1. If the path coefficient value is positive, it indicates that an increase in the value of one variable is followed by an increase in the value of another variable.

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2. If the path coefficient value is negative, it indicates that an increase in one variable is followed by a decrease in the value of another variable. (Azuar et al., 2015b)

And the probability value is:
1. If the probability value (P-Value) < Alpha (0.05) then Ho is rejected (the influence of one variable on other variables is significant).
2. If the probability value (P-Value) > Alpha (0.05) then Ho is accepted (the influence of one variable on other variables is not significant)

**Table 5. Direct Influence Hypothesis**

| | **Sampel Asli (O)** | **Rata-rata Sampel (M)** | **Standar Deviasi (STDEV)** | **T Statistik (O/STDEV)** | **P Values** |
|---|---|---|---|---|---|
| **X1. Work Environmenta -> Y. Employee performance** | 0.257 | 0.253 | 0.122 | 2.103 | **0.036** |
| **X1. Work environment -> Z. *Organizational Citizenship Behavior*** | 0.426 | 0.440 | 0.099 | 4.285 | **0.000** |
| **X2. Organizational Commitment-> Y. Employee performance** | 0.343 | 0.337 | 0.142 | 2.423 | **0.016** |
| **X2. Organizational Commitment-> Z. *Organizational Citizenship Behavior*** | 0.397 | 0.397 | 0.125 | 3.175 | **0.002** |
| **Z. *Organizational Citizenship Behavior* -> Y. Employee performance** | 0.358 | 0.375 | 0.131 | 2.722 | **0.007** |

Sumber : SEM PLS (2023)

Based on the table above, it can be obtained
1. The direct influence of the Work Environment on Employee Performance has a path coefficient of 0.257 (positive), and has a P-Values value of 0.036, so 0.036 < 0.05, so it can be stated that the Work Environment has a significant effect on Employee Performance.
2. The direct influence of the Work Environment on Organizational Citizenship Behavior has a path coefficient of 0.426 (positive) and has a P-Value of 0.000 so 0.000 < 0.05, so it can be stated that the Work Environment has a significant effect on Organizational Citizenship Behavior.
3. The direct effect of Organizational Commitment on the Employee Performance variable has a path coefficient of 0.343 (positive), and has a P-Values value of 0.016, so 0.016 < 0.05, so it can be stated that Organizational Commitment has a significant effect on Employee Performance.
4. The direct influence of Organizational Commitment on Organizational Citizenship Behavior has a path coefficient of 0.397 (positive) and has a P-Values value of 0.002 so 0.002 < 0.05, so it can be stated that Organizational Commitment has a significant effect on Organizational Citizenship Behavior

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5. The direct influence of Organizational Citizenship Behavior on Employee Performance has a path coefficient of 0.358 (positive) and has a P-Values value of 0.007 so 0.007 < 0.05, so it can be stated that Organizational Citizenship Behavior has a significant effect on Performance.

**Testing the Indirect Effect Hypothesis**

Indirect influence hypothesis testing aims to prove hypotheses about the influence of a variable on other variables indirectly (through intermediaries) (Sugiyono, 2017a).

1. If the indirect influence coefficient value > direct influence coefficient, then it mediates the relationship between one variable and another variable.
2. If the indirect influence coefficient value is <direct influence coefficient, then it does not mediate the relationship between one variable and another variable.

**Table 6. Indirect Influence Hypothesis**

| | Original Sample (O) | Sample Mean (M) | Standar Deviasi (STDEV) | T Statistik (O/STDEV ) | P Values |
|---|---|---|---|---|---|
| **X1. Work Environment -> Z. *Organizational Citizenship Behavior* -> Y. Employee performance** | 0.152 | 0.166 | 0.073 | 2.077 | **0.038** |
| **X2. Organizational Commitment-> Z. *Organizational Citizenship Behavior* -> Y. Employee performance** | 0.142 | 0.148 | 0.072 | 1.981 | **0.048** |

Sumber : SEM PLS (2023)

Based on the table above, it is obtained

1. The indirect influence of the Work Environment on Employee Performance through Organizational Citizenship Behavior as an intervening variable has a path coefficient of 0.152 (positive) and has a P Value of 0.038 so 0.038 < 0.05, thus it can be stated that the Work Environment has a significant effect on Performance Employees through Organizational Citizenship Behavior as an intervening variable.
2. The indirect effect of Organizational Commitment on Employee Performance through Organizational Citizenship Behavior as an intervening variable has a path coefficient of 0.142 (positive) has a P Value of 0.048, so it is 0.048 < 0.05, thus it can be stated that Organizational Commitment has a significant effect on Employee Performance through Organizational Citizenship Behavior as an intervening variable.

**Coefficient of Determination (R Square)**

The Coefficient of Determination (R Square) aims to evaluate the accuracy of predictions for a variable. In other words, to evaluate how variations in the value of the dependent variable are influenced by variations in the value of the independent variable in a path model. (Sugiyono, 2017b)

1. An R Square value of 0.75 indicates a strong PLS model
2. An R Square of 0.50 indicates a moderate PLS model.
3. An R Square value of 0.25 indicates a weak PLS model (Ghozali, 2013).

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**Tabel 7. Koefisien Determinasi**

| | R Square | Adjusted R Square |
|---|---|---|
| **Y. Employee performance** | 0.682 | 0.655 |
| ***Z. Organizational Citizenship Behavior*** | 0.526 | 0.499 |

Sumber : SEM PLS (2023)

In the table above, the results show that the influence of the Work Environment and Organizational Commitment on Employee Performance is 0.682, meaning the magnitude of the influence is 68.2%, this means it shows a strong PLS. Then, the results of the influence of the Work Environment and Organizational Commitment on Organizational Citizenship Behavior are 0.526, meaning the magnitude of the influence is 52.6%, this means that PLS is also strong.

## DISCUSSION

### The Influence of the Work Environment on Employee Performance.

The results of this research have a path coefficient of 0.257 (positive), and have a P-Values value of 0.036, so 0.036 < 0.05, so it can be stated that the work environment has a significant effect on employee performance for employees of PT Masaji Tatanan Kontainer Indonesia.

The results of this research are also supported by research conducted by (Iskandar & Yusnandar, 2021), (Farisi & Utari, 2020), and (Lesmana et al., 2021), which states that the Work Environment on Employee Performance

The work environment is a means of supporting the smooth working process, where comfort and safety at work are also taken into account in creating a conducive and enjoyable work atmosphere for employees so that it can support employee performance in carrying out their work activities. The work environment is also a series of conditions or circumstances of the work environment of an agency which is the place of work for employees who work in that environment (Sinambela & Tanjung, 2018).

Employee performance is basically something that employees determine how much they contribute to the company in the form of production results and services provided. Basically, employee performance greatly influences the quality of a company, where employee performance determines the level of success in the running of a company from year to year which is produced by human resources who own the company according to predetermined work standards.

### The Effect of Organizational Commitment on Employee Performance

The results of this research have a path coefficient of 0.343 (positive), and have a P-Values value of 0.016, so 0.016 < 0.05, so it can be stated that Organizational Commitment has a significant effect on Employee Performance for employees of PT Masaji Tatanan Kontainer Indonesia.

The results of this research are also supported by research conducted by (Tupti & Siswadi, 2022), and (Prayogi et al., 2019) which concluded that Organizational Commitment influences employee performance

Performance issues are always a classic problem in every company. Many companies try to find and research performance to advance their company. Performance is the result or output

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of a process." Because performance is a result or output of a process, many leaders highlight the performance of their subordinates to ensure that the company they run will progress. Many methods have been tried to be formulated and produced to improve performance in a company, starting from the layout of a room to the use of robots and computers to streamline company performance (Sembiring et al., 2021)

Commitment in an organization as a psychological construct is a characteristic of the relationship between organizational members and their organization and has implications for the individual's decision to continue their membership in the organization. Organizational commitment is a strong desire to become a member of a group. high willingness to work for the organization, a certain belief and acceptance of the organization's values and goals (Lesmana & Nasution, 2019)

**The Influence of the Work Environment on Organizational Citizenship Behavior**

The results of this research have a path coefficient of 0.426 (positive) and have a P-Values value of 0.000, so 0.000 < 0.05, so it can be stated that the Work Environment has a significant effect on Organizational Citizenship Behavior in employees of PT Masaji Tatanan Kontainer Indonesia.

The results of this research are also supported by research conducted by (Jufrizen, 2016), and (Lesmana & Ananda, 2021) concluded that the work environment influences Organizational Citizenship Behavior

Organizational Citizenship Behavior is considered important and valuable for the survival of an organization because employees who have Organizational Citizenship Behavior tend to display effective performance which in turn can influence better performance. Additionally, Organizational Citizenship Behavior consists of extra-role behaviors that are important for efficient processes in an organization. Organizational Citizenship Behavior can also predict employee performance, provide initiative in offering many opportunities for employees who are willing to take on additional work responsibilities and face work problems independently (Susilo et al., 2023). Organizational Citizenship Behavior (OCB) is the positive behavior of members organization. Positive behavior is reflected in the form of willingness to work and contribute to the organization (Jufrizen et al., 2020)

**The Influence of Organizational Commitment on Organizational Citizenship Behavior**

The results of this research have a path coefficient of 0.397 (positive) and have a P-Values value of 0.002 so 0.002 < 0.05, so it can be stated that Organizational Commitment has a significant effect on Organizational Citizenship Behavior in employees of PT Masaji Tatanan Kontainer Indonesia.

The results of this research are also supported by research conducted by (Farisi & Pane, 2021) and (Bahagia et al., 2018) which states that Organizational Commitment. has a significant effect on Organizational Citizenship Behavior

Organizational Commitment is a psychological condition that characterizes the relationship between employees (members) and the organization which is characterized by the member's acceptance of the organization's goals, reflecting individual strengths and member involvement, which shows the suitability of the organization's goals and values, demonstrated through activities supporting the organization's efforts and the decision to continue membership. in organizations (Lesmana & Prayogi, 2021)

Continuance commitment refers to an individual's awareness of the losses they will incur if they leave the organization, while normative commitment shows how an individual can survive in the organization because he feels he has a moral duty or obligation to his organization (Hazmanan Khair, 2021)

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**The Influence of Employee Organizational Citizenship Behavior on Employee Performance**

The results of this research have a path coefficient of 0.358 (positive) and have a P-Values value of 0.007 so 0.007 < 0.05, so it can be stated that Organizational Citizenship Behavior has a significant effect on Employee Performance for employees of PT Masaji Tatanan Kontainer Indonesia.

The results of this research are also supported by research conducted by (Jufrizen & Noor, 2022) which stated that Organizational Citizenship Behavior influences employee performance.

The existence of an Organizational Citizenship Behavior attitude in each employee will influence employee performance. Each employee displays a positive attitude and directed actions, making it easier for employees to carry out their respective duties and responsibilities. Organizational citizenship behavior (OCB) is a relatively modern management concept that has received the attention of many researchers. Most of these studies show that OCB has important effects on organizations, productivity, organizational competence and organizational effectiveness in meeting goals and improving employee morale (Azhar et al., 2020)

**The Influence of the Work Environment on Employee Performance through Organizational Citizenship Behavior as an Intervening Variable**

The results of this research have a path coefficient of 0.152 (positive) and have a P Value of 0.038 so 0.038 < 0.05, thus it can be stated that the Work Environment has a significant effect on Employee Performance through Organizational Citizenship Behavior as an intervening variable for employees of PT Masaji Tatanan Kontainer Indonesia

A work environment is said to be good if employees can carry out activities optimally, healthily, safely and comfortably. The work environment is everything that is around the workers and which can influence them in carrying out the assigned tasks, for example cleanliness, music, lighting and so on. others (Siagian, 2015)

A conducive work environment supports employees to feel comfortable at work so that employees can be more productive and more enthusiastic about working, but a less conducive work environment will cause employees to feel less satisfied or mentally depressed, which can disrupt the employee's productivity (Sagala, 2018)

**The Influence of Organizational Commitment on Employee Performance through Organizational Citizenship Behavior as an Intervening Variable**

The results of this research have a path coefficient of 0.142 (positive) and have a P Value of 0.048, so 0.048 < 0.05, thus it can be stated that Organizational Commitment has a significant effect on Employee Performance through Organizational Citizenship Behavior as an intervening variable for employees of PT Masaji Tatanan Kontainer Indonesia.

Performance is basically something that employees determine how much they contribute to the company in the form of production results and services provided. Basically, performance greatly influences the quality of a company, where performance determines the level of success of the running of a company from year to year which is produced by human resources who own the company according to predetermined work standards (Hasibuan & Silvya, 2019)

Organizational Commitment states the definition of organizational commitment as a manifestation of the totality of individual loyalty to the organization's identity. Organizational

commitment from employees is a force that is believed to bind someone to be willing to take actions that are relevant to one or more targets (Adhan et al., 2020)
Organizational Citizenship Behavior (OCB) is the positive behavior of organizational members. Positive behavior is reflected in the form of willingness to work and contribute to the organization (Jufrizen et al., 2020)

**CONCLUSION**

Based on the results of the research and discussion previously presented, the following conclusions can be drawn: The work environment has a significant effect on employee performance for employees of PT Masaji Tatanan Kontainer Indonesia. Organizational Commitment has a significant effect on Employee Performance for employees of PT Masaji Tatanan Kontainer Indonesia. The work environment has a significant effect on Organizational Citizenship Behavior of PT Masaji Tatanan Kontainer Indonesia employees. Organizational Commitment has a significant effect on Organizational Citizenship Behavior among PT Masaji Tatanan Kontainer Indonesia employees. Organizational Citizenship Behavior has a significant effect on Employee Performance of PT Masaji Tatanan Kontainer Indonesia employees. The work environment has a significant effect on employee performance through Organizational Citizenship Behavior as an intervening variable for employees of PT Masaji Tatanan Kontainer Indonesia. Organizational Commitment has a significant effect on Employee Performance through Organizational Citizenship Behavior as an intervening variable for employees of PT Masaji Tatanan Kontainer Indonesia.

**IMPLICATIONS**

In this research, the factors used to examine Employee Performance (OCB) only use Work Environment, Organizational Citizenship Behavior and Organizational Citizenship Behavior, while there are still many factors that influence Employee Performance (OCB). There is limited time in distributing and filling out this research questionnaire due to the busyness of employees. There are still inconsistent questionnaire answers according to researchers' observations, because respondents tend to be less careful about the statements in the questionnaire so that the questionnaire answers are inconsistent.

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**038-078**

# PEOPLE MANAGEMENT IN HOSTILE ENVIRONMENTS

By Federica Russo

## ABSTRACT

The energy industry plays a pivotal role in powering economies and supporting global infrastructure, making it a sector of strategic importance. However, the operations of energy companies are frequently situated in geographically and politically challenging environments that are characterized by a myriad of hostile conditions. Hostile Environments (HEs) are defined as those contexts characterized by the presence of unstable and violent conditions, such as civil wars, violence, crime, terrorism, insurrections, climate disasters. This definition is further expanded to include the lack of infrastructures, health and family support services. Within this context, the effective management of people becomes not only a critical priority but also a complex and multifaceted challenge. This research project aspires to embark on a comprehensive analysis, delving deep into the intricate realm of people management practices within the energy sector operating amidst such hostile environments, by focusing on understanding how environmental complexity affects global mobility within the oil & energy industry and what is the pivotal role of IHRM departments in managing expatriates working in HEs.

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**089-079**

# THE ROLE OF LOVE OF MONEY IN MEDIATING THE INFLUENCE OF FINANCIAL LITERACY AND PARENTAL INCOME ON FINANCIAL MANAGEMENT BEHAVIOR IN GENERATION Z IN THE CITY OF MEDAN

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## ABSTRACT

This study aims to determine how the The Role of Love of Money in Mediating the Influence of Financial Literacy and Parental Income on Financial Management Behavior in Generation Z in the City of Medan**.** The method used in this research is to use an associative and quantitative approach. The population in this study is all Generation Z in Medan City and the sample is 100 people. The research instrument was in the form of a test used as a data collection tool. The data collection tool uses a questionnaire. In this research, the data analysis technique used is quantitative data analysis and uses the Statistical Path Analysis Method, namely the Partial Least Square Structural Equation Model (PLSSEM).

Keywords: Financial Literacy, Parental Income, Financial Management Behavior, Love of Money

## 1. INTRODUCTION

Generation Z, the group of people born between 1995 and 2010, is more conversant with modern technology and the internet than their predecessors. Millennials spend an average of 6 to 7 hours a week on social media, while 44 percent of Generation Z check social media at least once an hour, according to data from “socialmediaweek.org” social media activity on platforms like Facebook, Twitter, Instagram and YouTube is the preferred method of gaining attention among members of Generation Z.

Z generation is a group of generations that is important for a country, this group of generations has the same age group that experienced important events in the same time period. A generation that has financial abilities and skills will also support the progress and prosperity of a nation. Generation Z are people born in 1995 – 2010, with the characteristics of being fluent in technology, interacting with social media, being expressive and tending to be tolerant and multitasking. With existing technological developments accompanied by the existing characteristics of Generation Z, it is very possible for Generation Z to have a consumerist attitude and a need for Financial Literacy. Generation Z has access to information and various offers that are very easy to find, making Generation Z have many choices in their lives.

Financial Management Behavior is a person's ability to manage, namely planning, budgeting, auditing, controlling, searching and storing daily financial funds. The emergence of Financial Management Behavior is the impact of a person's great desire to fulfill their life needs in accordance with the level of income they earn (Gunawan et al., 2022). Financial Management Behavior is how a household or individual manages financial resources which includes planning, budgeting, savings, investment and insurance (Siregar & Simatupang, 2022).

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According to (Koto, 2022) The factors that influence Financial Management Behavior are Locus of control, financial knowledge, and income. According to (Gunawan & Nasution, 2022) that the Financial Management Behavior indicators are paying bills on time, making an expenditure budget, recording daily/monthly/etc. income and expenses, preparing unexpected funds, saving regularly, comparing prices between shops or supermarkets before deciding to buy. Implementing a financial behavior management process is not easy to implement in everyday life, because you have to follow several systematic steps. Therefore, now that we have learned the basics of financial management, we know that we have to start by reflecting on things before we can act. This results in careful and responsible financial behavior (Negara et al., 2022).

Love of Money is a measure of a person's subjective feelings about and towards money. A person's love of money (the Love of Money) is often connoted negatively and is considered taboo in certain circles of society(Wulandari & Hakim, 2015). Love of money can also be understood as the extent to which someone loves money, how they view the importance of money in their life. Attitudes towards money are learned through a socialization process that is formed in childhood and maintained into adulthood. (Husnurrosyidah, 2019).

According to (Rudy et al., 2020) There are 4 factors that influence Love Of Money, namely wealth, motivator, success, and importance. According to (Tanra et al., 2021) Love of Money indicators are motivator, success, importance and wealth. Managing finances must be based on an understanding of finances or what is called financial literacy. Financial Literacy is an individual's ability to make judgments based on information and make effective decisions related to the use and management of finances. They also add that the person also has an attitude that facilitates the effective and responsible management of financial affairs (Putri & Siregar, 2022). Financial Literacy is how well a person understands the main concepts of finance, as well as the ability and confidence to manage personal finances through making appropriate short-term decisions and sound long-term financial planning. Financial literacy has two dimensions, namely understanding and application. Understanding means knowledge about personal financial management and financial education, while the application of financial management is its use for personal financial purposes (Felantika, 2022).

According to (Chairiah & Siregar, 2022) Factors that influence Financial Literacy, namely age, social class, gender, income, occupation, education and religion. According to (Gunawan et al., 2020) Financial Literacy indicators, namely general knowledge of financial management, savings and loan management, insurance management, investment management. Generation Z generally gets their pocket money from their parents' income. The role of parents in finance is to provide information and knowledge in understanding how to manage and make the right decisions regarding finances. Therefore, Parental Income also influences children's Financial Management Behavior. Differences in Parental Income levels will have an impact on the emergence of differences in understanding and perception, resulting in different behavior in managing finances (Khairani & Alfarisi, 2019). Parental Income is all income received by a person whether it comes from direct involvement in the production process or not, which can be measured in money and is used to meet the collective and individual needs of a family in one month. (Purwaningsih et al., 2017).

## 2. METHODS

### Types of research

This type of research is survey research, where this research takes from one population. This research uses an explanatory approach, with the aim of explaining the causal

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relationship between the research variables and the testing hypothesis. This research uses an associative and quantitative approach. Associative aims to analyze the problem of the relationship between one variable and other variables. Then the data is collected in quantitative form (Juliandi et al., 2015). The research method used in this research is a quantitative method. According to (Sugiyono, 2019) Quantitative methods can be defined as research methods that are based on positive philosophy, used for researchers of certain populations or samples, collecting data and through research instruments, quantitative or statistical data analysis with the aim of testing predetermined hypotheses.

**Population and Sample**

Population is a generalized area consisting of objects/subjects that have certain quantities and characteristics that are determined by the researcher to be studied and then drawn conclusions. (Sugiyono, 2019). Penelitian menetapkan populasi dalam penelitian ini adalah Generasi Z di Kota Medan.

According to (Sugiyono, 2019) The sample is part of the number and characteristics of the population. This research uses a population whose number cannot be ascertained (non probability sampling), because the number of Generation Z in Medan City is uncertain. The sample in this research was taken from Generation Z in Medan City. This means that the sample size is determined by the researcher based on the researcher's abilities and suitability to the researcher's needs or can be called Quota sampling. So the researchers set the sample size in this study at 100 people.

**Data collection technique**

**Data analysis technique**

This data will be analyzed using a quantitative approach using statistical analysis, namely partial least squares – structural equestion model (PLSSEM) which aims to carry out path analysis with latent variables. The purpose of using (Partial Least Square) PLS is to make predictions. PLS is a powerful analysis method because it is not based on many assumptions and the data does not have to have a multivariate normal distribution (indicators with categorical, ordinal, interval and ratio scales can be used in the same model). Structural model testing in PLS is carried out with the help of Smart PLS software ver. 3 for Windows.

## 3. RESULTS AND DISCUSSION

**Measurement Model Analysis (Outer Model)**

The measurement model analysis (outer model) aims to evaluate the construct variables studied, the validity (accuracy) and reliability of a variable.

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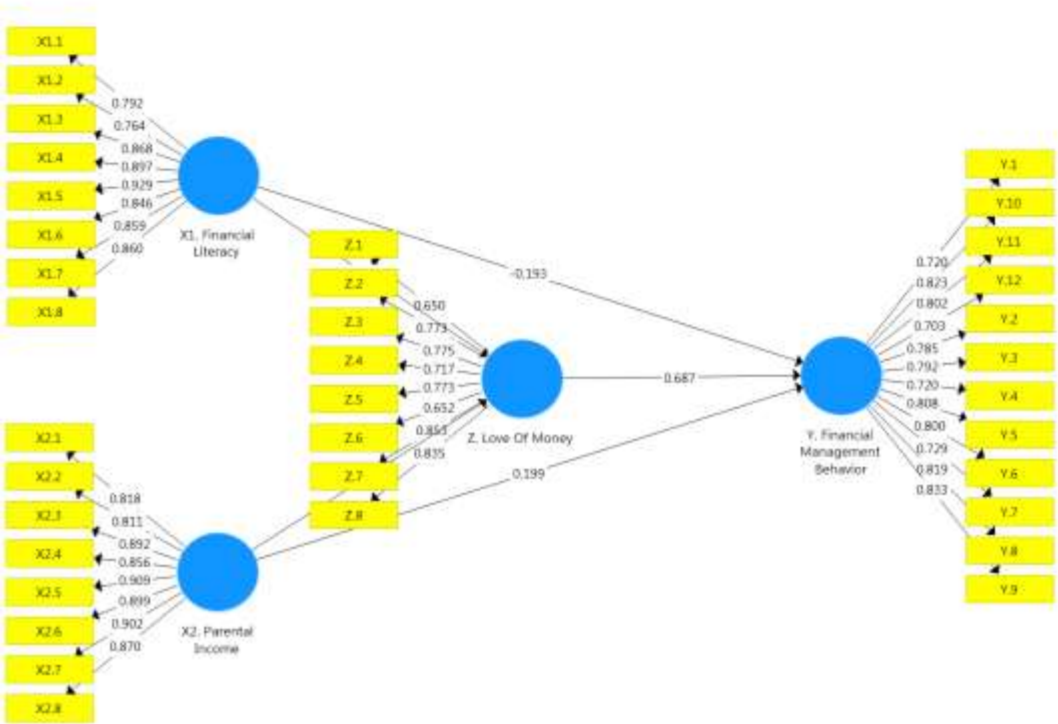


**Figure 3.1**
**PLS Algorithm**

**Construk Reability and Validity**

Internal consistency analysis is a form of reliability used to assess the consistency of results across items on the same test. Internal consistency testing uses composite reliability values with the criteria that a variable is said to be reliable if it has a composite reliability value > 0,600 (Hair et al., 2017).

**Table 3.1**
**Construk Reability and Validity**

| | Cronbach's Alpha | rho_A | Reliabilitas Komposit | Rata-rata Varians Diekstrak (AVE) |
|---|---|---|---|---|
| X1. Financial Literacy | 0,946 | 0,948 | 0,955 | 0,728 |
| X2. Parental Income_ | 0,954 | 0,959 | 0,961 | 0,758 |
| Y. Financial Management Behavior | 0,941 | 0,946 | 0,949 | 0,607 |
| Z. Love Of Money_ | 0,892 | 0,897 | 0,914 | 0,573 |

Based on the internal consistency analysis data in the table above, the results show that all variables have a composite reliability value of more than 0.600. So that the results of each variable can be declared reliable.

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**Convergent Validity**

Convergent validity is used to see the extent to which a measurement correlates positively with alternative measures of the same construct. To see whether an indicator of a construct variable is valid or not, look at the outer loading value. If the outer loading value is greater than (0.4) then an indicator is valid (Hair et al., 2017).

Based on the table above, it can be seen that the outer loading value for the variables Financial Management Behavior, Love Of Money, Financial Literacy, and Parental Income is greater than 0.4, so all the indicators for the variables Financial Management Behavior, Love Of Money, Financial Literacy, and Parental Income is declared valid.

**Discriminant Validity**

Discriminant validity aims to assess whether an indicator of a construct variable is valid or not, namely by looking at the Heterotrait - Monotrait Ratio of Correlation (HTMT) value < 0.90, then the variable has good discriminant validity (valid). (Hair et al., 2017).

**Table 3.2**
**Discriminant Validity**

| | X1. Financial Literacy | X2. Parental Income_ | Y. Financial Management Behavior | Z. Love Of Money_ |
|---|---|---|---|---|
| **X1. Financial Literacy** | | | | |
| **X2. Parental Income_** | 0,419 | | | |
| **Y. Financial Management Behavior** | 0,293 | 0,415 | | |
| **Z. Love Of Money_** | 0,651 | 0,451 | 0,691 | |

And the results of the table above show that all variables have a Heterotrait - Monotrait Ratio of Correlation (HTMT) < 0.90, so the variables have good discriminant validity (valid), so it can be stated that each variable is valid.

**Testing the Significance of Structural Model Path Coefficients**

In this test there are two stages, namely testing the direct influence hypothesis and testing the indirect influence hypothesis. The hypothesis testing path coefficients are in the image below:

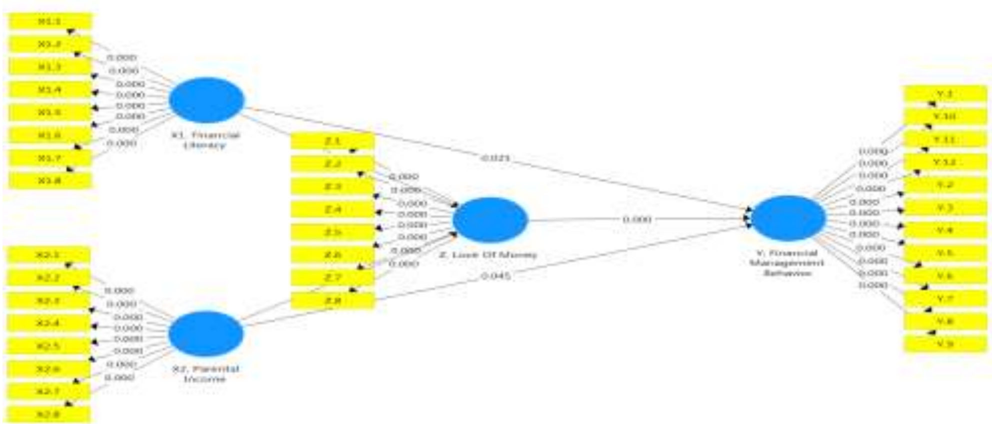

**Figure 3.2**
**PLS Bootstrapping**

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**1. Direct Effect Testing**

**Table 3.3**
**Direct Influence Hypothesis**

| | Sampel Asli (O) | Rata-rata Sampel (M) | Standar Deviasi (STDEV) | T Statistik (O/STDEV) | P Values |
|---|---|---|---|---|---|
| X1. Financial Literacy -> Y. Financial Management Behavior | -0,193 | -0,190 | 0,083 | 2,314 | 0,021 |
| X1. Financial Literacy -> Z. Love Of Money | 0,514 | 0,519 | 0,077 | 6,677 | 0,000 |
| X2. Parental Income_ -> Y. Financial Management Behavior | 0,199 | 0,196 | 0,099 | 2,014 | 0,045 |
| X2. Parental Income_ -> Z. Love Of Money | 0,213 | 0,213 | 0,093 | 2,303 | 0,022 |
| Z. Love Of Money_ -> Y. Financial Management Behavior | 0,687 | 0,702 | 0,105 | 6,553 | 0,000 |

Based on the table above, it can be obtained:

1. The influence of the Financial Literacy variable (X1) on Financial 74 Management Behavior (Y) has a P-Values value of 0.021 < 0.05, so it can be stated that Financial Literacy (X1) has a significant effect on Financial Management Behavior (Y).
2. The influence of the Financial Literacy variable (X1) on Love of Money (Z) has a P-Values value of 0.000 < 0.05, so it can be stated that Financial Literacy (X1) has a significant influence on Love of Money (Z).
3. The influence of the Parental Income variable (X2) on Financial Management Behavior (Y) has a P-Values value of 0.045 < 0.05, so it can be stated that Parental Income (X2) has a significant effect on Financial Management Behavior (Y)
4. The influence of the variable Parental Income (X2) on Love Of Money (Z) has a P-Values value of 0.022 < 0.05, so it can be stated that Parental Income (X2) has a significant effect on Love Of Money (Z).
5. The influence of the Love Of Money (Z) variable on Financial Management Behavior (Y) has a P-Values value of 0.000 < 0.05, so it can be stated that Love Of Money (Z) has a significant effect on Financial Management Behavior (Y).

**Testing the Indirect Effect Hypothesis**

**Table 3.4**
**Testing the Indirect Effect Hypothesis**

| | Sampel Asli (O) | Rata-rata Sampel (M) | Standar Deviasi (STDEV) | T Statistik (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| X1. Financial Literacy -> Z. Love Of Money_ -> Y. Financial Management Behavior | 0,353 | 0,363 | 0,073 | 4,818 | 0,000 |
| X2. Parental Income_ -> Z. Love Of Money_ -> Y. Financial Management Behavior | 0,147 | 0,150 | 0,071 | 2,070 | 0,039 |

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Based on the table above, it can be obtained:

1. The P Values of the indirect influence between the Financial Literacy (X1) variable on Financial Management Behavior (Y) as the Intervening Love Of Money (Z) variable is 0.000 < 0.05, thus it can be stated that Love Of Money (Z) Intervening the influence of Financial Literacy (X1) on Financial Management Behavior (Y).
2. The P Values of the indirect influence of the Parental Income (X2) variable on Financial Management Behavior (Y) as the Intervening variable Love Of Money (Z) is 0.039 < 0.05, thus it can be stated that Love Of Money (Z) is an intervening influence between Parental Income (X2) on Financial Management Behavior (Y).

**Koefisien Determinasi (*R Square)***

The Coefficient of Determination (R Square) aims to evaluate the accuracy of predictions of a variable. In other words, to evaluate how variations in the value of the dependent variable are influenced by variations in the value of the independent variable in a path model (Hair et al., 2017)

1. An R Square value of 0.75 indicates a strong PLS model.
2. An R Square of 0.50 indicates a moderate PLS model.
3. An R Square value of 0.25 indicates a weak PLS model (Ghozali & Latan, 2019)

**Tabel 3.5 Koefisien Determinasi**

| | R Square | Adjusted R Square |
|---|---|---|
| Y. Financial Management Behavior | 0,473 | 0,457 |
| Z. Love Of Money | 0,398 | 0,385 |

In the table above, the results show that the influence of Financial Literacy (X1) and Parental Income (X2) on Financial Management Behavior (Y) is 0.473, meaning the magnitude of the influence is 47.3%, this means it shows a moderate PLS.

## 4. DISCUSSION

### 1. The Influence of Financial Literacy on Financial Management Behavior

The results of this research state that there is a significant influence of Financial Literacy (X1) on Financial Management Behavior (Y) in Generation Z in Medan City. Financial literacy cannot be separated from a person's life because financial literacy is used by the individual to make personal financial decisions. The reality is that currently, many countries whose population has a poor level of financial knowledge and individuals who tend to be careless in using and spending the money they have. This fact has encouraged the development of behavioral financial theory, which is an application of psychology in the discipline of finance. (Putri & Tasman, 2019).

Empirical evidence of low financial literacy also occurs among Generation Z, that the low financial literacy of Generation Z occurs due to a lack of personal finance education at universities. Furthermore, the level of financial literacy possessed by Generation Z is still categorized as low. However, this research does not correlate financial literacy with Generation Z's financial behavior, which is thought to have a correlation with decision making (Laily, 2016). The results of this research are in line with research conducted by

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(Siregar et al., 2023), (Chairiah & Siregar, 2022) and (Yushita, 2017) which states that Financial Literacy has a positive and significant effect on Financial Management Behavior.

**2. The Influence of Parental Income on Financial Management Behavior**

The results of this research state that Parental Income (X2) has a significant effect on Financial Management Behavior (Y) in Generation Z in Medan City. Parental Income describes the level of regular income that parents receive every month which comes from salary, wages, or income from personal business. Differences in parents' income levels will have an impact on differences in understanding and perception, thereby forming different financial management behaviors. If parents' income is high, they are better able to provide pocket money and bills to their children (Felantika, 2022) The results of the research conducted are in line with research by (Herdjiono & Damanik, 2016), (Mahgfiroh et al., 2020) dan (Santiko & Dewi, 2021) which states that Parental Income has a positive and significant effect on Financial Management Behavior.

**3. The Influence of Financial Literacy on the Love of Money**

The results of this research state that Financial Literacy (X1) has a significant influence on Love of Money (Z). Financial Literacy is not limited to understanding knowledge, skills and confidence in financial institutions, products and services, but community attitudes and behavior can have an influence in increasing financial literacy which can then encourage the realization of community welfare. (Chairiah & Siregar, 2022). When someone can control themselves from within to use money only as needed or use their money according to their needs, it is likely that someone will also carry out their financial management behavior well. Money is so close to Generation Z that it often occurs in everyday conversations.

Love Of Money measures how much a person's love of money will later influence his ethical perception. Each person's love for money will be different depending on their needs (Diana & Aisyah, 2017). The results of the research conducted are in line with research by (Chairiah & Siregar, 2022), (Rini Prihastuty & Rahayuningsih, 2018), (Alfitra et al., 2023) which states that Financial Literacy has a positive and significant effect on Love Of Money.

**4. The Influence of Parental Income on Love of Money**

The results of this research state that Parental Income (X2) has a significant effect on Love of Money (Z). Parental income is income or compensation paid by offices, companies or businesses carried out from activities 82 such as investments, rental income, etc. in the form of money or goods. The role of parents is to help children provide information and knowledge in understanding how to manage and make the right decisions regarding finances. With the income earned by parents for the family's living needs (Nusa & Dewi, 2022).

Love Of Money teaches us about our love for the money we have. That the level of love of money has a very good impact on personal financial management. Love Of Money is defined as a greedy desire for money that is different from personal needs (Prasetyo & Lestari, 2022). Adapun hasil dari penelitian yag dilakukan sejalan dengan penelitian oleh (Nusa & Dewi, 2022), (Cahyani & Rochmawati, 2021), (Icih & Kurniawan, 2020), yang menyatakan bahwa Parental Income berpengaruh positif dan signifikan terhadap Love Of Money.

**5. The Influence of Love of Money on Financial Management Behavior**

The results of this research state that Love of Money (Z) has a significant effect on Financial Management Behavior (Y). Love of Money is a person's behavior towards money and a person's high desires and aspirations for money often think that money is considered a very important thing, they also think that money can bring happiness because the money can motivate them to work harder. , apart from that, because money makes them feel respected in a community, and is a benchmark for the success they achieve (Icih & Kurniawan, 2020)

A person's high love of money influences Financial Management Behavior, namely being able to manage money according to their needs by motivating themselves to become rich. A person who is able to make decisions in managing his finances will not experience difficulties in the future and will show healthy behavior so that he is able to determine the priority scale of what his needs and desires are (Pulungan, 2017). The results of the research carried out are in line with research by (Putri & Tasman, 2019), (Pulungan & Febriaty, 2018), (Husnurrosyidah, 2019) yang states that Love Of Money has a positive and significant effect on Financial Management Behavior.

**6. The Influence of Financial Literacy on Financial Management Behavior with Love of Money**

The results of this research state that Love of Money (Z) intervenes in the influence of Financial Literacy (X1) on Financial Management Behavior (Y). Financial Literacy is defined as knowledge and understanding of financial concepts and risks, ability, motivation and confidence in applying some organized knowledge and understanding in making effective decisions in a financial context. In living life, every individual wants a more prosperous life, by managing their expenses and income in such a way as to produce the desired wealth. Individuals who are categorized as having a good Love of Money trait are believed to be able to manage their finances well too. If someone has the desire to consume a good/service, that person can control themselves to consume the good/service without excessively, but only based on their needs. Financial Management Behavior can be significantly influenced by Financial Literacy through Love of Money. Because both paths are equally significant, someone with good financial literacy will tend to have wiser financial management behavior.

**7. The Influence of Parental Income on Financial Management Behavior With Love Of Money**

The results of this research can be stated that Love Of Money (Z) Intervening influences Parental Income (X2) on Financial Management Behavior (Y). From the results above, it can be concluded that low or high parental income can influence Generation Z in acting on their finances even though they are accompanied by good or bad self-control. This is because the wise Generation Z may not necessarily be able to manage the finances obtained from their parents' income. Parental Income is the level of income obtained by the respondent's parents per month, whether from salary, wages or income from business results.

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Measured income is measured based on income from all sources (Khairani & Alfarisi, 2019). Financial Management Behavior is a science that studies how humans respond and react to existing information in an effort to make decisions that can optimize the level of return by paying attention to the risks inherent in it (attitude and action elements are determining factors in investing) (Wahyuni et al., 2023). Money is useful for studying human behavior through their attitudes. This attitude is manifested in the form of love for money or Love of Money. Love Of Money measures how far a person's love of money will influence their ethical perception (Ayem & Leni, 2020). Financial Management Behavior can be significantly influenced by Parental Income through Love of Money. Where the higher the Financial Management Behavior, the better the Love of Money obtained. And the income earned by parents is guaranteed to be good in managing Generation Z's finances so that they don't waste money.

## 5. CONCLUSION

Based on the results of the research and discussion previously stated, the following conclusions can be drawn :

1. Financial Literacy has a significant effect on Financial Management Behavior in Generation Z in Medan City.
2. Parental Income has a significant effect on Financial Management Behavior in Generation Z in Medan City.
3. Financial Literacy has a significant effect on Love of Money in Generation Z in Medan City.
4. Parental Income has a significant effect on Love of Money in Generation Z in Medan City.
5. Love of Money has a significant effect on Financial Management Behavior in Generation Z in Medan City.
6. Financial Literacy has a significant effect on Financial Management Behavior with Love of Money as an Intervening variable in Generation Z in Medan City.
7. Parental Income has a significant effect on Financial Management Behavior with Love of Money as an Intervening variable in Generation Z in Medan City.

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**104-092**

# ORGANIZATIONAL COMMITMENT ON THE INFLUENCE OF WORK ENVIRONMENT AND JOB STRESS ON EMPLOYEE PERFORMANCE

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## ABSTRACT

The work environment has a direct influence on employees where the work environment can improve employee performance. Stress is a common aspect of the job experience that is often expressed as job dissatisfaction. Employee performance is an illustration of the level of achievement of the implementation of an activity program or policy in realizing the goals, objectives, vision and mission as outlined through the strategic planning of an organization. Organizational commitment has a positive influence on employee performance in accordance with the previous. The purpose of this study was to determine and analyze the effect of the work environment, work stress, organizational commitment on employee performance at the Medan City Transportation Agency. The method used in this research is to use associative and quantitative methods. The number of samples is 57 people using the Slovin formula. Data collection techniques through questionnaires (questionnaire). Analysis of the research data is using statistical analysis, namely the partial least squares – structural inquiry model (PLSSEM). The results of this study are work environment and work stress have a direct effect on employee performance and organizational commitment, work environment and work stress have a direct effect on employee performance which is mediated by organizational commitment.

Keywords: Organizational Commitment, Work Environment, Work Stress, Employee Performance

## INTRODUCTION

Empowering Human Resources is an important thing to do to improve employees' abilities. In this regard, employees are the most important resource that must be maintained within a company agency. Obligations for a company agency to manage human resources for the development and progress of a company/agency. Apart from that, the work environment in an organization is also an important thing for management to pay attention to, even though the work environment does not carry out the production process in an organization, this factor is important and has a big influence, but until now many people have not paid attention to this factor (Darmawati et al., 2022). The work environment influences employee emotions. If an employee is happy with the work environment in which he works, then the employee will feel at home working, carrying out all his activities so that working time is used effectively (Fahmi, 2016). Working in a safe and comfortable physical work environment will support the work carried out by employees (Badayai, 2012). A pleasant work environment for employees through harmonious relationships with employees, colleagues and subordinates, and supported by adequate facilities and infrastructure in the workplace will have a positive impact on employees, so that employee performance can increase (Rahmawanti, 2014).

Work stress is a condition where a person experiences tension which creates a physical and psychological imbalance, which can affect the emotions, thought processes and conditions of each employee. Stress is a common aspect of the work experience that is often expressed as job dissatisfaction, but is also expressed in strong affective states and job stress also affects the work environment. According to (Asih et al., 2018) work stress is a condition of human interaction with their work in the form of a condition of tension which creates a physical and psychological imbalance, which affects the emotions, thought processes and condition of an employee. The causes of work stress that often occur are due to excessive workload, high pressure from the company, consistently not meeting targets, lack of concentration in carrying out work, which will impact health problems, headaches and nausea, which will trigger job dissatisfaction. (Beloor et.al., 2017). High stress levels will have an impact on the performance of an employee. If an employee experiences stress at work, of course it will reduce his performance. Each employee has been given a job in accordance with their respective proportions and responsibilities. An employee must be able to manage stress levels well, it is intended that every work done can be completed properly and in accordance with the predetermined time limit. Good time management at work can certainly reduce stress levels for an employee. Working well, honest, trustworthy, responsible and sincere, it will reduce stress levels in an employee's work.

Employee performance is a description of the level of achievement in implementing an activity program or policy in realizing the goals, objectives, vision and mission outlined through an organization's strategic planning. Performance is the work result that can be achieved by a person or group of people in an organization, in accordance with their respective authority and responsibilities in order to achieve the goals of the organization concerned legally, without violating the law and in accordance with norms and ethics. Increasing employee performance will bring progress for the company to be able to survive in an unstable competitive business environment. Employee performance is the result of work produced by an employee which is interpreted to achieve the expected goals(Marayasa & Faradila, 2019). Employee performance is the result of work produced by an employee which is interpreted to achieve the expected goals. According to(Siahaan & Bahri, 2019) Every agency or company must be able to select and determine competent employees to fill vacant positions so that the main duties of that position can be carried out.

Organizational commitment plays an important role in improving employee performance. Organizational commitment has a positive influence on employee performance in accordance with before. In other words, employees with high commitment to the organization will perform better. employees who have a high commitment to the company, namely by having a strong belief and acceptance of the goals and values of the organization, a strong willingness to work for the organization and a strong desire to remain a good employee at the company. Commitment is seen as a value orientation towards an organization that shows individuals really think about and prioritize their work and organization (Mathins and Jackson, 2011). Individuals will try to give all the effort they have in order to help the organization achieve its goals. Employees who truly have a high spirit of commitment will not leave their jobs, because in their souls they have enthusiasm for work which will improve employee performance for the better (Muis et.al., 2018).

The Transportation Service is an element implementing autonomy in the field of transportation which is located below and is responsible to the Governor through the Regional Secretary. The Transportation Service has the main task of carrying out regional government affairs in the field of transportation based on the principles of regional autonomy and assistance duties. The aim of this research isto determine and analyze the influence of the work environment, work stress, organizational commitment on the performance of Medan City Transportation Department employees

## THEORETICAL BASIS

### Employee Performance

Performance is a description of the level of achievement of implementing activities/programs or policies in realizing the goals, objectives, mission and vision of an organization as stated in an organization's strategic planning.(Ainanur et al., 2018). Meanwhile, according to(Andayani & Tirtayasa, 2019)Performance is a work result produced by an employee which is interpreted to achieve the expected goals. Employee performance is the result of the employee's work both in terms of quality and quantity in carrying out and completing the tasks assigned to the employee by his superior or leader based on his role in the company.The performance indicators are: a.) Quality produced, explaining the number of errors, time and accuracy in carrying out tasks, b.) Quantity produced, regarding how many products or services can be produced, c.) Working time, explaining how many absences, tardiness, and length of work the individual employee has served, d.) Collaboration, explaining how the individual helps or hinders the efforts of his fellow workers (Miner, 1990).

### Work environment

The work environment is a condition or place where a person carries out his duties and obligations and can influence employees in carrying out their assigned tasks. According to(Ghoniyah & Masurip, 2011). According to(Wulan, 2019)The environment experiences changes that cause organizations or companies that can adapt to changes in the environment that are organizations or companies that can survive.

According to(Sofyan, 2013)The work environment is everything around an employee that influences him in carrying out and completing the tasks given to him in an area. As for according to(Junaidi, 2021)A work environment that focuses on employees can improve performance, whereas an inadequate work environment can reduce performance and ultimately reduce employee performance in carrying out the tasks given. The work environment indicators are: a.) Work atmosphere. Conditions around employees who are doing work which can influence the implementation of the work itself. This work atmosphere will include the workplace, facilities and work aids, cleanliness, lighting, tranquility as well as working relationships between the people in that place. b.) Relations with co-workers are harmonious and without any mutual intrigue between co-workers. One factor that can influence employees to stay in one organization is the existence of harmonious relationships between co-workers. Harmonious and family relationships are one of the factors that can influence employee performance. c.) Availability of Work Facilities This means that the equipment used to support smooth work is complete/up to date. The availability of complete work facilities, although not new, is one of the supports for the work process (Nitisemito, 2015).

### Job Stress

According to(Asih et al., 2018)Stress is a result of an imbalance between the demands and resources an individual has. The higher the gap occurs, the higher the stress experienced by the individual, and it will be threatening. According to(Johartono & Widuri, 2014)Stress is a dynamic condition in which individuals face opportunities, constraints or demands related to what they really want and whose results are perceived as uncertain but important. So it can be concluded that work stress is a condition where individuals feel anxious or uncomfortable when carrying out their work.Indicators of work stress are as follows: a.) Work load, measured from the respondent's perception regarding the workload that is felt to be excessive. b.) Leadership attitude, measured from the respondent's perception regarding the leadership's unfair attitude in assigning tasks. c.) Working time, measured from the respondent's

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perception of excessive working time. d.) Conflict, measured from respondents' perceptions regarding conflict between employees and leaders. e.) Communication, measured from respondents' perceptions regarding poor communication between employees. f.) Work authority, measured from the respondent's perception of work authority related to responsibility (Hasibuan, 2016).

***Organizational Commitment***

Organizational commitment is a strong desire to become a member of a group. high willingness to work for an organization, a certain belief and acceptance of the organization's values and goals (Luthans, 2008). Organizational commitment is a condition where an employee supports a particular organization and the goals and desire to maintain membership in that organization (Robbins and Judge, 2009).According to(Muis et al., 2018)Organizational commitment in general is a provision that is mutually agreed upon by all personnel in an organization regarding guidelines, implementation and goals to be achieved together in the future. Meanwhile, according to(Ginanjar & Berliana, 2021). Organizational commitment can grow because individuals have an emotional bond with the company which includes moral support and acceptance of the values within the company as well as an inner determination to serve the company. According to(Jufrizen, 2015) From this definition, every member who is committed to the organization will be more able to survive as part of the organization compared to members who do not have a commitment to the organization. These activities are based on moral beliefs and do not prioritize personal gain.

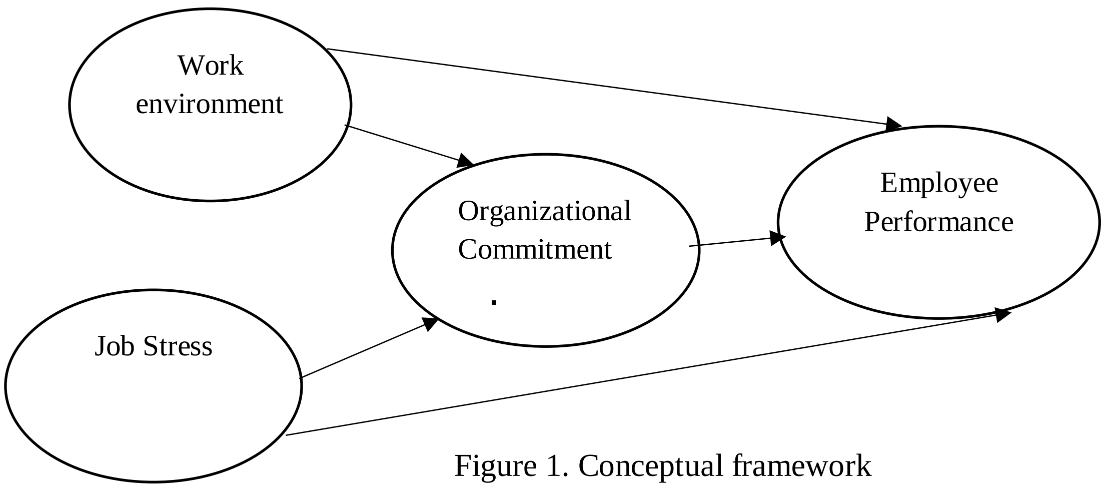


Figure 1. Conceptual framework

The hypotheses in this research are:

1. The work environment has a direct effect on employee performance at the Medan City Transportation Service
2. Work stress has a direct effect on employee performance at the Medan City Transportation Service
3. The work environment has a direct influence on organizational commitment at the Medan City Transportation Department
4. Work stress has a direct effect on organizational commitment at the Medan City Transportation Department
5. Organizational commitment has a direct effect on employee performance at the Medan City Transportation Department
6. The work environment influences employee performance which is mediated by


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organizational commitment at the Medan City Transportation Service

7. Job stress has an effect on employee performance which is mediated by organizational commitment at the Medan City Transportation Service

## RESEARCH METHODS

### Approach

This research uses an associative research approachThe location of this research was carried out at the Medan City Transportation Department. The population in this study was 133 respondents who were employees of the Medan City Transportation Department and the number of samples using slovin was obtained as many as 57 respondents.Data collection was carried out using interview techniques and questionnaires.This data will be analyzed using a quantitative approach using statistical analysis, namely partial least squares – structural equestion model (PLS-SEM3.0) which aims to carry out path analysis with latent variables.

## RESEARCH RESULT

### Outer Model Analysis

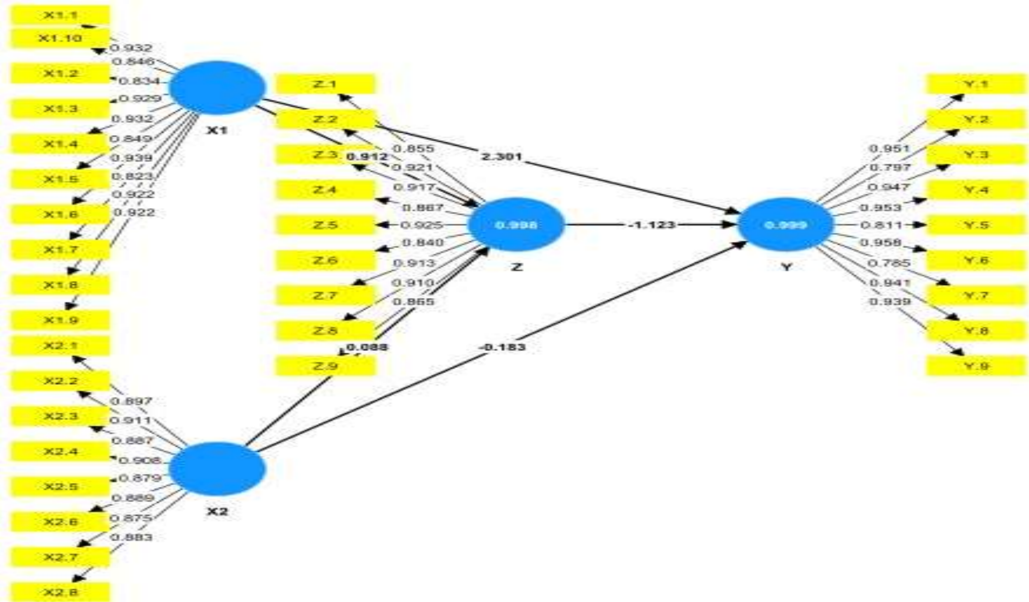


Figure 2. SEM-PLS Structural Research Scheme

Figure 2 shows the correlation values for the work environment variables, work stress, employee performance and organizational commitment, showing that all the values above are above 0.5 so that none of the constructs for these variables need to be eliminated from the model.

### Discriminative Validity

**Table 1. Cross Loading**

| | Work environment | Job Stress | Employee Performance | Organizational Commitment |
|---|---|---|---|---|
| X1.1 | 0.745 | 0.678 | 0.657 | 0.658 |
| X1.2 | 0.742 | 0.747 | 0.645 | 0.684 |
| X1.3 | 0.676 | 0.796 | 0.640 | 0.667 |
| X1.4 | 0.637 | 0.688 | 0.545 | 0.520 |
| X1.5 | 0.739 | 0.874 | 0.619 | 0.647 |

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| | | | | |
|---|---|---|---|---|
| X1.6 | 0.666 | 0.789 | 0.582 | 0.622 |
| X1.7 | 0.704 | 0.851 | 0.549 | 0.691 |
| X1.8 | 0.650 | 0.826 | 0.594 | 0.657 |
| X1.9 | 0.617 | 0.714 | 0.516 | 0.550 |
| X1.10 | 0.746 | 0.806 | 0.576 | 0.640 |
| X2.1 | 0.829 | 0.689 | 0.613 | 0.598 |
| X2.2 | 0.899 | 0.795 | 0.545 | 0.677 |
| X2.3 | 0.799 | 0.633 | 0.579 | 0.610 |
| X2.4 | 0.728 | 0.678 | 0.578 | 0.510 |
| X2.5 | 0.774 | 0.645 | 0.594 | 0.542 |
| X2.6 | 0.796 | 0.707 | 0.547 | 0.545 |
| X2.7 | 0.815 | 0.759 | 0.624 | 0.510 |
| X2.8 | 0.835 | 0.805 | 0.557 | 0.587 |
| Y1 | 0.593 | 0.538 | 0.588 | 0.741 |
| Y2 | 0.570 | 0.647 | 0.587 | 0.768 |
| Y3 | 0.571 | 0.562 | 0.507 | 0.739 |
| Y4 | 0.597 | 0.551 | 0.564 | 0.656 |
| Y5 | 0.551 | 0.580 | 0.685 | 0.811 |
| Y6 | 0.567 | 0.572 | 0.557 | 0.729 |
| Y7 | 0.511 | 0.662 | 0.225 | 0.772 |
| Y8 | 0.598 | 0.597 | 0.512 | 0.635 |
| Y9 | 0.651 | 0.554 | 0.711 | 0.797 |
| Z1 | 0.564 | 0.667 | 0.700 | 0.580 |
| Z2 | 0.587 | 0.518 | 0.689 | 0.502 |
| Z3 | 0.612 | 0.516 | 0.671 | 0.519 |
| Z4 | 0.573 | 0.570 | 0.647 | 0.534 |
| Z5 | 0.696 | 0.690 | 0.773 | 0.507 |
| Z6 | 0.667 | 0.564 | 0.744 | 0.605 |
| Z7 | 0.735 | 0.527 | 0.851 | 0.559 |
| Z8 | 0.672 | 0.558 | 0.824 | 0.587 |
| Z9 | 0.815 | 0.759 | 0.524 | 0.510 |

Source: Processed Data, 2023

Based on the table aboveEach indicator in the research variable has the largest cross loading value on the variable it forms compared to the cross loading value on the other variables. Based on the results obtained, it can be stated that the indicators used in this research have good discriminant validity in compiling their respective variables.

**Table 2.*Average Variance Extracted (AVE)***

| | Cronbach's Alpha | rho_A | Composite Reliability | (AVE) |
|---|---|---|---|---|
| Work environment | 0.872 | 0.873 | 0.875 | 0.799 |
| Job Stress | 0.863 | 0.864 | 0.896 | 0.795 |
| Employee Performance | 0.970 | 0.874 | 0.875 | 0.812 |
| Organizational Commitment | 0.867 | 0.869 | 0.872 | 0.792 |

Source: Processed Data, 2023.

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Based on Table2 it is known that the AVE value of the work environment variables, work stress, employee performance and organizational commitment is > 0.5, so it is stated that each variable has good discriminant validity

***Composite Reliability***

**Table 3.*Composite Reliability***

| | Composite Reliability |
|---|---|
| Work environment | 0.875 |
| Job Stress | 0.896 |
| Employee Performance | 0.875 |
| Organizational Commitment | 0.872 |

Source: Processed Data, 2023.

Based on Table 3, it is known that the composite reliability value for all research variables is > 0.6. These results indicate that each variable has met composite reliability so it can be concluded that all variables have a high level of reliability

***Cronbach's Alpha***

**Table 4.*Cronbach's Alpha***

| | Cronbach's Alpha |
|---|---|
| Work environment | 0.872 |
| Job Stress | 0.863 |
| Employee Performance | 0.970 |
| Organizational Commitment | 0.867 |

Source: Processed Data, 2023.

Based on Table 4 it is known that the value*Cronbach's alpha*each research variable > 0.7. So these results show that each research variable has met the requirements for high reliability.

***Estimated Weight***

**Table 5. Estimated Weight**

| **Variable** | ***P Values*** |
|---|---|
| **Work Environment (X1) -> Organizational Commitment (Z)** | **0.002** |
| **Work Environment (X1) -> Employee Performance (Y)** | **0.022** |
| **Organizational Commitment (Z) -> Employee Performance (Y)** | **0.001** |
| **Job Stress (X2) -> Organizational Commitment (Z)** | **0,000** |
| **Job Stress (X2) -> Employee Performance (Y)** | **0.012** |

Source: Processed Data, 2023.

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In Table5 stated that the largest value of organizational support is 0.019 with a minimum estimation weight of probability value <0.2, so this research variable has a significant formative measurement model estimated value.

**Inner Model Analysis**

Path Coefficient Test

Path coefficient evaluation is used to show how strong the effect or influence of the independent variable is on the dependent variable. Based on Figure 1, the SEM-PLS Structural Research Scheme explains that the path coefficient value of the work environment variable -> employee performance is 0.501, work stress -> employee performance is 0.783, organizational commitment -> employee performance is 0.495, work environment -> organizational commitment is 0.325 and work stress -> organizational commitment of 0.561. Based on this description, it shows that the variables in this model have a positive direction on the influence of the work environment and work stress on employee performance through organizational commitment.

***Goodness of Fit Test***

**Table 6. *R-Square***

| | R Square | r-Square adjust |
|---|---|---|
| Employee Performance | 0.728 | 0.682 |

Source: Processed Data, 2023.

In Table 6. The R-Squareadjust value obtained for the employee performance variable is 0.682 for the employee performance variable. This value interprets that the work environment and work stress variables are able to explain the variance in employee performance through organizational commitment of around 68.2%, the remainder is influenced by other factors not mentioned in this research.

**Hypothesis Test Results**

**Direct Influence**

**Table 7.T-Statistics and P-Values**

| **Variable** | T Statistics (\|O/STDEV\|) | ***P Values*** |
|---|---|---|
| **Work Environment (X1) -> Employee Performance (Y)** | 2,231 | **0.022** |
| **Job Stress (X2) -> Employee Performance (Y)** | 2,875 | **0.012** |
| **Work Environment (X1) -> Organizational Commitment (Z)** | 3,314 | **0.002** |
| **Job Stress (X2) -> Organizational Commitment (Z)** | 6,178 | **0,000** |
| **Organizational Commitment (Z) -> Employee Performance (Y)** | 3,521 | **0.001** |

Source: Processed Data, 2023.

Based on Table 7. The t-statistic value is 2.231 > 2.010 and the P-value is 0.022 < 0.05, indicating that the work environment has a significant positive effect on employee performance, so the first hypothesis is "accepted". Based on Table 7, the t-statistic value is 2.875 > 2.010 and the P-value is 0.012 < 0.05, indicating that work stress has a significant positive effect on employee performance, so the second hypothesis is "accepted". Based on Table 7, the t-statistic value is 3.314 > 2.010 and the P-value is 0.002 < 0.05, indicating that the work environment has a significant positive effect on organizational commitment, so the third hypothesis is "accepted". Based on Table 7, the t-statistic value is 6.178 > 2.010 and the P-value is 0.00 < 0.05, indicating that work stress has a significant positive effect on organizational commitment, so the fourth hypothesis is "accepted". Based on Table 7, the t-statistic value is 3.521 > 2.010 and the P-value is 0.001 < 0.05, indicating that organizational commitment has a direct effect on employee performance, so the fifth hypothesis is "accepted".

**Indirect Influence**

**Table 8.Intervening T-Statistics and P-Values**

| Variable | T Statistics | *P Values* |
|---|---|---|
| Work Environment -> Organizational Commitment -> Employee Performance | 2,832 | **0.002** |
| Job Stress -> Organizational Commitment -> Employee Performance | 3,152 | **0,000** |

Source: Processed Data, 2023.

Based on the table above, the t-value*statistics*amounting to 2,832 > 2.010 and P-value 0.002 < 0.05 indicating that the influence of the work environment through the mediation of organizational commitment has a significant positive effect on employee performance, so the sixth hypothesis is "accepted". Based on Table 8, the t-statistic value is 3,152 < 2.010 and the P-value is 0.000 > 0.05, indicating that the influence of work stress through the mediation of organizational commitment has a significant positive effect on employee performance, so the seventh hypothesis is "accepted".

**Discussion**

**The Relationship between the Work Environment and Employee Performance**

Based on the results of the hypothesis test, the coefficient value for the influence of the work environment on employee performance was obtained with a t-statistic value of 2.231 > 2.010 and a P-value of 0.022 < 0.05, indicating that there is a significant positive influence between the work environment and employee performance.The physical work environment in a company is a work condition to provide a comfortable atmosphere and working situation for employees in achieving the goals desired by a company. According to(Wulan, 2019)The environment experiences changes that cause organizations or companies that can adapt to changes in the environment that are organizations or companies that can survive. Research result(Dede & Hamsinah, 2022)shows that a good work environment has an important role in improving employee performance in the company. Because the work environment is one of the things that can motivate employees to work very well.states that the work environment has a significant effect on employee performance.

**The Relationship between Job Stress and Employee Performance**

Based on the results of the hypothesis test, the coefficient value for the influence of work stress on employee performance was obtained with a t-statistic value of 2.875 > 2.010 and a P-value of 0.012 < 0.05, indicating that there is a significant positive influence between work stress and employee performance. Work stress is a condition where a person experiences tension which creates a physical and psychological imbalance, which affects the emotions, thought processes and condition of each employee. Stress is a common aspect of the work experience that is often expressed as job dissatisfaction, but is also expressed in strong affective states and job stress also affects the work environment. Stress is a result of an imbalance between the demands and resources an individual has. The higher the gap occurs, the higher the stress experienced by the individual, and it will be threatening.

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**The Relationship between Work Environment and Organizational Commitment**

Based on the results of the hypothesis test, the coefficient value for the influence of the work environment on organizational commitment was obtained with a t-statistic value of 3.314 > 2.010 and a P-value of 0.002 < 0.05, indicating that there is a significant positive influence between the work environment and organizational commitment. According to(Handoko & Rambe, 2018)Organizational commitment is an individual's psychological state which is related to strong belief, trust and acceptance of the goals and values of the organization, a strong willingness to work for the organization and the degree to which he or she remains a member of the organization.

**The Relationship between Work Environment and Organizational Commitment**

Based on the results of the hypothesis test, the coefficient value for the influence of work stress on organizational commitment was obtained with a t-statistic value of 6.178 > 2.010 and a P-value of 0.00 < 0.05, indicating that there is a significant positive influence between the work environment and organizational commitment.According to(Nyoman & Sri, 2018) Work stress is something that concerns the interaction between individuals and the environment, namely the interaction between stimulation and response. According to(Apriliana et al., 2021)Organizational commitment influences work stress. Work stress occurs when employees are faced with work tasks and work responsibilities that exceed the limits of their abilities, skills and knowledge so that employees feel stressed. A problem that often occurs in the world of work is how to build commitment to achieve the company's organizational goals. It can be concluded that work stress has a very significant effect on organizational commitment.

**The Relationship between Organizational Commitment and Employee Performance**

Based on the results of the hypothesis test, the coefficient value for the influence of Organizational Commitment on employee performance was obtained with a t-statistic value of 3.521 > 2.010 and a P-value of 0.001 < 0.05, indicating that there is a significant positive influence between organizational commitment on employee performance.Every agency or company must be able to select and determine competent employees to fill vacant positions so that the main duties of that position can be carried out. Organizational commitment plays an important role in improving employee performance. Organizational commitment has a positive influence on employee performance in accordance with before. In other words, employees with high commitment to the organization will perform better.

**The Influence of the Work Environment on Employee Performance through the Mediation of Organizational Commitment**

Based on the results of research that has been conducted, the t-statistic value is 2,832 > 2.010 and the P-value is 0.002 < 0.05, indicating that the influence of the work environment through the mediation of organizational commitment has a significant positive effect on employee performance.According to(Muis et al., 2018)Employee commitment to the organization is a behavioral dimension that can be used to measure and evaluate employee strength in surviving and carrying out their duties and obligations to the organization. There is a positive and significant relationship between the work environment and employee performance. Organizational commitment is significantly related to the work environment and employee performance. Organizational commitment significantly mediates the work environment and employee performance.

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**The Effect of Job Stress on Employee Performance through the Mediation of Organizational Commitment**

Based on the research results, it can be seen that the t-statistic value is 3,152 < 2.010 and the P-value is 0.000 > 0.05, indicating that the influence of work stress through the mediation of organizational commitment has a significant positive effect on employee performance. Work stress is a condition where a person experiences tension which creates a physical and psychological imbalance, which affects the emotions, thought processes and condition of each employee. Stress is a common aspect of the work experience that is often expressed as job dissatisfaction, but is also expressed in strong affective states and job stress also affects the work environment.

## Conclusion

The conclusions from the research carried out are:The work environment has a direct effect on employee performance,work stress has a direct effect on employee performance,lWork environment has a direct effect on organizational commitment,Work stress has a direct effect on organizational commitment,Organizational commitment has a direct effect on employee performance, lWork environment has a direct effect on employee performance, mediated by organizational commitment,Job stress has an effect on employee performance which is mediated by organizational commitment. It is recommended to improve employee performance shouldMedan City Transportation Departmentpaying more attention to and improving the work environment for its employees, such as a quiet and peaceful room, balanced communication between superiors and subordinates and between fellow employees and increasing a good work scope to support activities, there is a division of roles for each employee, so that there is no impression employees are too forced to do something until they have to forget about time, while on the one hand there are employees who have more time to relax, it is hoped that employees will always increase their commitment to their place of work, because regardless of the organizational commitment that employees have, the services they provide towards the community can be further improved, then the performance of Medan City Transportation Service employees should also be improved in serving the community, because transportation is very important in turning the wheels of the community's economy, especially in Medan City.

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**Islamic Finance**

**073-061**

# LEGITIMACY OF SHARIAH FINANCIAL TECHNOLOGY: COVERING THE EXPECTATIONS OF INDONESIAN CONSUMER

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## ABSTRACT

Fulfilling expectations of user or customer are the things that cannot be negotiated in order to be accepted or legitimized as something that is appropriate, whether in terms of social value norms, beliefs or consumer self-worth, especially for a new product or service, including sharia financial technology services. This study aims to propose a new model of shariah financial technology that can be legitimized by the customer-specially-and people of Indonesia generally. Furthermore, the result will contribute to strategy adjustments that can then be implemented by Sharia Financial Technology in the future. This research carried out with a qualitative approach where data collection and analysis techniques use ZMET (Zaltman Metaphor Elicitation Technique). ZMET is a technique that elicits conscious and subconscious thoughts by exploring a person's non-literal or metaphorical expressions. The result show that benefit -which are supported by education, accompaniment, and training, good governance- with transparency as the key factor- and complete features of the App become the most powerful variable predicting the success of shariah financial technology legitimacy in Indonesia.

Keywords: Shariah Financial Technology, Legitimacy, Zaltman Metaphor Elicitation Technique

## INTRODUCTION

*Financial Technology (Fintech) Sharia* as a new player in the financial industry certainly provides good news for the implementation of the Sharia ecosystem in Indonesia, where its presence is expected to be able to encourage integration into a broader and more inclusive Islamic economic sector. However, it is unfortunate that even though Indonesia has huge market potential, the growth and development of *sharia fintech* is still quite low compared to neighboring country *Malaysia (Global Islamic Fintech Report, 2022*). Another fact also supports that based on data collected by the Financial Services Authority (OJK) as of March 2021, *sharia fintech assets* are still very small, namely only 2.5% of their conventional *counterparts*. Although this could be caused by various factors, in the context of new companies, legitimacy is one thing that cannot be ruled out.

The issue of legitimacy is very important to discuss for new companies which are considered to have to be able to adapt to their external environment, especially consumers. Legitimacy, which can basically be defined as perceptions and assumptions about the actions of an entity (organization/institution/company) as desirable, appropriate or proper in a system of social constructs, norms, values, beliefs and definitions of society (Suchman, 1995) is really needed by companies that began to be initiated in order to obtain important resources, especially access to funding sources and consumer trust (Aldrich and Fiol, 1994; Lounsbury and Glynn, 200 2). This is supported by previous literature which reveals that legitimacy is an important property or resource in achieving competitive advantage (Sudabby, 2017).

Focusing on consumers, fulfilling expectations, is something that is non-negotiable, especially so that it can be accepted or legitimized as something that is appropriate, whether in terms of social value norms, beliefs or consumer self-worth. On this basis, Yuan et al, 2019 then explained that empirically legitimacy has been proven to influence consumer intentions to purchase products *(intention to purchase),* so it is not surprising that legitimacy also makes a positive contribution to the ability to survive and grow new companies (Payyete, 2014) . So often, when a company fails to achieve legitimacy, they will end up with slow growth and development or even tend to stagnate and end up in bankruptcy, which of course is not expected to happen to Sharia fintech in Indonesia.

Therefore, it is very important for Sharia *Financial Technology* to reveal the expectations or hopes of the public or consumers in particular, so that in the future the implementation of strategies, whether in the form of products or other services, will be accepted or legitimized by consumers. This research will attempt to contribute to these efforts by analyzing the public's expectations of what Sharia fintech should do in the future so that in the end Sharia fintech is able to survive and grow in the industry.

**Research question**

Thus, this research will answer the research question in the form of "What are the Consumers' Expectations for Sharia Fintech so that it can be accepted (legitimized)?"

**Research purposes**

This research seeks to uncover people's expectations about what Sharia fintech must do to be able to gain legitimacy, thereby contributing to strategy adjustments that can then be implemented by Sharia Financial Technology in the future.

**LITERATURE REVIEW Legitimacy**

Legitimacy has emerged as an important construct in the context of social sciences, one of which is in the domains of management science and business. Defined as a “general perception or assumption that an entity's actions are desirable, appropriate, or in accordance with expectations” within some system of socially constructed norms, values, beliefs and social definitions” (Suchman, 1995). Legitimacy as conveyed and put forward by Suchman is what has recently been called Legitimacy Theory. In the business context, Sudabby (2017) explains that there are at least 3 main definitions used, namely property, process and perception. However, legitimacy as a property and perception has been discussed quite a lot in previous literature.

As a property , legitimacy is assessed as a *resource* that can be used to achieve a company's competitive advantage. Furthermore, legitimacy then clearly provides opportunities for companies, especially those that are just starting out, to obtain funding from external parties, in this case investors. This argument is supported by Suchman (1995) calling legitimacy an "operational resource" of the company. Researchers further describe legitimacy as an "intangible asset" (Gardberg & Fombrun, 2006) that is not owned by the organization, so this asset can be acquired, accumulated, lost and spread to other organizations. As a property, new companies usually use three general events to gain legitimacy, namely (*1) conforming (2) decoupling and (3) performing/learning.*

*Conforming*: Isomorphism or adaptation to suit fit. Isomorphism means making efforts to have the same character, structure and processes of other organizations caused by: institutional pressure or uncertainty in the organizational environment. The essence of this argument is that in order to be legitimate, organizations adopt the characteristics, practices, and forms imposed by regulations, standards, or norms produced by other organizations. In a business context, new companies tend to follow the patterns and behavior of companies that are market leaders and have a strong influence in their industry. However, this method is considered unable to make a company superior in competition or only achieve *competitive parity* because it tends to become a follower and does not differentiate itself from the leader company (Sudabby et al, 2017).

Double standard *decoupling.* Where companies on the one hand follow the patterns desired by the external environment, for example social norms, but at the same time continue to exploit resources that are considered contrary to norms. For example, company management implements a good policy and invites admiration from the public, such as good CSR and is seen as a positive effort by the community, but on the other hand, it turns out that there is a hidden implementation of business strategies behind it, such as exploitation of labor to reduce costs and so on. In practice, these two things of course need to be balanced properly by the company's top management.

*Performing/Learning,* previous literature illustrates that to win competitive advantage, in this case gaining legitimacy, companies must appear different primarily by showing the technical superiority of their innovative practices from their competitors in a competition. This strategy is referred to as pragmatic legitimacy. For example, product design factors play an important role in achieving the legitimacy of electric lamps beyond gas lamp technology (Hargadon and Douglas, 2001).

As a perception, much research on legitimacy agrees that legitimacy “is in the eye of the beholder” (Ashforth & Gibbs, 1990) or “in the soul of the social actor” (Zimmerman & Zeitz, 2002). In this view, legitimacy is understood as a perception or sociocognitive phenomenon. However, it has often been considered a collective, or “general” perception in the sense that the collective agreement is “independent of any particular observer” (Suchman, 1995). However, in contrast to the legitimacy-as-property and legitimacy-as-process perspectives, in legitimacy-as-perception studies, subjects assessing legitimacy are not aggregated into a monolithic group, or “audience”, but are considered as individuals who make their own judgments or adopt the judgments of others.

**Sharia Financial Technology and Legitimacy**

Fintech Lending/ *Peer-to-Peer Lending* / *Online* Loans is a direct lending and borrowing service in rupiah between creditors/lenders (lenders) and debtors/borrowers (loan recipients) based on information technology. Fintech lending is also referred to as TechnologyBased Money Lending and Borrowing Services (OJK, 2021). Stewart and Ju¨rjens (2018) further define *Financial Technology* "as the use of technology platforms and mobile devices to access transaction notifications, bank accounts and credit, as well as debit alerts via push notifications via short message services, applications, or other ways of getting notifications" The term Islamic FinTech or Sharia FinTech, on the other hand, is defined as "FinTech with Sharia principles and Islamic values" (Rahim et al., 2019). Islamic principles or values are basically always associated with the maqashid of Sharia which consists of 5 The basic objectives of the law or Sharia of Allah SWT which include protection of religion *(hifdzul* *addiin)* , protection of reason *(hifdzul al aql),* protection of nasab ( *hifdzul an nasab* ), and protection of property ( *hifdzul al maal* ),

Sharia FinTech has begun to be introduced and operates in Indonesia, which is a country with more than 80% of the population being Muslim and the country with the largest Muslim population in the world, but it is very unfortunate that the growth and development of sharia *fintech* is still quite low when compared to neighboring country *Malaysia. (Global Islamic Fintech Report, 2021* ). Another fact also supports that based on data collected by the Financial Services Authority (OJK) as of March 2021, *sharia fintech assets* are still very small, namely only 2.5% of their conventional *counterparts* . Although this could be caused by various factors, in the context of new companies, legitimacy is one thing that receives important attention.

As a new entrant to the financial industry, fintech certainly has major problems related to acceptance or legitimacy which is clearly needed to obtain important resources for competitive advantage to survive. This need for legitimacy is considered to be more directed towards legitimacy as a property and will be obtained through a process of cognitive evaluation and assessment (perception) by individuals at the micro level, and consumers at the macro level as evaluators. So, as an acceptance, the company will really benefit if it can understand this assessment. In the end, knowing the hopes and expectations of consumers which are the results of evaluating consumer cognition will be very useful for adjusting and determining company strategy in the future.

## RESEARCH METHOD

This project is research carried out using a qualitative approach where data collection and analysis techniques use ZMET *(Zaltman Metaphor Elicitation Technique)* . ZMET is a technique that elicits conscious and subconscious thoughts by exploring a person's non-literal or metaphorical expressions. This subconscious mind is sometimes less able to be explored when only using an interview or other techniques. Dr Gerald Zaltman first developed ZMET from Harvard Business School in the early 1990s, one of which was an article entitled *"Using the Zaltman Elicitation Technique to Understand Brand Images"*which has become the main source for ZMET users today. ZMET is a qualitative data collection and analysis tool that reveals mental models and will produce a consensus map which is then translated into a comprehensive and thorough research result. In using the ZMET method, there are at least ten steps that must be carried out by researchers, including:

1. **Step 1: *Story Telling*** .

   In the storytelling step, participants are asked to describe and tell the meaning of each picture they sent previously or brought to the interview process. From the stories expressed by participants in this step, the researcher wrote down the key words that appeared and were important. Researchers also explore in depth thoughts and feelings that are hidden or outside the participants' awareness. The researcher's interpretation in concluding the statements that emerged from the participants is a very important aspect at this stage.

2. **Step 2: *Missed Image*** .

   Participants were asked to describe pictures they could not find and explain the meaning of the described pictures. Missing images can describe several interesting facts and opinions from participants that were not conveyed in the previous step. This

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is because participants cannot get images that can describe the participants' opinions as a whole. By explaining the imagined images that represent participants' opinions, researchers can dig deeper into things that have not been revealed about a concept.

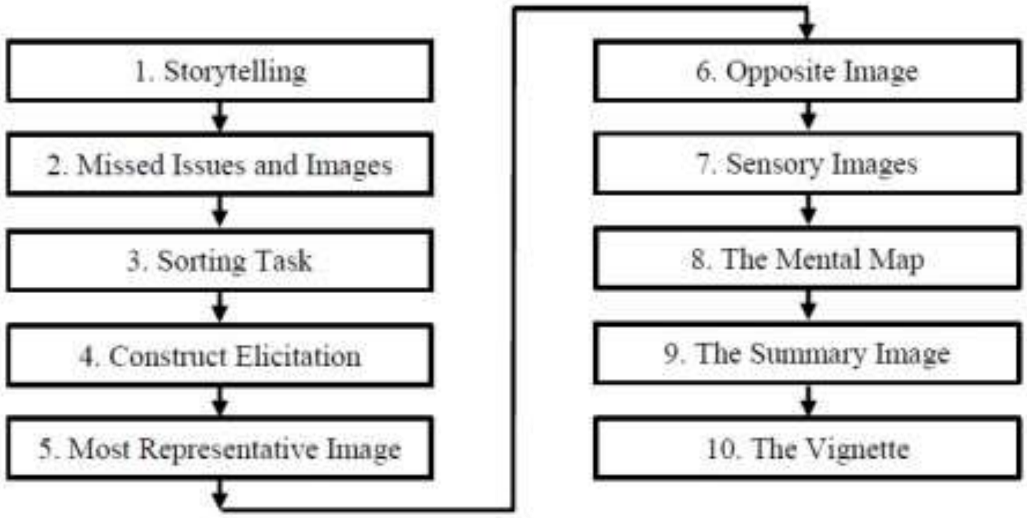


**Figure 1**

**Steps taken in the ZMET method**

3. **Step 3:** ***Sorting Tasks.***

Participants are asked to group the pictures they have brought into several groups that have meaning. Participants are free to determine the number of groups of images they build. In this stage, participants are required to give a name or theme to each group of images that have been arranged. This step is very useful in investigating themes or concepts that are considered relevant by participants which could possibly be used as a reference for construct formation in the next process

**4. Step 4:** ***Construct Elicitation***

Participants engage in a highly structured interview process. Researchers carry out a laddering process to gain an in-depth understanding of the construct abstraction conveyed by participants. The laddering technique is used to reveal constructs and relationships between constructs. The respondent's chosen image is used as a stimulus to identify the construct.

**5. Step 5:** ***The Most Representative Picture***

In this step, participants are asked to describe the image that is considered to best represent their opinion about the topic under study. This step helps researchers investigate the constructs that are considered most important, relevant, or significant for participants.

***6.*** **Step 6:** ***The Opposite Image***

Participants are asked to describe the image they would look for if the participant is asked to reference an image that is considered to depict a situation that

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is inversely proportional to the topic currently being researched. The main function of this step is to confirm the participants' opinions regarding the topic under study

**7. Step 7:** ***Sensory Image***

In the sensory image step, participants are asked to represent the topic being studied using the functions of the five senses. The five sense representations used can be color, sound, aroma, taste and touch. This stage can clarify the constructs that were identified in the previous stage. New constructs can emerge at this stage so that researchers can enrich the data they have for the analysis process.

**8. Step 8:** ***Mental Map***

In the step of preparing a mental map, the researcher helps respondents to write down the constructs that emerged during the interview process. Participants can add other constructs if they feel they are still needed. Based on the constructs found during the interview process, participants were asked to create a framework that describes the relationship between constructs.

**9. Step 9:** ***Summary Image***

Using the pictures they have brought, participants are asked to build a collage (summary of pictures) and tell the relationship between the pictures and relate them to the framework of thinking formed in the previous stage. This process really helps researchers in building a consensus map at the analysis stage.

**10. Step 10:** ***Consensus Map – The Process***

The final goal of the analysis is to build a consensus map derived from the responses of all participants. The final stage of analysis can only be carried out if all participants have been interviewed. The preparation of the consensus map goes through the following process ; codification – determination of major constructs – consensus map. Codifying data is by codifying the overall thoughts and feelings expressed by participants during in-depth interviews. Constructs are grouped into larger construct groups based on the results of the researcher's interpretation of interview recordings, transcripts and understanding during the interview. To interpret the research results, the researcher will listen to the interview recording again. Then, the researcher will interpret the things expressed by the participants and make a comprehensive list of constructs.

The researcher made a list of all constructs that appeared and were mentioned by participants and recorded the number of participants who stated these constructs. Constructs with the same or similar meaning are grouped together to represent a more general construct *(higher order construct).* After the general constructs have been compiled, the researcher identifies relationships between major constructs that describe the participants' overall opinions regarding the topic under study. In building a consensus map, researchers can determine the relationship between major constructs by referring to the results of participants' discussions in interview sessions, descriptions of correlations in the *construct elicitation step,* descriptions of the thinking framework (*mental map),* and also through the results of *summary images* that have been produced in the previous stage.

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**Samples**

The population of this research is all Muslim communities in Indonesia who have the ability to carry out financial transactions. There were 6 samples (informants) whose information was extracted, and the sampling method used in this research was ***purposive sampling*** where there were special criteria, namely:

1. Have experience using Sharia Fintech products.
2. It would be better if you have good financial literacy, in the form of formal education in the field of finance or Sharia economics.

**Reason:**

1. Selecting a sample that has experience using Sharia financial products will add insight into products and services that may have previously been inappropriate and are not expected to happen again in the future, as well as ensuring that the main expectations or expectations regarding Sharia fintech are still met.

**RESULTS AND DISCUSSION**

Previous researchers gave directions to potential informants to collect images that could represent their expectations of Finnacial Technology Syariah. During interviews, the results of story telling from informant 1, an academic who had used Sharia financial products, were as follows:

| No | Picture | Information obtained |
|---|---|---|
| 1 |  | **The jug** symbolizes blessings that must be shared by all in society. So, in ancient times, a jug was a container for drinking water that was placed in front of the house by people, anyone could drink the water, even strangers passing in front of the house, they didn't need permission from the house owner, the water in the jug could be drunk directly. , as long as the container is placed back in its original place. Now, if we explore it more deeply, people used to put jugs in front of their houses, to share the blessings they received from Allah SWT, so that anyone could enjoy the blessings they received from the Creator. So this jug can become one of the fintech symbols, anyone can use it, as long as it complies with the sharia system that has been implemented by DSN. |
| 2 |  | **The Sahabi tree** , symbolizes the shade and financial strength of sharia technology, in facing the exposure to usury which is increasingly endemic in society. So the philosophy of the sahabi tree is that it is a very large and shady tree, which lived hundreds of years ago, and was a resting place for the Prophet Muhammad SAW when trading. This tree protected the prophet from the sun, and this tree is the only tree that can live in the middle of the Jordanian desert. |

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| No | Picture | Information obtained |
|---|---|---|
| 3 |  | **Dinar and Dirham,** explains that there is no usury in sharia financial technology, where the dinar dirham will not change its currency value at any time. So that what has been done and agreed upon, that will be what will be done or carried out, without usury which can mislead or plunge those who agree into a deep abyss. |
| 4 |  | **Image of People Pushing a Cart,,** explains the cooperation carried out between the community and managers, to improve the community's economy. So that the profits and losses obtained can be shared together. |
| 5 |  | **Sun** explained that financial technology will be able to enlighten anyone, without thinking about the socio-economic status of each individual. So anyone can use it according to their needs, so that it can continue to illuminate the lives of many people. |
| 6 |  | **Glasses** explains that sharia financial technology can also help people see opportunities that can help people improve the economy. |
| 7 |  | Water springs explained that the purity of sharia principles in financial technology must be well maintained. If in the future the purity of sharia is disturbed, then everyone will not believe in financial technology, but if it is the opposite, all people in this world will continue to be oriented towards sharia financial technology. |

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| No | Picture | Information obtained |
|---|---|---|
| 8 |  | **The calculator** explains transparency in reporting carried out by financial technology companies, so that the public can directly audit what sharia financial technology companies have done. |
| 9 |  | **A handshake with the word bismillaah** symbolizes an agreement that must be known transparently, and the agreement is based on the Koran and hadith, so that what is done will get the pleasure of Allah SWT. |

At this stage, the information obtained is still very general and tends to be widespread, the researcher also then tries to make efforts to find arguments that may not have been conveyed or because they are limited by numbers so that in the end the image cannot be displayed in step
1, and indeed a picture of "Uterus" is found. " **(Step 2).** When confirmed why he chose this image, the informant revealed that Rahim was considered to be a place where goodness would be born, then he also linked it to the Islamic economic concept that whatever form of business a company based on Islam must be a source of goodness for everyone.
Next, try to dig up **informant 2** from the process ***construct elicitation*** as explained by Zaltman (1994), by selecting any 3 images we asked him to select 2 related images and 1 unrelated image and then explain the reasons. At this stage, researchers discovered new constructs that had not previously emerged, such as **education** and **synergy**. He gave a fairly in-depth explanation, especially about how it is felt that a Sharia fintech is currently still waiting for the ball to provide education about Sharia financial literacy in general and Sharia fintech in particular. Furthermore, in the reality the literacy regarding to Sharia Financial Technology still lower (Gunawan et al, 2021) especially in the middle economic community. We just realize that financial literacy is one of the most important construct to support the halal ecosystem in Indonesia (Mujiatun et al, 2023). "Still waiting for the ball" is a metaphor that is conveyed because according to him, educational efforts are still carried out only by the regulator, in this case Bank Indonesia or the Financial Services Authority. According to him, these efforts are not enough, because it is clear that the education carried out by regulators will not be as comprehensive as that which should be carried out by companies that have detailed services or products. Therefore, Sharia fintech must actively participate in educating the public, either independently or in synergy with various interested parties.

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**"If you can't do it yourself then do it with other institutions, such as universities, the Indonesian Ulema Council or together with regulators, there needs to be synergy." SA, 32 years old**.

According to SA, even though he is a Sharia finance academic , information regarding usage, compliance and other information relating to Sharia fintech products is still very limited, so it is not surprising that when he first accessed Sharia fintech products he had to search for them independently. In the context of winning the hearts of consumers, this should not be done by fintech, if this situation continues to be ignored then no one in the community will look at Sharia fintech. So he concluded.

In order to reconfirm the user's expectations, the researcher then asked him to choose one image that most represented and another image that he felt had the opposite meaning to that image (steps 5 and 6). As a result, another informant (RP) chose the image **of a bridge** as the image that represented his expectations and chose **scissors** as the opposite of that image. According to him, the bridge represents "benefits" which the presence of Sharia Fintech should be able to spread to many people, not only people who have access to it (customers/investors) but also the general public. He also said that the benefits were very broad, namely mentoring MSMEs, distributing scholarships to underprivileged children and so on.

On the opposite side, he stated that scissors symbolize "loss" because they separate something that is already good, "like good cloth, and then cut it. "It's going to be bad," he said. Then, he also related how the condition of conventional fintech recently was considered to be troubling borrowers by doubling the interest they had to pay. He considers this example to be cutting inside the fold, so he hopes that Sharia fintech will not do the same thing.

**"Don't be like cutting in folds, that's bad"**

**RP, 29 years old**

Interesting things were also discovered when researchers asked informants to provide responses regarding ***sensory images.*** Informant 5 with the initials AS (25 years old) revealed that if sharia fintech has a taste, it is **bitter**. He believes that people who access Sharia loans or fintech products must have financial difficulties or, worse, must have difficulties in life. Therefore, those who come to Sharia fintech should be given assistance with ease of service, clarity of information obtained and fast transactions, not too bureaucratic, long-winded and have a deterrent effect on reuse. In this dialogue, he again provided input and hope in the form of **maslahat** having the highest position above anything else.

From a long process starting from step 1 to step 7, finally the researcher was able to conclude the mental map of each informant who had been interviewed. Some people have similarities but often there are also differences that arise. At this stage we can describe a mental map that we obtained from informant 6 with the initials I (26 years):

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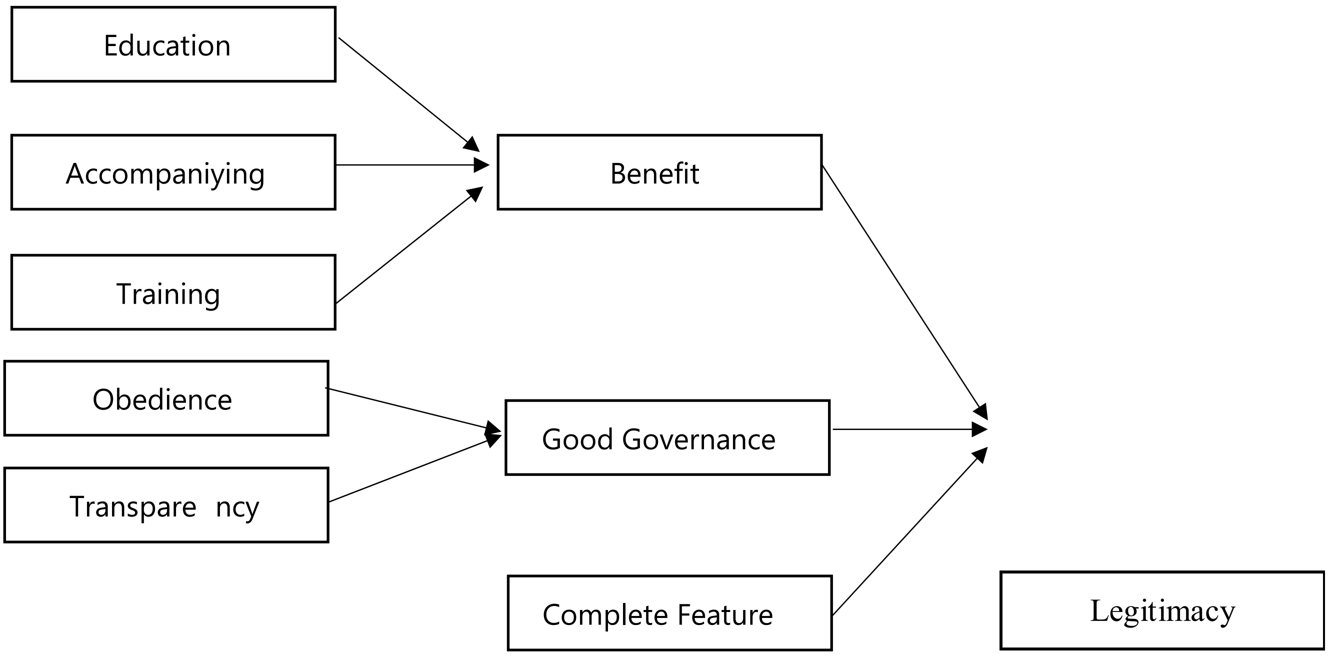


From the mental map above it can be seen that there is a very clear relationship between one construct and another, and this can be achieved and obtained through a long series of stages as mentioned previously. The mental map image illustrates that the informant hopes that Sharia fintech will be able to provide and do 3 different things, namely in the form of benefits, good management and more complete features or services. Furthermore, the benefit in question is being able to provide education about Sharia financial literacy so that in the future users will no longer experience difficulties in accessing it and have a more comprehensive understanding of the applicable regulations. Apart from that, the benefits must also be felt through the assistance provided by fintech to those who obtain capital. This shows that fintech does not only stop at lending, but assisting and training borrowers in an effort to build a business will provide a positive image in the eyes of the community.

On the other hand, we can see that openness and transparency as well as compliance with regulatory rules is something that is expected, this shows that there is still discomfort and distrust regarding the presence of sharia fintech, especially since what Sharia fintech does still seems the same as its conventional counterpart, especially in cases where customers are harmed, such as in the case of teachers in online loans which went viral on social media and television.

Better features are also a consideration for consumers when finally deciding to use Sharia fintech services. It cannot be denied that currently consumers continue to compare the features available in Sharia fintech with the features in Sharia banking applications. Where, if we look in more detail, it turns out that Sharia banking applications better accommodate the needs of today's society.

**Currently, I prefer applications like BSI mobile, because they have lots of features, I can pay for electricity, my tuition and also top up various services. "I haven't found anything as complex as that in a Sharia fintech application."**
**I, 26 years old**

In the final stage, we carried out a list or data collection on the constructs that emerged and then grouped them into high order constructs, this is in line with what Zaltman (1994) said that high order constructs are the result of the constructs that appear the most from the most people and most frequent time. In general, we then put forward 4 main expectations that Sharia fintech must be able to hear as an institution:

1. **Social Impact,** where Sharia fintech is expected to not only focus on profits alone but there are other main things that must be done including activities that have a broad impact and provide benefits not only to customers or users but also to the wider community regardless of religion, ethnicity and race. This will ultimately show the spirit of Islam as a religion that is *rahmatan lil alamin*. Furthermore, this construct social impact- is the crystallization of several constructs that emerged previously which include mentoring, educational training and benefits that cannot be separated in its implementation and implementation in the future. From a strategic perspective, *social impact* is also able to counter bad news or issues that arise, especially those related to fraud that has been rampantly committed by conventional fintech recently.
2. **Compliance,** companies that have Islamic principles certainly have consequences for submitting and complying with Islamic law (maqashid Syariah) through the Koran and Sunnah. However, concretely, compliance can be described in the form of recognition from the regulator, namely by being registered with the financial services authority, obtaining halal certification from the Indonesian Ulema Council, the company is led by human resources who are also Muslims and of course managed by prioritizing the principles of transparency and accountability. Compliance ultimately provides a real form of security and comfort for customers or Sharia fintech users.
3. **Complete features and services,** being aware of the limitations of features and services is also a separate evaluation for Sharia fintech, especially in an all-digital world, diverse products and services will make customers more interested and lead to long-term adoption. As stated by I, currently the advancement of bank application features and services is still far more advanced than Sharia fntech. Customers hope that fintech can answer this and help them in their daily activities. This large construct arises from quite diverse constructs including innovation and convenience where fundamentally Sharia fintech companies must remain sensitive to change and always innovate to provide convenience for customers.

## CONCLUSION

Starting from the fact that Sharia fintech faces low acceptance or legitimacy as evidenced by Indonesia's ranking which is still far below Malaysia, and nationally its assets are still far behind compared to conventional fintech (OJK, 2021 and Global Islamic Fintech Report, 2021), this project seeks to reveal hope and expectations of fintech users so that it can improve in the future. This project is a research that uses a qualitative approach where the data collection and analysis method used is ZMET *(Zaltman Elicitation Metaphor Technique* ). By using information collected from 6 informants who have used Sharia financial products, it was found that there are 3 main customer expectations for Sharia fintech in the future. The expectation in question is that fintech must be able to provide broad *social impact* , have good compliance - described by being registered with the regulator, having Muslim managers - and in the current context fintech must have a variety of product features and services to support consumer needs.

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**Education and Technology**

**016-010**

# ENSURING QUALITY OF LEARNING BY ORGANISING WEBINARS AS AN ALTERNATIVE ASSESSMENT FOR HIGHER EDUCATION STUDENTS DURING THE COVID-19 PANDEMIC PERIOD: AN EXPERIMENT

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## ABSTRACT

The education sector worldwide bore the brunt of the tragedy caused by the Covid-19 pandemic. Many people have labelled the negative impacts as "educational loses" (Hoofman & Secord, 2021; Kuhfeld et al., 2022). The academic performance of students as measured by conventional assessments is one element in learning journeys that needs attention. Pre-pandemic assessments, lost their validity during the Covid-19 period as a result of restrictions on teacher and student engagement and physical presence in the classroom (Li, 2022). During the time of this experiment and writing, the global pandemic that had reached Singapore's shores was still present and had an effect on people, homes, companies, and schools (Wyman, 2020). The key question was whether organising webinars is an ideal assessment alternative for students of higher learning. These queries sparked the idea of experimentation where students organised their own webinars for the very first time with module-related themes. The aim of this research experiment was to examine the practicality and effectiveness of organising webinars as an approach to test the knowledge and skills acquisition among hospitality students. The mixed research method was used in this study. Tools included a survey questionnaire that consisted of a mix of quantitative and qualitative questions. The respondents were students of both the bachelor's degree and MBA programmes of a private education institute in Singapore. The findings of this experiment would benefit higher-learning organisations as well as educational institutions in using the organisation of online events like webinars, as an assessment tool. The study could also provide insights to certain business organisations that would use webinars for the first time or continue to improve on them as they communicate to their public and attract more attention to the products and services they provide.

Keywords: Covid-19, hospitality, Singapore, student assessment, webinar

**030-026**

# ENHANCING ELECTRONIC TRAINING THROUGH THE APPLICATION OF COGNITIVE TASK ANALYSIS (ACTA) FOR REDESIGN AND DEVELOPMENT

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## ABSTRACT

This research study focuses on the utilization of electronic training (e-training) as an innovative approach for the professional development of higher education teachers, specifically Higher Learning Educators (HLEs) in Malaysia. The central goal is to create an electronic professional development training prototype that caters to the continuous learning needs of HLEs, offering them greater flexibility in enhancing their pedagogical skills. The decision to develop this e-training prototype stems from an initial exploration into the challenges and requirements of professional development for educators within Malaysian higher learning institutions. To validate and evaluate the prototype, the study adopts the Applied Cognitive Task Analysis (ACTA) framework, a research instrument that involves a panel of experts including a learning designer, an educational manager, and a system administrator. ACTA encompasses four data collection techniques, namely Task Diagram interviews, Knowledge Audits, Simulation Interviews, and Cognitive Demands Analysis. These techniques help assess the prototype's effectiveness and suitability. Each expert contributes expertise-driven questions addressing specific challenges, which the researcher then organizes into structured interview inquiries. Following validation, the prototype undergoes refinement based on expert feedback, leading to an improved design that forms the basis for the e-training prototype's development. The platform's development employs HTML5 and CSS3, offering a pedagogical enhancement course titled "Planning for a Flipped Classroom." The validation process is repeated during the development phase, ensuring the prototype aligns with expert recommendations before implementation. The experts' insights prove invaluable in addressing cognitive complexities and common errors, resulting in recommendations to enhance the prototype's design and development. Notable recommendations include the integration of visuals and videos instead of text, setting a competency standard of 70% for summative tests, utilizing the prototype's certificate as an achievement indicator, and providing documents in PDF format for user convenience. In essence, this research underscores the potential of e-training for advancing the professional development of HLEs. By applying the ACTA framework, incorporating expert insights, and refining the prototype design, the study aims to create an effective and flexible platform that supports educators in enhancing their pedagogical skills and fosters continuous learning within the realm of higher education.

Keywords: Electronic Training Prototype, ACTA, Teacher Professional Development, Pedagogical Skill, Higher Learning Educators

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## INTRODUCTION

The demand for professional development among Higher Learning Educators (HLEs) as a crucial component of lifelong learning has witnessed substantial global growth over the past two decades (Fenwick, 2018; Lai, 2011). This surge can be attributed to the escalating influx of local and international students into Higher Education Institutions (UNESCO, 2009; Diamond, 2017, 2008), coupled with the transformative influence of 21st-century learning cultures on pedagogical strategies and approaches in higher education (Lizier et al., 2018; Lai, 2011).

In Malaysia, this paradigm shift in the education sector has received significant encouragement and support from the Ministry of Higher Education, aligning with the nation's aspiration to become a developed nation by 2020 (New Economy Model - The Tenth Malaysia Plan (RMKe-10) 20102015). These initiatives aim to foster a knowledge-based society by leveraging human capital through innovative and dynamic lifelong learning programs (MOHE, 2015). The pursuit of highquality education through professional development for educators in higher education institutions and the promotion of lifelong learning are central themes of the Malaysian National Education Blueprint for Higher Education 2013-2025 (MOE, 2014, 2015).

Professional development for Higher Education Educators primarily focuses on pedagogical skills and content delivery issues. Presently, our formal education practices and recognitions are inadequate to elevate the quality of educators. This deficiency is conspicuous in higher education, where many university educators lack training in pedagogical practices during their academic journey. Their pedagogical experiences and conceptualizations of effective teaching are predominantly shaped by their professors' teaching methods (Knapper, 2010). However, there is a growing realization in higher education institutions about the significance of ongoing professional development programs to facilitate personal and professional growth among educators (Abakah, 2023).

This objective of this paper was to validate an electronic prototype designed to enhance the pedagogical skills of educators in Malaysian higher learning institutions, offering an innovative alternative to traditional professional development. The validation process comprises two stages: (i) the validation of redesigning the e-prototype and (ii) the validation of developing the e-prototype. This paper, being part of a larger study, primarily addresses several research objectives inherent in the validation (redesigning) and revalidation (development) phases, including:

1. Identifying and categorizing the cognitive task difficulties experienced by educators in Malaysian higher learning institutions.
2. Investigating the root causes of commonly identified errors in pedagogical practices among educators in Malaysian higher learning institutions.
3. Providing design recommendations and enhancements for the development of an electronic prototype aimed at enhancing the pedagogical skills of educators in Malaysian higher learning institutions.

This study holds significance in two domains. Firstly, it contributes to human capital development, benefiting educators, higher education institutions, managers, learning designers, electronic learning trainers, system administrators and developers, policy makers, researchers, and anyone interested in electronic learning platforms for pedagogical content, knowledge, and skills enhancement. Secondly, it adds to the field of educational technology and distance education in professional development, shedding light on the role of technology and pedagogical distance in expanding learning through electronic platforms.

In the context of professional development, nurturing a culture of continuous learning among educators in higher education is vital. It is essential to produce educators who are engaging, effective, efficient, and adept at bridging pedagogical content knowledge and pedagogical skills to cater to diverse teaching and learning contexts, and to address real-world challenges. It is important to note that this study's scope is confined to a group of voluntarily participating educators in Malaysian higher education institutions.

## LITERATURE REVIEW

The integration of information and communication technologies (ICT) in the education environment has changed the roles and competencies of educators (Fullan, M & Langworthy, M., 2014). The adaptation of ICT and eLearning in higher education institutions has experienced exponential growth in the last decade (Saikia, 2017). Technology and pedagogy should be an integral part of higher education institutions' approaches to teaching and learning. In parallel, pedagogical competency models with technology need to be developed for higher education teachers (EU, 2014) to foster Technology-enhanced instruction (Bates & Sangra 2018). Past studies have suggested that a blend of multiple technologies will transform learning by offering a diversity of learning activities, tools, and materials, and by providing tools that enable continuous monitoring, and support problem-solving, formative, and summative assessment (Singh, J., Steele, K., & Singh, L.,2021).

In the last two decades, there were a few notable commercial applications or platforms developed by Professors from universities around the world promoting electronic training as continuous professional development which are available online. Some of the popular eLearning applications which provide pedagogical enhancement courses for educators in higher learning institutions are Coursera, Udemy Learning, FutureLearn, Class-Central and EdX. Although there were a few platforms available for adult training, but none are available for higher education educators to enhance their pedagogical skills, especially in the context of Malaysian higher education.

Further, Darling-Hammond, Hyler, and Gardner (2017) have outlined the essential features of effective professional development (PD) for educators. Effective PD should focus on curriculumspecific teaching strategies, engage educators in active learning, encourage collaboration, utilize models of best practices, provide coaching and expert support, offer feedback and reflection opportunities, and be of sustained duration. These features are integral in enhancing teacher learning within their classroom contexts, promoting hands-on

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experience in teaching strategies, fostering peer collaboration, and enabling educators to refine their instructional skills and practices.

This research adopted Applied Cognitive Task Analysis (ACTA) as it has provided a structured method for identifying and analyzing the cognitive processes involved in complex tasks, with the aim of improving performance and designing effective training programs. ACTA has its roots in cognitive psychology and cognitive science. Researchers like Rasmussen (1986) and Flanagan (1954) laid the groundwork for understanding cognitive processes in complex tasks. ACTA has been instrumental in designing effective training programs. Researchers have used ACTA to dissect complex tasks in domains such as aviation, medicine, and military operations, enabling the development of targeted training materials that focus on cognitive skills (Taylor J et. al., 2023).

## METHODOLOGY

The ACTA methodology was used in this study during the *validation and development phase.* Figure 1 provides the operational structures of validation and development phase that explain what has carried out during these phases.

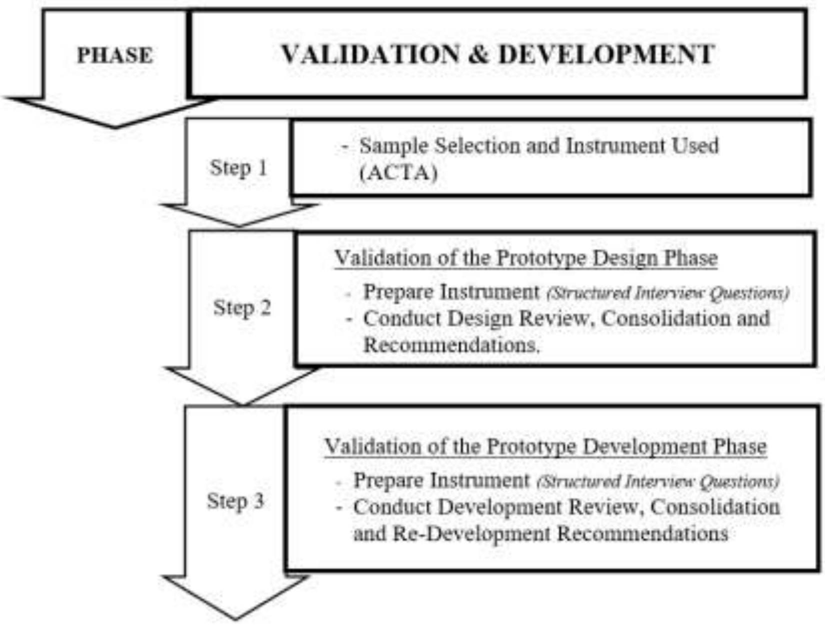


*Figure 1* Operational Structures of Validation and Development Phases

During this phase, the e-training prototype design was validated by a group of experts. Based on their feedback, the design was further enhanced. The same processes were repeated for the development of the prototype. The objectives of the validation and development phases encompass the validation of the prototype's design, including the identification of various aspects of cognitive task difficulties, the determination of common error causes, and the solicitation of expert recommendations for enhancing the prototype's design. Subsequently, the prototype will be refined in accordance with these recommendations and design

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principles. Upon completion of the development phase, experts will engage in a *dry run* of the prototype to evaluate its functionality and user interfaces. The validation process will be reiterated during the development phase to assess cognitive task difficulties, identify common error causes, and once again gather recommendations for further improving the prototype.

Research sample

The study utilized a purposeful sampling and data collection method (Creswell & Creswell, 2022;
Creswell, 2005). The researcher selected three out of the eight participants involved in phases 1 and 2 as experts to validate the prototype design and conduct a dry-run of the prototype system before the implementation phase. The researcher collaborated with three divergent experts as her team members. Table 1 presents the diverse profiles of the experts involved in the validation and development of the prototype system.

**Table 1: Profiles of experts participated in the validation and development phase.**

| Participant # | Expert 1 System Administrator (SA) | Expert 2 Learning Designer cum Trainer (LD) | Expert 3 Education Manager (EM) |
|---|---|---|---|
| Age 42 62 53 eLearning Exposure 13 15 18 | | | |
| Higher Education Industry Experience | 13 | 30 | 20 |
| Position / Role(s) | Learning Designer | Education Manager | System Administrator |
| Formal Education | Master in Instructional Design | Master in Education (Curriculum Deve lopm ent) | Master in Information Technology |

In this study, a specific technique called Applied Cognitive Task Analysis (ACTA), developed by Militello and Hutton (1998), was adopted. Militello and Hutton (1998) have provided a comprehensive evaluation of the ACTA technique, highlighting its relatively easy reporting, flexibility, and ability to provide clear and understandable outputs suitable for purposes such as training need identification or system design. The ACTA toolkit typically recommends involving three to five experts in conducting this method (Militello et al., 1998, 2000). While interviewing a limited number of experts can lead to increased knowledge for the interviewer, it is worth noting that the information can be cross verified among experts (Militello et al., 2000). Furthermore, in constructing a coherent knowledge

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base, there is a trade-off between group size and the potential for conflicting viewpoints (Hoffman et al., 2009).

Rationale for Selecting this Instrument.

Cognitive task analysis is an established method frequently applied to understand and validate work processes, design, and develop ergonomically sound tools or systems to support human performance (Taylor J, Ashford M, Jefferson M. High, 2023; Mark, N., 2003). It has gained popularity in both research and practice as an essential element of instructional design (Cowling, M. and Birt, J., 2018). Moreover, ACTA consists of three interview methods that facilitate the collection of information about the cognitive demands and skills required for a task. What makes ACTA particularly valuable is that it can be readily used by professionals who have not been trained in cognitive psychology (Militello and Hutton, 1998). ACTA also allows professionals to represent this information in a format that can be directly applied to practical products, such as improved training scenarios or interface recommendations (Militello and Hutton, 1998).

Data Collection Procedure

ACTA provide four (4) techniques to the interviewer to collect data. The technique is shown in Figure 2:

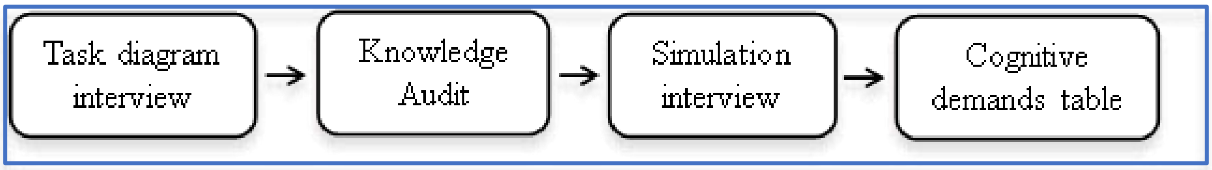


*Figure 2* The 4-phases of ACTA technique as recommended by Militello, Hutton, Pliske, Knight,

& Klein (1997)

Application of ACTA in validating the design and the development of e-training prototype:

This section shows the how the 4-techniques of ACTA interview methods described above is used to collect qualitative data from a group of experts. Figure 3 illustrates how each technique of ACTA is adopted by this study for validating the prototype design of an electronic prototype for pedagogical skills enhancement of educators and Figure 4 on the other hand illustrates the validation process of the prototype development.

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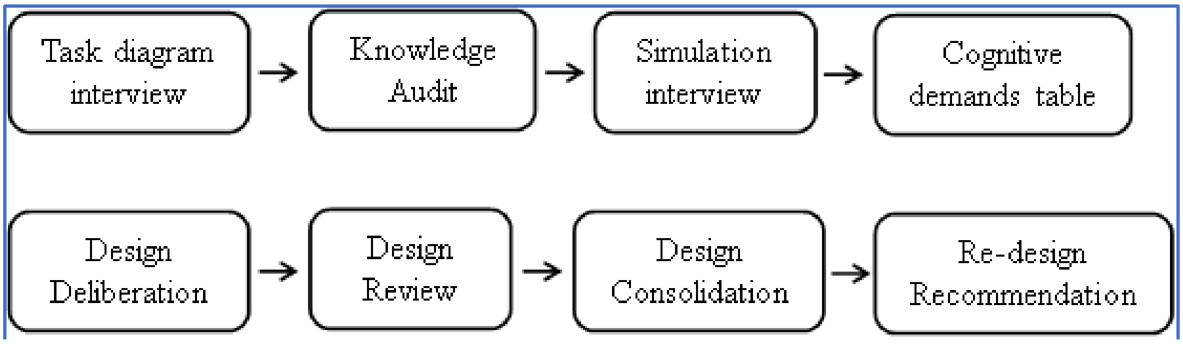


*Figure 3* ACTA technique adopted for validating the prototype design for pedagogical skills enhancement of educators.

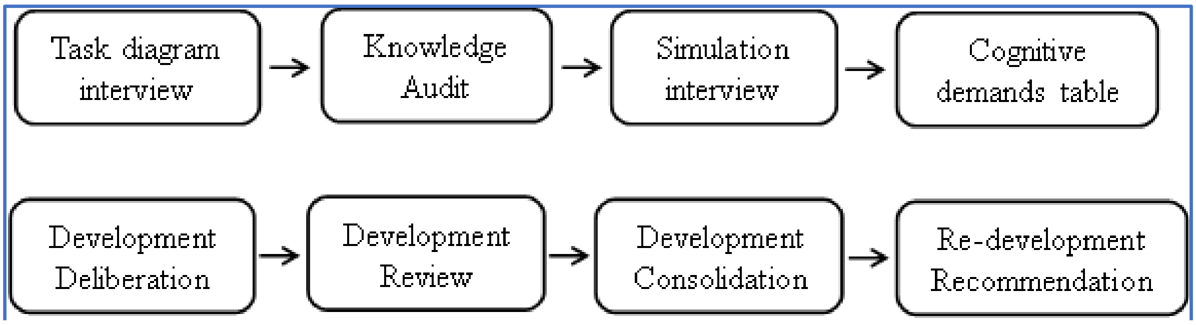


*Figure 4* illustrates how each technique of ACTA is adopted for re-validating the prototype development for pedagogical skills enhancement of educators.

<u>Data Collection Procedure</u>

The interview and data collection process involved several steps:

Step 1: The researcher communicated with the experts via email and provided a personal explanation of the purpose of the ACTA interview session, which was aimed at contributing to the development of the prototype system.

Step 2: The process began with the creation of a task diagram to identify challenging themes within prototype development. During the Face-to-Face (F2F) ACTA interview sessions, experts shared their experiences in validating the actual prototype system. In this phase, the researcher acted as a mediator (facilitator).

Step 3: The researcher systematically reviewed the prototype system, and experts deliberated on its development based on the identified themes and related interview questions. The data collected were qualitative in nature and were systematically compiled into all relevant ACTA documents, including the *Knowledge Audit Table, Simulation Interview Table,* and *Cognitive Demand Table.* This process could be conducted as either a focus group interview or individual sessions, with each expert analysing and sharing their perspective with others.

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Ultimately, a consensus was reached among the experts, resulting in unified documents for each technique.

Step 4: The responses and feedback obtained during this phase were used to enhance the prototype system further before its implementation.

## RESULTS

Data Analysis for Validation of Design and Development Phase

The results were obtained in two stages: First, during the validation of e-training prototype design and second, during the validation of the development of the e-training prototype. The first question was "*What are the aspects of cognitive task difficulties, the causes of common errors perceived, and recommendations proposed on the prototype design for an electronic prototype for pedagogical skills enhancement of educators in Malaysian higher learning institutions?"*

Table 2 outlines elements of an electronic prototype design that experts collectively identified as potentially posing cognitive challenges. These elements include storyboard design, voice-over script document design, and assessment design. The experts also pinpointed possible difficulties associated with these tasks, potential causes of common errors, and recommended improvements for the electronic prototype design.

During the validation of the prototype design via interviews with three experts, a consensus emerged that storyboard design, voice-over script document design, and assessment design were considered cognitive tasks. In contrast, system functionality design and downloadable document design, along with assessment design, were categorized as non-cognitive tasks within the prototype design.

The experts systematically compiled their responses through the design review and design consolidation stages, ultimately creating a Cognitive Demand Table. This table serves as a framework for analysing the necessary information to enhance the design phase of the prototype system, particularly in the context of self-directed learning for pedagogical skill improvement. Table 3 in the article presents the experts' findings in four categories: (i) Difficult cognitive elements, (ii) Reasons for their difficulty, (iii) Common error causes, and (iv) Cues and strategies employed.

**Table 3: Description of the final compilation of feedback from experts during re-designs recommendations (Cognitive Demand) session**

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| **Difficult cognitive elements** | **Why difficult** | **Causes of common errors** | **Cues and strategies used** |
|---|---|---|---|
| *Storyboard design VO Scripts documents design Assessment design* | Difficult to use the sense of age factor (especially download / upload the external content). Difficult to be active in the online forum, assignment, etc. along with their real work commitment Difficult to have motivation to complete the task. Difficult to create active interactions between The prototype and educators. Difficult to communicate between The prototype and among educators. | Not well-structured guidance and navigation The prototype failed to meet the expected outcomes of educators The prototype did not prepare well about the element of formative and summative assessment. The prototype did not provide proper step-bystep pedagogical guidance to the educators. Poor online communication and feedback tools design between The prototype and educators. Failed to motivate active participation among the educators because poor time management and pedagogical system | **Cues:** Screen designs looks a bit cramped as it might create pressure when HLE do the self-reading /l earning. Educators who are not familiar with similar online applications or Learning Management Platform would find The prototype challenging to follow. The landing screen is crowded with too much of information which competes for attention from the user. Colours used should be more contemporary. Having pictures of professionals/ people would make more human and enhance the interest of the user. Educators only can communicate via electronic forum and emails. Educators need to respond to online forums, download document templates and upload their completed work (assignment) using external sources such as PDF files or word document which are more complicated. The prototype did not give clear guidance on how to use the e-training system The prototype will only communicate with educators via electronic forum and email correspondence which are considered quite conventional and not fun. The prototype set 70% as its competency standard and does not have any repeat options. **Strategies Used:** User-friendly and attractive screen views should be designed in accordance to the needs of the higher learning educators (educators). The screen views need to be designed using graphical user interface that contains simple and appropriate objects, tabs and icons, and video |

The second question was answered during the validation of the development of the e-training prototype. The second question was *"What are the aspects of cognitive task difficulties, the causes of common errors perceived, and recommendations proposed on the prototype development for an electronic prototype for pedagogical skills enhancement of educators in Malaysian higher learning institutions?"*

During this stage, experts' responses for each theme that they identified as cognitively challenged tasks based on the questionnaire developed during the task diagram interviews during the revalidation process of the prototype development. At the end of the interview session of the revalidation process, all three experts came to a consensus that the storyboard development, the screen and documents development and the assessment development are identified cognitive tasks.

Storyboard Development → Screen and Documents Development → Assessment Development

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Once again, the experts compiled their responses systematically via the development review stage (the knowledge audit) and the development consolidation stage (the simulation interview). Finally, the experts deliberated and based on the findings from all previous techniques into the Cognitive Demand Table which proposes to provide a format to analyse the types of information needed to improvise development phase of the prototype system as a self-directed learning for pedagogical skills enhancements. As illustrated in Table 4, the experts have tabulated the findings into four (4) categories: (i) Difficult cognitive elements; (ii) Why difficult; (iii) Causes of Common errors; and (iv) Cues and strategies used.

**Table 4: Illustration of the final compilation of feedback from experts during redevelopment recommendation (Cognitive Demand) session**

| **Difficult cognitive elements** | **Why difficult** | **Causes of common errors** | **Cues and strategies used** |
|---|---|---|---|
| *Storyboard & Content development*<br><br>*Screen & Document development*<br><br>*Assessment development* | Difficult to motivate different types of learners.<br><br>Learners can get bored to view too much of text or reading.<br><br>Plain text can create boredom.<br><br>Different types of learners require different types of motivation<br><br>Difficult to have proper navigation and motivation to complete the task.<br><br>Difficult to communicate between P-eCPD and among Educators.<br><br>Difficult to save or download document attached.<br><br>Users may not implement what they have learnt | Content may not motivate users to complete.<br><br>Plain text can create boredom.<br><br>Different types of learners require different types of motivation.<br><br>Users may not follow learning systematically or may skip<br><br>Users may lose interest and may not complete the course.<br><br>Users may be demotivated with their performance and may not implement what they have learnt. | **Cues:**<br>• The contents are quite wordy.<br>• The storyboard design guided step-by-step but lack of explanation for the user on the course outline page.<br>• The communication tools were limited to only eForum and email correspondence<br>• Navigation buttons were limited one-way to "Next" or go forward.<br>• Users should be able to view their score immediately upon completing their competency assessment.<br>• Summative assessment does not have repeat or redo option.<br>• Word processing document attached was not readable or downloadable by users.<br>• Prototype will only communicate with educators via the electronic forum and email correspondence which are considered quite conventional and not fun.<br>• Prototype set 70% as its competency standard and allows educators to repeat summative assessment three times<br><br>**Strategies Used:**<br>• As pictures or videos speak louder than text, the lengthy texts can be replaced by appropriate learning videos. This would be more advantageous and would motivate the learner.<br>• Use of instruction with a different text colour highlighted.<br>• Explanation of the top of the anchor page on how to navigate the subject matter should be stated. |

## DISCUSSION OF FINDINGS

The study focuses on the validation of the design and development phases of an electronic prototype aimed at enhancing the pedagogical skills of educators in higher education. The objectives of these phases are to validate aspects related to cognitive task difficulties, the

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causes of common errors, and proposed recommendations for the prototype design and development.

During the design of the prototype, experts identified common errors. These included inadequate structure in the guidance and navigation provided to educators, a failure to meet the expected outcomes of educators, especially concerning formative and summative assessments, and a lack of step-by-step pedagogical guidance. Additionally, there were shortcomings in online communication and feedback tools, which failed to motivate active participation among educators due to issues related to time management and the pedagogical system.

In addition, during the development of the prototype, experts noted similar common errors as in the design phase, with particular concern about the motivational aspects of the content. Plain text was identified as a potential source of boredom, and experts recognized that different types of learners require varied motivational strategies. There were concerns that educators might not follow the learning systematically, potentially skipping lessons and losing interest. Demotivation with their performance and implementation of what they have learned was also a concern.

The study employs cognitive task analysis techniques, which have received support from other educational-related studies. Cognitive task analysis has played a significant role in instructional technology and education since the 1970s. It involves experts synthesizing compelling data related to their decision-making processes and mental analysis of tasks. The use of these techniques can offer substantial benefits for both designers and learners, especially when applied to training and job support.

Additionally, recent studies have shown the potential of cognitive task analysis in educational research, particularly in the development of effective training programs for future teachers to enhance their pedagogical skills. These techniques provide valuable insights into the cognitive processes employed by experts when evaluating training programs and teaching effectiveness.

In conclusion, this study underscores the importance of addressing common errors in the design and development of electronic prototypes for pedagogical skills enhancement among educators in higher education. The recommendations provided by experts aim to improve the user experience, motivation, and engagement of educators, ultimately leading to enhanced learning outcomes. Furthermore, the study highlights the value of cognitive task analysis techniques in educational research and their potential to inform and enhance training programs for educators.

## CONCLUSION

The electronic prototype designed for pedagogical skills enhancement among educators in higher education shows considerable promise. It not only improves pedagogical knowledge but also fosters lifelong learning and self-directed learning, aligning with the evolving landscape of education. The study's findings and recommendations emphasize the importance of ongoing engagement with the prototype to keep educators updated with the latest trends and practices, ultimately enhancing the quality of their teaching.

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**069-056**

# THE INFLUENCE OF INTEGRATION OF ISLAM AND SCIENCE IN ISLAM AND SCIENCE COURSES ON LEARNING OUTCOMES OF FKIP UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA STUDENTS

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## ABSTRACT

This research aims to determine whether or not there is an influence of the integration of Islam and science and technology on the learning outcomes of Fkip UMSU students in Islamic and science and technology subjects, namely the importance of knowing the role of Islam in the fields of science and technology. The specific target of this research is how much influence the integration of Islam and science and technology has on Islamic values in applying science and technology. When implementing Islamic and science and technology learning, in our classes we give students an understanding of the relationship between Islam and science and technology so that students are motivated to study more seriously. Really. The activities carried out by students are online and reading Islamic and science and technology books. In relation to the research objectives above, the research that will be carried out is entitled "The Influence of the Integration of Islam and Science and Technology in Islamic and Science and Technology Subjects on the Learning Outcomes of FKIP UMSU Students". The problems faced in class are often not in accordance with expectations, because it is often found in students' learning that they differentiate between Islam and science and technology so that students are far from Islamic values. This assessment is to determine the influence of the integration of Islam and science and technology on learning outcomes. The approach used in the research was quantitative to obtain this research using a pretest posttest control group design with a sample from semester IVA and semester IVB of the English Language Study Program which was used with a cluster random sampling technique. Semester IVA is an experimental class using the influence of the integration of Islam and science and technology, while semester IVB is a control class for learning outcomes. The population of this research was 149 semester IVA and IVB students. Data was collected through documentation, tests, observation and questionnaire methods.

Keywords: Integration of Islam, science and technology, learning outcomes.

## INTRODUCTION

Education is a very important human need, because education has the task of preparing human resources for the development of the nation and state. Advances in science and technology (IPTEK) result in changes and growth in a more complex direction.
Technological progress in the past three decades has shown its influence on each and every life of individuals, communities and countries. With the development of time and the development of civilization, more and more new technologies emerge that bring convenience to humans. This convenience often gives different meanings, so that sometimes there are

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many misinterpretations. Some Muslims strongly oppose technological developments for religious reasons, who do not like technological developments that cause the erosion of faith.

This different understanding must be justified. In fact, no religion, including Islam, has ever prohibited the development of science to enable technological development. The development of technology actually provides many benefits and is a means of getting closer to Allah. Views that are antipathetic towards scientific progress need to be straightened out with a more comprehensive understanding.

Integration between Islam and science and technology can be interpreted as a process of combining certain values with another concept, so that it becomes a coherent and inseparable whole or a process of blending until it becomes a complete and rounded whole (Hidayat & Mulyono, 2019).

Basically, Islam and science and technology are a synthesis of science modern knowledge that denies religious and secular values with Islam which "too" skyrocketed and presented new and complete knowledge integral without any dichotomy between the two (Azmi & Nadia, 2022). In other words, Islam and science and technology are a synthesis of two contradictory concepts, namely the concepts of Islam and science and technology which were built by the secularistic West. Islam and science and technology strive to display harmony between Islam and modern science and technology, so that the reorientation of science and technology can be utilized by Muslims (Muhibuddin, 2022).

According to Nur Rahma Amini in her journal, Science and Technology is the result of holistic and comprehensive rational thinking on the reality of the universe (Kauniyah verse) and on revelation and the Sunnah (Qauliyah verse) (Rahmah Amini et al., 2019).

God is the source of all knowledge and technology. Then Allah revealed His knowledge in the form of kauniyah verses and qauliyah verses. Kauniyah verses are verses that are implied in the universe He created, while qauliyah verses are verses that are written in the holy book. Both are beneficial for humans and are a harmonious and mutually reinforcing pair, they cannot be contradictory, because they come from the same source, namely Allah SWT. One difference is that the qauliyah verse is absolute truth. Meanwhile, the Kauniyyah verse is relative in truth. (Darmana, 2012)

According to Fajar (2021), based on a review of the theory that is the basis of the relationship between religion and science and technology, it can be divided into three paradigms, namely:

1. Secular Paradigm
   This paradigm considers religion and science and technology to be separate and unrelated things. Both religion and science and technology cannot interfere in managing each other's affairs. Religion and science and technology really have nothing to do with the science of ontology (the meaning or nature of something), the science of epistemology (the foundations of philosophical science and the limits of knowledge), and the science of axiology (the use of science).
2. Socialist Paradigm
   The socialist paradigm comes from the concept of socialism which rejects the existence of religion altogether. In this view, it is considered that religion is irrelevant and has nothing to do with science and technology. Science and technology can stand alone and be separated from religion. The socialist paradigm is based on the concept of dialectical materialism. This concept recognizes the existence of a process of change that occurs continuously through dialectics, namely the teaching that everything in the universe occurs through conflict between two things and contains the potential for development.
3. Islamic paradigm
   This paradigm assumes that trust is the basis or foundation and regulator of life. Islamic beliefs are the basis for all science. This paradigm gives orders to mankind to

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form all their thoughts from the teachings of the Islamic creed, not based on the teachings of the creed. The Islamic paradigm has created Muslims who are devout and intelligent in the field of science and technology. These results were produced during the heyday of global Islamic science and technology between 700-1400 AD.

Thus, it is necessary for students to learn about Islam and science and technology, the integration of Islam and science and technology in Islam and science and technology courses. Have you ever asked how humans get the truth? Just imagine when your supervisor asks you to meet him at Student Creativity Week. He gives you the address but you've never been there. Immediately you take out your smartphone and search for it on the Google search engine. You finally arrived at the right destination with the knowledge you got through the Google search engine. Likewise, the relationship between Islam and science. It's like two currencies that are impossible to separate. Islamic truth will be achieved with knowledge, while the integrity (truth) of science and technology will be maintained with the height of Islamic morals.

Some Western scientists believe that religion and science have two separate paths. Religion is oriented towards the afterlife, while science and technology have a focus on worldly life. According to them, religion and science and technology will not meet forever. However, in Islamic understanding, religion and science actually go in the same direction, side by side and hand in hand. Where is the actual meeting point of the two paths between Islam and science and technology? When Charles Darwin said that humans evolved from an ape and Islam said that humans came from a lump of earth, where is the point of truth that can be adhered to? In fact, the end of the two lines between religion and science and technology is truth. Meanwhile, the determiner of truth is the Single Substance that has created both; is Allah SWT. Therefore, Islam and science and technology actually only have one path to truth which originates from the Lord of the universe.

A Muslim's understanding that religion (read: Islam) and science and technology are one interconnected unit is a true understanding of tawhid (Islamic monotheism). Allah is the sole Creator of heaven and earth with all its affairs. Allah is also the one who has regulated nature, revealed Islam and inspired science and technology into human beings. So in reality the two will never clash with each other because they originate from One, One and Only.

Please pay attention to the Word of Allah SWT in the Koran, Surah Al-Anbiya verse 22 below:

لَوْ كَانَ فِيهِمَآ ءَالِهَةٌ إِلَّا ٱللَّهُ لَفَسَدَتَا ۚ فَسُبْحَٰنَ ٱللَّهِ رَبِّ ٱلْعَرْشِ عَمَّا يَصِفُونَ ﴿٢٢﴾

Meaning: “If there were gods in the heavens and the earth besides Allah, then surely both (the heavens and the earth) would have been destroyed. So Glorified is Allah who has the Throne than what they attribute to him”.

The science and technology that is inspired into the hearts of scientists is even a form of Allah SWT's providence. towards nature which is entrusted to the creatures He has created as caliphs on earth. Thus, the interrelation between Islam and science and technology should be an inspiration for educated people; Muslim students and scholars to continue to explore the world of science while remaining connected to faith and Islam and establishing themselves as caliphs who maintain and manage life which provides maximum benefits for the environment and humanity (Muhammadiyah, 2013).

By providing Islamic and science and technology courses, we will be able to find out whether it has an effect on the learning outcomes of FKIP UMSU students, English Study Program, semester IV classes, IV A and IV B.

Learning outcomes are the main benchmark for determining a person's learning success. A person with high achievement can be said to have succeeded in learning (Erniwatie, 2020). According to Arikunto (in Millah et al., 2017), learning outcomes are the results that a person achieves after carrying out learning activities and are an assessment that a person achieves to find out the extent to which the learning materials or materials taught have been accepted by students.

Learning outcomes are the abilities that a student has after the student receives treatment from the lecturer as an educator. Learning outcomes will appear in any changes to these aspects, either from one aspect or several aspects. These aspects are knowledge, understanding, habits, skills, emotions, social relationships, character and attitudes (Setiawan & Lubis, 2016).

## METHOD

The steps in this research are as follows:

1. Starting by providing a process of understanding Islam and science and technology in classes IVA and IVB in the English Language Study Program.
2. Researchers observed student learning outcomes in the experimental class and control class.

The instruments for this research are in the form of pre-tests and post-tests which are given to students and researchers who make observations during the learning process.

Data analysis used by researchers uses correlation analysis. An instrument is said to be of high quality and its use can be justified if its validity and reliability have been proven. According to Sugiyono (2013), validity means that the instrument can be used to measure what it should measure. Meanwhile, reliability is an instrument that, when used several times to measure the same object, will produce the same data.

## RESULTS AND DISCUSSION

Researchers included the results of respondents' answers in the questionnaire that was distributed to respondents. The questionnaire consists of ten questions for each variable which includes statements about the application of Islamic and Science and Technology subjects to Muamalah subjects.

The questionnaire that was distributed by researchers to 40 respondents has been returned in full and there are 10 items for the variable Influence of the Integration of Islam and Science and Technology in Islamic and Science and Technology courses and 10 items for the variable Learning outcomes for FKIP UMSU students.

To process the research instrument, the researcher summarized the respondents' answers according to alternative answers. For example, respondent one chose alternative SS = 0, alternative S = 8, alternative TS = 2, alternative STS = 0. Likewise respondents two to forty.

Based on the results obtained, respondents' SS alternative answers had an average of 4,5 for the S alternative, an average of 5,8, for the TS alternative an average of 0.15 and for the STS alternative an average of 0,00. From the average score of the questionnaire that has been taken, it can be stated that:

The four answer options have the following weights:

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- Alternativ SS is given a weight of 4
- Alternative S is given a weight of 3
- Alternative TS is given a weight of 2
- Alternative STS is given a weight of 1

Furthermore, apart from processing the recapitulation of respondents' answers on variable In the table above, it can be seen that respondents mostly chose the SS alternative, this indicates that Islamic and Science and Technology subjects were applied by researchers with an average of 4%. The weight of the SS alternative answer which is worth 4 (four) is in accordance with the answer choice criteria which confirms that the SS alternative is given a weight of 4 (four), occurring between 40% – 100% and is in second place. Alternative S with a value of 3 (three) ranks first with an average of 5.8% of respondents, occurring between 50% – 100%, alternative TS with a value of 2 (two) ranks third with an average of 0,15%. Meanwhile, in the STS answer, not a single respondent gave an answer.
Based on the final results, it was found that the respondent's SS alternative answer had an average of 2,6. For alternative S the average was 7,3, for alternatives TS and STS not a single respondent gave an answer.
Next, the researcher tabulated the respondents' answers according to the question number. The questionnaire distributed to respondents had alternative answers, those who chose the SS option were given a weight of 4 (four), those who chose the S option were given a weight of 3 (three), those who chose the TS option were given a weight of 2 (one) while those who chose the STS option were given a weight of 1 (One). After tabulating, the researcher looked for the values of $\sum X$, $\sum Y$, $\sum X^2$, $\sum Y^2$, and $\sum XY$ to be tabulated into the product moment formula.
This is necessary to calculate the validity of the question items, to determine the degree of accuracy between the data that occurs on the research object and the researcher's reporting power. This indicates that validity calculations are needed in research. Validity is a measure that shows the levels of validity of a research instrument. It is said to be valid if it is able to measure what is desired and can reveal data on the variables studied.
In calculating item number one, variable Y, the correlation result for item number one $r_{xy}$ = 0,599. The researchers compared these results with the critical price table of r product moment ($r_{tabel}$), with a 95% confidence interval the result obtained for N = 40 was 0,312. The results obtained were $r_{count} > r_{table}$, it can be concluded that the calculation for item number one is valid. The calculation for question item number one above also applies to all research questionnaire question items for variable Y.
For the calculation of question items number two to ten, variable Y can be seen in table 5,6 where question items number one to ten do not appear to meet the validity of the research instrument. To find out the validity of the item, this is done by consulting the product moment critical price table, with a 95% confidence interval. If the calculated price > critical price of rtable. Then the item has been declared valid.
Based on the results of calculating the correlation coefficient between the total score of variable 95% confidence, there is N = 0,312. Thus it can be concluded that $r_{count}$ (0,984) > $r_{table}$ (0,312). From the calculations that have been obtained, there is a relatively positive linear relationship.
After calculating the validity of each question item on each variable, the researcher calculated the reliability of the total score for each variable. After getting the validity and reliability results, the researchers looked for a correlation analysis to calculate how much influence the Islamic and Science and Technology subjects had on the learning outcomes of FKIP UMSU students.

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The price $r_{count}$ = 0,766 is consulted on $r_{table}$ = 0,312 product moment. It turns out that the results of $r_{count} > r_{table}$. The researcher concluded from the data that had been processed using the product moment formula that there was an influence between the Islamic and Science and Technology courses in the Muamalah course on the learning outcomes of FKIP UMSU students.
To find out whether there is a significant influence between Islamic and Science and Technology courses in the Muamalah course on the learning outcomes of FKIP UMSU students. Must be tested using the product moment correlation formula. If the calculated rcount is greater than $r_{table}$, then it can be said that there is a significant influence between variable X and variable Y, with N = 40 and the 95% confidence level for $r_{table}$ is 0,312.

From the results of the analysis carried out by the researcher, it turns out that the rcount is greater than the rtable or it could be said to be 0,766 > 0,312. Thus, it can be said that there is a significant influence between Islamic and science and technology subjects on the learning outcomes of FKIP UMSU students.
To test the hypothesis of the influence of Islamic and Science and Technology courses on the learning outcomes of FKIP UMSU students. The correlation coefficient significance test was carried out using the t statistical test, namely:

$$t = \frac{r\sqrt{n-2}}{\sqrt{(1-r^2)}}$$

$$t = \frac{0,766\sqrt{40-2}}{\sqrt{(1-(0,766)^2)}}$$

$$t = \frac{(0,766)(6,164)}{\sqrt{1-0,586}}$$

$$t = \frac{4,721}{\sqrt{0,414}}$$

$$t = \frac{4,721}{0,643}$$

$$t = 7,342$$

For a real level of α 5% and dk = 40, the $t_{table}$ value is 2,021. Based on the calculation above, we get $t_{count}$ = 7,342 while $t_{table}$ 2,021 means tcount > $t_{table}$ or 7,342 > 2,021. Based on the values obtained, it can be concluded that the hypothesis is accepted or that there is a significant influence of Islamic and science and technology subjects on Islamic and science and technology subjects on the learning outcomes of FKIP UMSU students.

## CONCLUSION

Allah's verses consist of everything in this universe that shows and informs the existence and attributes of Allah. Allah is the source of all knowledge. Then Allah revealed His knowledge in the form of kauniyah verses and also qauliyah verses, namely revelation in the form of verses from the Koran. From these two verses knowledge was created, then research was carried out from this knowledge so that theories emerged which then created the science of scientific truth. Based on a review of the theory that is the basis of the relationship between religion and science and technology, it can be divided into three paradigms, namely the secular paradigm, the socialist paradigm and the Islamic paradigm. Religion and science and technology are closely related, with the development of science and technology (IPTEK)

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having had a significant impact on people's lives today. This progress provides various conveniences in carrying out daily activities and various aspects of human life.

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**070-057**

# E-LEARNING BASED ON THE EU ASSEMBLR APPLICATION AS A MEDIA FOR LEARNING MATHEMATICS

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## ABSTRACT

The purpose of this research is to determine the effectiveness of edu assembler-based e-learning which is used as a learning medium. This type of research is quantitative quasi-experiment research with a one-group pretest-posttest design. The population of this study was 2nd-semester students. The sample for this study was 36 students taken based on the cluster random sampling technique. This research instrument uses mathematics test questions which can be accessed via e-learning. Data analysis techniques, namely the normality test as a prerequisite test, the test of the difference in pretest and posttest averages, the test of the magnitude of the increase in pretest results with posttest (N-Gain), and finally test of the effect size (effect size). The results showed that the pretest data was not normally distributed, while the posttest data was normally distributed, so nonparametric statistical tests were carried out. The nonparametric statistical test used is the Wilcoxon test where the results show a sig score. (0.00) < 0.05 means there is a difference in the average pretest and posttest scores. Next, an n-gain test was carried out with a score of 0.53 which was in the medium category. This means that the pretest and posttest scores have a moderate level of improvement. Meanwhile, the results of the last test using the effect size test resulted in a score of d = 1.47 which was in the strong effect category. This means that edu assembler-based e-learning has a strong effect on student learning outcomes.

Keywords: e-learning, assembler edu, learning media.

## INTRODUCTION

The current era is popularly called the current era by Indonesian teenagers because it is the era of globalization, where information and communication technology (ICT) plays a very important role in daily life, the world of education, and especially in mathematics education (Jupri et al., 2015). For example, if we ask a random person on the street or at work whether he has a smartphone or not, the person being asked will likely answer that he does. This shows that in everyday life, we cannot be separated from technological devices. In other words, technology is a part of our lives that is difficult to separate.

The current rapid development of science and information technology certainly has a positive impact on all aspects, especially in the educational aspect. In the world of education in general, especially in higher education, processes and practices cannot be separated from the use of technology. Try asking any student if they have a laptop as a tool to help them take and attend lectures. Most likely, the answer is that he has. This shows that technology is an inseparable part of the world of education. (Jupri, 2018)

One of the impacts that was felt in the world of education during the COVID-19 pandemic was the development of learning media. The rapid development of technology should be one way to facilitate the learning process (Hidayati, 2016). The world of education has entered the era of the world of media, where the learning process prioritizes media, rather than lecture methods, so the role of learning media is increasingly important to realize an effective learning process because the function of media in learning can generate new desires and interests, increase motivation and stimulate learning activities, even psychologically affecting students (Saputri, 2016).

Learning media is anything that can be used to convey messages or information in the learning process so that it can stimulate students' attention and interest in learning (Najiah & Mardiana Panggabean, 2021). Learning media as a learning process is communication and takes place in a system so that without communication media nothing will happen and the learning process as a communication process will not be able to take place optimally (Ammy & Maryanti, 2023).

One of the learning media developments that can be implemented today is by utilizing e-learning. E-learning is a learning process through electronic media, especially the Internet (Turrahma et al., 2017). E-learning innovation is a new model of learning that plays a big role in the world of education. Several characteristics of e-learning, namely; (1) utilization of electronic technology services; (2) exploitation of the advantages of digital media; (3) the use of self-learning materials so that lecturers and students can access them anytime and anywhere; (4) the use of learning schedules, curriculum, learning outcomes, and matters related to educational administration can be viewed at any time on the computer (Muhammad Khoir et al., 2020).

The concept of e-learning is that learning teaching materials are presented on the Internet, and educators continuously hold several meetings, both face-to-face and web meetings (Purmadi & Sa'di, 2021). Meanwhile, another theory says that the main focus of e-learning is on students, where students are required to be independent at certain times and be responsible for carrying out their learning and "force" students to play a more active role in their learning. This is very different from conventional or traditional learning, where the educator is considered a source of knowledge or someone who knows everything and is assigned to distribute knowledge to students (Chusna, 2019).

Many e-learning platforms can be used by educators to develop distance learning media, including Google Classroom, Zoom Meeting, Google Meet, edu Assembler, and others. This platform is a medium that can be used as a substitute for face-to-face learning. This research uses the edu assembler platform as an e-learning learning medium. Assembler edu-based e-learning applied to students has advantages, such as: having videos, and audio animations, not requiring knowledge of programming, can be viewed from various points of view (3 dimensions), can be asked where we want (in class, in the room, in the yard, in books, etc.) (Sugiarto, 2022). Assemblr edu is a platform that allows us to use 3D and to create learning activities that are more interactive, and collaborative, and make learning sessions more interesting and interactive. We can turn boring study exercises into fun with easy-to-use and accessible features. (Putri Intari Dewi et al., 2022)

The author sees that the facilities and conveniences available in the Assemblr Edu application will help in the learning process, including increasing students' reasoning and creative abilities, thereby increasing students' understanding of the material being studied. The Assemblr edu application is present as an application in the education sector to describe in more detail in 3D all mathematics learning material that humans consider difficult or abstract (Lino Padang et al., 2022).

This edu assembler-based e-learning is learning that can provide roles and functions to address the weaknesses of conventional education, especially the limitations of space and time in the education process. The existence of e-learning based on an edu assembler with a standard platform using the internet could be a solution to this problem, because of its nature which allows for interconnectedness in various aspects, both student interaction and access to references from the internet. Keban & Taufik (2017): "Saying that internet-based learning allows everything to be connected, not to mention that the internet is cheap, simple and open, resulting in the internet being used by anyone, anywhere, anytime, and available to everyone".

Conventional learning which is limited to face-to-face learning on campus will not develop students' abilities if they do not look for additional learning resources outside the classroom. Apart from that, the time available for students is also limited, so the delivery of material will also be limited, especially in mathematics education majors which require a strong understanding of concepts. Based on the theory that has been explained, the advantages and characteristics of edu assembler-based e-learning, where the learning process and materials can be accessed effectively and flexibly, can be used as a mathematics learning medium.

## METHOD

This research uses a quantitative quasi-experiment with a one-group pre-test and post-test research design. This research design was used because it was carried out in one class that was given treatment with the same research subjects. The population of this study were students of the Mathematics Education study program, semester 2 of the 2022/2023 academic year. Then the sampling technique in this research used simple random sampling. The simple random sampling technique is a sampling of population members carried out randomly, without paying attention to the strata contained in the population (Elfrianto & Lesmana, 2022). Based on this, the sample was class 2A Morning, which consisted of 36 students.

The stages in this research are giving a pre-test to students to see the students' initial abilities, then continuing with giving treatment by implementing edu assembler-based e-learning as a mathematics learning medium. After treatment was given to the sample, a post-test was given to see the students' final mathematics abilities.

The instrument used to collect data in this research was multiple choice questions consisting of 10 basic mathematics questions. The multiple choice questions are input into edu assembler-based e-learning, so that to be able to access the questions, students must be connected to the internet and enter the test code that has been provided by the researcher. Students can access and complete the multiple-choice test questions for 10 minutes at a predetermined time.

The collected data was then analyzed using several statistical tests, namely: the prerequisite test by determining the normality of the data with the Kolmogrov-Smirnov test statistic, then continued the average difference test between the pre-test and the post-test, then the N-Gain test and effect test were carried out. size. In the normality test, the decision criteria are if sig. > 0,05 then the data is normally distributed, while sig. < 0,05 then the data obtained is not normally distributed.

Test of differences in means, hypothesis sounds:
$H_0$: There is no average difference between pre-test and post-test scores if sig. > 0,05.
Ha: There is an average difference between pre-test and post-test scores, sig. < 0,05.

Next, an N-Gain statistical test was carried out to find out how much the results improved between the pre-test and post-test. This was stated by Hake (In Yudi, 2020) that the N-Gain statistical test is a test that can generally describe the level of learning outcome scores before and after treatment. To see how much the pre-test and post-test results have improved, you

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can see the N-Gain score range table as follows:

**Table 1. N-Gain Score Categories**

| Score N-Gain | Category |
|---|---|
| **N-Gain > 0,7** | High |
| **0,3 ≤ N-Gain ≤ 0,7** | Medium |
| **N-Gain < 0,3** | Low |

Then, to see the effective size of edu assembler-based e-learning which is used as a mathematics learning medium, the effect size test is used. The effect size test is a statistical test method used to find the effectiveness of the model or method used or can be interpreted as a step to measure the effectiveness scale of the learning method/model that has been applied in a study (Lakens, 2013). To see how effective the use of edu assembler-based e-learning is can be seen in the categorization of effect size test scores adapted from Cohen (1988) as follows:

**Table 2. Categories of Magnitude of Effectiveness**

| Score | Category |
|---|---|
| **0 – 0,20** | Very weak |
| **0,21 – 0,50** | Weak |
| **0,51 – 1,00** | Currently |
| **> 1,00** | Strong |

After carrying out several statistical tests as described above, the final stage is to conclude whether the implementation of edu assembler-based e-learning is effective or not.

## RESULTS AND DISCUSSION

### Results

The learning media used in this research is e-learning based on an edu assembler. The application of e-learning is not only used as a medium for learning but also as an evaluation or assessment tool for students.

In this research, the first stage carried out was giving a pre-test to 36 students to see their initial abilities. Then, after completing the pre-test, students are given treatment by implementing edu assembler-based e-learning. The learning process is carried out by uploading teaching materials and questions on e-learning media. Students can access these teaching materials at any time and then study them independently. After learning, students can present material and discuss via the Google Meet link which has been included in e-learning. In the final stage, students are given a post-test to see the student's final abilities.

The data obtained was based on the results of the students' pre-test and post-test and then analyzed to conclude. This data processing was analyzed with the help of the SPSS program. The first statistical test, namely the normality test is a prerequisite test. Normality test results from pre-test and post-test data are as follows:

**Table 3. Kolmogorov-Smirnov Normality Test**

| No | Mark | df | Sig. | Interpretation |
|---|---|---|---|---|
| 1. | Pre-Test | 36 | 0.040 | The data is not normally distributed |
| 2. | Post-Test | 36 | 0.109 | Data is normally distributed |


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Based on the table above, it can be concluded that the pre-test data on student understanding received a score of 0,040 < 0,05, meaning that the pre-test data was not normally distributed. Then the significance score of the post-test data on student understanding was 0,109 > 0,05, meaning that the post-test data was normally distributed. After the normality test is carried out, the mean difference test is then carried out. The average difference test between the pre-test and post-test uses a non-parametric statistical test, namely the Wilcoxon test. This is because one of the data is not normally distributed (Orcan, 2020). Non-parametric statistical results with the Wilcoxon test are as follows:

**Table 4. Results of the Wilcoxon Statistical Test**

| | **Wilcoxon Signed Ranks Test** | **N** | **Sig. (2-tailed)** |
|---|---|---|---|
| Post Test – Pre test | Negative Ranks | 4 | 0.000 |
| | Positif Ranks | 28 | |
| | Ties | 4 | |
| | **Total** | 36 | |

The table above shows that the Wilcoxon statistical results have rank tests, including negative ranks, where the post-test score is smaller than the pre-test score for students' mathematical understanding. The number of students in negative ranks is 4 students. Then in positive ranks, where the post-test score is greater than the pre-test score for students' mathematical understanding. The number of students in this category is 28 students. Finally, in the ties category, the post-test and pre-test scores are the same. The number of students in this category is 4 students. Based on these results, most students are in the positive ranks.

Next, to find out whether there is a difference in the average pre-test and post-test, the results of the significance of the Wilcoxon statistical test are looked at. In this table, the results of the significance of the Wilcoxon statistical test in this study received a sig score. (0,00) < 0,05. Based on these results, $H_0$ is rejected and Ha is accepted. This means that there is a difference in the average mathematics understanding score before and after the edu assembler-based e-learning treatment.

After it is known that there is a difference in the average scores of the pre-test and post-test, the N-Gain statistical test is continued to find out how much the results have improved between the pre-test and post-test. The statistical test results obtained an N-Gain value of 0,53. If you look at this value in the N-Gain score category table, the magnitude of the increase in results is in the medium category. This means that the pre-test and post-test scores have a moderate level of improvement. Meanwhile, to determine the effective magnitude of edu assembler-based e-learning, a statistical effect size (d) test was carried out. The effect size statistical test results in this study were 1,47. If viewed based on the effective magnitude category, the score d = 1,47 is in the strong effect category. This means that edu assembler-based e-learning has a strong effect on students' mathematics learning.

**Discussion**

Based on the research results, it show that edu assembler-based e-learning is an effective learning media used in mathematics learning so that student understanding can increase. This is proven based on the results of analysis tests, where edu assembler-based e-learning has a strong effect on students' understanding of learning mathematics. This research is supported by previous research which states that e-learning is a method that is quite effective in improving learning outcomes and student motivation (Wicaksana et al., 2020). Apart from that, Aryaningrum et al., (2022) in community service activities stated that the knowledge of

teachers and school principals has increased, due to the use of interesting learning media which can make it easier for students to understand and understand the material taught by the teacher, as well as making students not bored in learning.
E-learning provides students with the opportunity to study independently by studying the material provided in the system so that students can study anytime and anywhere. In line with this, Nadziroh (2017) said that the benefits of e-learning for students enable high flexibility in learning development. This means that teaching materials can be accessed at any time and repeatedly by students, thus further strengthening their mastery of the concepts of learning materials. According to Karwati (2014), divides the advantages of e-learning from two points of view, namely from the student's point of view and the lecturer's point of view as a teacher. From the student's perspective, students can access learning materials at any time and repeatedly to study and adapt to the student's ability to understand the material. Then from the teacher's point of view, the benefits and advantages of e-learning are that teachers can control student learning activities, conduct research to increase insight, and provide feedback to students flexibly and effectively. Meanwhile, according to Oktaviana & Jasril (2023), the benefits of the edu assembler application are that it allows teachers and students in classes together to communicate and share media and allows teachers and students to design projects based on students' preferences and abilities.

## CONCLUSION

So far, mathematics learning has required learning innovation in the world of education. One of the innovations that is developing rapidly at the moment is the use of edu assembler-based e-learning. This edu assembler-based e-learning contains activities and learning resources for students. Based on the results of this research, it is concluded that edu assembler-based e-learning is effective as a learning medium in terms of students' mathematical understanding. This is proven by the research results where the pre-test and post-test scores for understanding mathematics have a moderate level of improvement. Apart from that, in terms of effective size, seen from the statistical results of the effect size test, show that edu assembler-based e-learning has a strong effect on students' understanding of mathematical concepts.

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**071-058**

# THE INFLUENCE OF GADGETS ON USER BEHAVIOR IN SOCIAL INTERACTION

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## ABSTRACT

The world has entered a new era, namely the era of technology and communication. The development of technology and communication occurs very quickly, technology continues to create various types of devices that are classified as high-tech devices, in general, technology (gadget) has become an integral part of people’s lives, and in order for them to continue to use smart internet with their devices, efforts are needed to increase awareness, knowledge, and skills. However, today’s devices are often redundant and effect various aspects of life. You can feel this effect both on yourself and on those around you. One of the closest environments that is affected by the use of devices is the family. Families who really have their own responsibilities and responsibilities to their family members are bothered by the excessive use of devices by users. One aspect of the family that is disturbed is the social interaction between family members which includes patterns of communication and social contact. Changes in family social interaction can be measured through communication and social contact. There are differences and changes in communication and social contact in the family before and after the use of gadgets by family members can affect the patterns of social interaction of all family members. Thus, it can be seen the influence of the use of these devices on social interaction in the family.

Keywords: Technology and communication, the influence of social interaction

**071-062**

# CULTURAL PHILOSOPHY AS A CULTURE IN INDONESIA

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## ABSTRACT

In this journal, we discuss journals on cultural philosophy. This journal uses a descriptive research method in which this method discusses cultural philosophy that is still ongoing from the past to the present that is still ongoing. Philosophy comes from the Greek word philosophies which means love of wisdom. Philosofia/philosophia comes from two words philia which means love and sophia which means wisdom/wisdom, wisdom, cleverness in knowledge. So that it means that philosophy is simply love of wisdom or love of knowledge. In a practical sense philosophy implies the nature of thinking/mind, while philosophizing is thinking deeply or radically or in earnest to the roots of a truth or in other words philosophizing means seeking the truth of something. Basically, awareness of human experience encouraged him to formulate forms, definitions, and theories about his way of life for cultural understanding. Therefore, consciousness arises from the gift of reason, predictability, and human emotion, which is not possessed by other living things such as animals. Leslie White (1973) defines culture as "beliefs, ideology, social organization, and technology (tool use)". In the second half of the 19th century, Sir Edward Burnett Tylor made a study of "Primitive Society" which became the basis for compiling the concept of culture. So that in this case the philosophy of culture is something in the form of responsibility that can direct and guide a culture towards good development based on certain criteria and principles so that in this case the cultural goals of enhancing human dignity are well achieved.

Keywords: Cultural Philosophy, cultural goal, consciousness

## INTRODUCTION

Philosophy is the basis or basis for human thinking in the world of education as reasoning in seeking and deepening knowledge. Philosophy and science are continuously undergoing transformation in order to resolve the problems faced along with developments in the era of globalization. The development of philosophy and science and technology (IPTEK) has a big role or influence on the world of education. Historically, the existence of philosophy and science and technology continues to experience dynamics with each periodization in response to the demands of the times in the era of globalization. (Fadli, 2021)
Philosophy is the study of all phenomena of human life and thought critically and described in fundamental concepts. Philosophy does not consist in carrying out experiments and trials, but in persistently posing problems, looking for solutions to them, providing appropriate arguments and reasons for certain solutions (Karimah and Khotimah, 2021).
Philosophy is a scientific discipline that is the main source of various knowledge in the world of education. As we already know, humans are knowledgeable creatures. (Bahar, 2017). Social change triggers the emergence of a spirit of intellectual asceticism in society, from

there giving rise to an intellectual ethos. This is what encourages people to continue to work and develop with new things in order to increase the prosperity of their lives, so that they become a modern society.

In modern times, cultural issues can influence many people's thinking, such as educational experts, who always face problems everywhere. In every matter the power of culture shows itself as an inevitable factor, which inevitably must be taken into account so that these efforts do not fail. From within culture, people explore motives and incentives to uphold the development of society. No one would deny that cultural phenomena are something specific to humans, animals and plants. Cultural works are not expected. (Bakker Sj, 1984)

Culture is a human creation that takes place in life. Education and life are a relationship between process and content, namely the process of taking over culture in the sense of civilizing humans. Another aspect of the function of education is processing culture into mental attitudes, behavior, and even into students' personalities. Meanwhile, the foundation of education is philosophy. So the relationship between education and culture is found in the relationship between democratic values, where the function of education as culture has a more important goal, namely to develop human personality to be more creative and productive, namely to be able to create culture. (Bahar, 2017)

Culture is always associated with technological progress, democracy and human knowledge in various fields such as language, literature, technology, fine arts, music, industry, entertainment, trade, philosophy and others. All forms and manifestations of human expression, ethics, aesthetics, intellectuality, etc., make humans live with more dignity and sovereignty over the fate of their lives. Culture is associated with ideal and real conditions that are driven by a set of views on life and a system that is able to respect pluralism, differences of opinion, justice and human rights. With these tools, peace, technological progress and happiness can be achieved and in such conditions the Indonesian people will be able to improve their lives and values, as well as develop science, philosophy, religion, technology, language, art and literature.

Culture can be a guide to life and behavior to regulate humans so they can understand how they should act and act to determine attitudes when dealing with other people in realizing their lives (Muslimah, 2021). Culture, which is always attached to humans, has a huge function for humans and society. Culture is something that continues and does not stop at a certain point. When a culture in human life has stopped at one point and no longer develops, then it is called civilization. (Bahar, 2017)

Humans have various cultures that differ from one another, thus creating the uniqueness of these cultures. Each culture is different based on the surrounding environment which is of course also different. Culture in human life is also very influential because it can influence a person's thought patterns and behavior. Thus, it can be said that culture is one of the greatest achievements of humans as living creatures.

People and culture are inseparable and together they make up life. People gather in socio-cultural units and become societies. Human society produces, creates, grows and develops culture. There is no society without culture and there is no culture without society. Of the two creatures created by Al-Khalik, only human society that imitates the Almighty Creator gives birth to culture. Culture is a human discovery in society, and human awareness of their experiences encourages them to unite formulas, boundaries, definitions and theories about their life activities, which is called culture. Such awareness arises from the gift of human reason, emotions and instincts that other living creatures, such as animals and wild animals, do not have. According to current understanding, humans are called rational animals, even though biologically they are also called animals.

Philosophy in culture aims to study a culture in order to understand the nature of that culture in depth and comprehensively. Philosophy and culture are closely related because culture

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influences the way of thinking, attitudes and human life, so culture is also studied in philosophy.

Modernization, which implies the application of positive modern thinking to solve various problems faced by humans, has penetrated various corners of the world. This encroachment, in various ways, was preceded by the discoveries that spurred Western civilization, namely the invention of: book printing, machines and the compass. These three discoveries have changed the face of the world completely. All kinds of knowledge, methods of warfare and navigation, with these discoveries took on new forms. These changes affect various things, so that it seems as if there is no other constellation that affects humans more deeply than that. Humans are biocultural creatures; it is the product of interactions between biological and cultural factors. Its biological function can be influenced by biology. As a biological creature, it cannot be denied that it lives in a cultural context. He dresses, prepares food, makes a house, and communicates with language, even his entire environment is the result of human processing.

Humans cannot live without culture and conversely, humans as cultural creatures cannot be separated from their biological existence. Culture itself lives and is maintained in biological populations and in the biophysical environment. He takes part and creates culture with his biology. The works created by humans are not without purpose. In other words, every natural object that is touched and worked on by humans is given a new form that contains value. Therefore, every cultural object signifies a certain value, shows the intentions and ideas of its creator. He is a symbol within the scope of culture. (Noh *et al.*, 2015)

## METHOD

The method used in this research is a descriptive qualitative research method, namely library research. Where library research is a research activity carried out by collecting information and data with the help of various kinds of materials in the library, such as reference books, results of previous similar research, articles, notes, and various journals related to the problem you want to solve. Activities are carried out systematically to collect, process and conclude data using certain methods/techniques to find answers to the problems faced. (Sari & Asmendri, 2020)

Quantitative research is research that is objective, tests theory, generalizes, and tests hypotheses using statistical means. So, qualitative research places more emphasis on understanding in depth a problem or examining problems on a case by case basis, the nature of one problem will be different from the nature of other problems. (Prasetia, 2022)

In other words, quantitative research measures objects with calculations, with numbers, percentages and statistics. Meanwhile, qualitative research does not emphasize quantum or quantity, so it places more emphasis on the natural aspect of quality because it involves understanding, concepts, values and characteristics inherent in the research object.

## RESULT AND DISCUSSION

To know the nature of something, someone can find out from studying philosophy. Philosophy helps to know and feel everything and gain knowledge or wisdom. This means that philosophy is thinking and feeling deep into everything to its core. Philosophy is a scientific discipline that is the main source of various knowledge in the world of education. As we already know, humans are knowledgeable creatures (Bahar, 2017).

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Culture is a human creation that takes place in life. Culture can come from the environment and natural surroundings which of course differ from one another. In other words, cultures differ from one another and have their own characteristics or uniqueness as well as different meanings. Culture itself has an influence on human life, which can influence aspects of a person's mindset and behavior. As time goes by, culture also continues to experience changes. Culture is something that continues and does not stop at a certain point. When a culture in human life has stopped at one point and no longer develops, then it is called civilization. (Bahar, 2017).

In the process of development, creativity and the level of civilization of the community are the owners, so that the cultural progress that exists in a society is actually a reflection of the progress of that society's civilization. The importance of culture in developing education in national culture seeks, preserves and develops cultural values and social institutions in supporting the process of national development and development as well as preserving the noble values of national culture.

Cultural philosophy is something in the form of responsibility that can direct and guide a culture towards good development based on certain criteria and principles so that in this case the culture's goal of increasing human dignity is achieved well. The philosophy of culture will continually confront the question of man's place and role in his self-generated complex of self-realization. By understanding cultural philosophy, humans are expected to know what is expected of them, the values they must have and what roles they must fulfill.

Culture is a work that is formed from literature originating from individuals. Culture must have an interdependent literary work so that culture must depend on literature. The most developed oral literary culture at this time is proverbs. In proverbs there are meanings that contain values that can be related to life which are able to teach or guide humans towards more positive aspects. Apart from proverbs, literary culture can also be found in the form of poetry and stories which are passed on by word of mouth and have been around for a long time until now.

Cultural elements include the smallest units that are included in a cultural meaning. The cultural element also includes the work of reason and the combinations that exist from a culture and the cultural elements are divided into integrative parts without changing in the slightest. Elements are also often categorized as elemental parts and aspects. Cultural elements also include cultural language, cultural knowledge systems, social organizations and cultural kinship.

As knowledge about culture expands, hundreds of limitations to the concept of culture emerge from all angles in science. until 1952. Kroeber and C. Kluckhohn in their book "Culture: A Critical Review of Concepts and Definitions" succeeded in identifying and inventorying 179 boundaries of the concept of culture for a more systematic reformulation of the concept of culture. This book specifically shows that the meaning of culture is the overall pattern of behavior and behavior that is acquired and inherited through symbols, which can ultimately form something unique for a human group, including its embodiment in real objects.

The cultural characteristics of complexity and phenomena were recognized as a major part of the efforts to understand human character more systematically launched by the idealization initiative. Cultural characteristics include cultural components that are largely patterned without having to serve human needs which basically include biological, psychological, social and transcendental components. The process of cultural learning in a mechanism does not have to be carried out instinctively but rather is explained. The process of transmitting some of the knowledge and behavior of the previous generation is replaced by new knowledge and behavior. Cultural structures flow overlapping and infiltrating each other with the aim of reviving national symmetry and humanitarian concepts such as the international

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Red Cross, the United Nations, regional cooperation, as well as various human rights declarations and commitments.

## CONCLUSION

Philosophy is thinking and feeling deep into everything to its core. Philosophy comes from the word son which means love, and the word sophos which means knowledge or wisdom, so philosophy means love of knowledge or wisdom. Poerwanta presents significant philosophical traits and thoughts. However, not all thinking means philosophizing. Because philosophizing means thinking deeply and seriously. Meanwhile, if it is interpreted, culture is the result of interaction in life together. Where humans as members of society are always experiencing changes. A conjunctive movement or change in the rise and fall of cultural waves in a society over a certain period of time is called cultural dynamics. In the process of development, creativity and the level of civilization of the community are the owners, so that the cultural progress that exists in a society is actually a reflection of the progress of that society's civilization. The fundamental difference that places humans as the highest creatures is that humans have a mind or mind so that humans are the only living creatures that have the ability to create things that are useful for the continuation of their lives (cultural creatures).

Cultural philosophy is something in the form of responsibility that can direct and guide a culture towards good development based on certain criteria and principles so that in this case the culture's goal of increasing human dignity is achieved well. The philosophy of culture will continually confront the question of man's place and role in the complex of self-realization that he himself produces. In this way, in fact cultural philosophy will never complete its task of answering these various questions, apart from presenting more and more questions which in turn will also become more complex.

Cultural characteristics include cultural components that are largely patterned without having to serve human needs which basically include biological, psychological, social and transcendental components. The process of cultural learning in a mechanism does not have to be carried out instinctively without being explained. The process of transmitting some of the knowledge and behavior of the previous generation is replaced by new knowledge and behavior. Cultural structures flow, overlap and infiltrate each other with the aim of reviving national symmetry and humanitarian concepts such as the international Red Cross, the United Nations, regional cooperation, as well as various human rights declarations and commitments.

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**076-065**

# THE CHALLENGES AND OBSTACLES OF EDUCATION OF EARLY CHILDREN IN THE GLOBALIZATION ERA IN INDONESIA

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## ABSTRACT

Education is an important asset for the progress of a nation, therefore every citizen must and must follow the level of education, both early childhood education, primary education, secondary and high education, especially in the era of globalization. The current era of globalization brings significant impact and impact on early childhood development. Early childhood is now faced with complex issues and dynamics. This is marked by the swift flow of information, communication, and technology in every life. Therefore, efforts to filter the child should be through the planting of characters and parents are expected to understand the importance of educational values from an early age. Children have to vary their abilities through play, because at this stage the child has unique characteristics, is active, energetic, and has a strong curiosity and enthusiasm for many things to be adventurous, and rich with fantasy. This research was conducted by qualitative descriptive method. From the research results, it is found that the challenges and obstacles in early childhood education in Indonesia are: 1) the lack of socialization in establishing the post of early childhood education and qualified human resources, 2) the lack of awareness of teachers teaching in education early childhood applying the results of training, workshops, etc. in early childhood teaching and 3) facilities facilities, infrastructure, locations and places that have not been adequate for use in teaching and learning, 4) Limit age and time of appropriate gadget usage 5) Positive impact of gadget usage, one of them as educator means 6) Negative impact of gadget usage 7) Role of parent in accompanying child in digital era.

Keywords: Challenges Education, Globalization, Early Childhood

## Introduction

Since the fall of the New Order's regime, Indonesia has undergone changes in its political, economic and social structures. Many have argued that the country is now moving towards a democratic society as there now exists greater freedom of speech, more calls for governmental transparency and accountability ( Brenner,2011) and a marked shift from centralisation to decentralisation . The country has also experienced rapid economic development and growth . It is without any doubt that the neoliberal economic policy that emphasises the country's development, in terms of economic and gross domestic product per capita is evident. Unfortunately, the economic distribution is unequal, and thus, while some groups can have access and benefits from it, others have in fact been marginalised.

The process of change is taking place in every field including education, which during the New Order government was characterised by a top-down policy whereby the government set the curriculum for all schools. In addition, schooling was also used by the government as an

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apparatus through which the state ideology Pancasila was promulgated. With the fall of the New Order government, the value of Pancasila was then questioned and contested (Amirrachman,2012). Education was no longer centralised. In the post-New Order government, several new education laws were passed. Law No.20 (2003) and government regulation No.19 (2005) provide a space for decentralisation by allowing each school to develop its own local curriculum, a curriculum which is based on local diversity.

The governments in many countries have realized the impact of early childhood education in improving children’s academic outcomes and life chances (Hedges, et al. 2016:50). Although it is not mandatory in Indonesia, there are various skills which children can learn in this stage. Typically, early childhood education would provide young children with social skills such as sharing, turn taking, and tolerating others. Early childhood education provides early interventions for young children, which would establish social competence and thus ensure positive developmental trajectory if delivered effectively (Garbacz, 2015:151). Early childhood education might also increase language acquisition experiences such as comprehending and completing tasks, as well as listening and speaking skills. Those skills are not necessarily academic; however, they contribute to the child’s readiness to achieve success in the elementary school. With the increasing awareness of the importance of early childhood education, the government of the Republic of Indonesia has issued several public laws to support equal opportunity for all citizens to receive proper and appropriate education. The Minister of Women Empowerment and Child Protection of the Republic of Indonesia has issued the Ministerial Regulation which protects the rights of children with special needs, even starting from the gestational period (PPPA no.4, 2017). The government also protects the rights of individuals with disabilities against discrimination, including their basic needs such as education (Laws of the Republic of Indonesia no 8 of 2016). Those public laws strive to ensure the protection of the civil rights and education for the diverse population of children in Indonesia. There needs to be changes in teaching processes, especially in serving the families of young children with special needs in inclusion settings. Regardless of the socioeconomic status of the parents, teachers still need to make efforts to involve parents in the children’s education process and to communicate well with the caregivers (Ankrum, 2016:170). If teachers understand the students’ families, according to Podmore et al. (2016) in Hedges et al. (2016:51), they can serve better in terms of developing educational programs which might improve the children’s learning, languages, identities, and culture In this case, both parents and teachers need to show more trust, understanding, commitment to communicate, and mutual respect (Steeley and Lukacs, 2015:22).

Early childhood education is one form of education that focuses on the basic laying of the growth and development of both motor coordination (smooth and rough), emotional intelligence, multiple intelligence (spiritual intelligence). As the Prophet said in His hadith narrated by Imam Buchori and Muslim states that "Every child is born in a state of fitrah depending on how his parents make the child as a Christian or a moslem. The child can be illustrated as an asset that must be prepared so that in the future the child can be as expected. Children also serve as the next generation of the nation's leadership relay. Leaders who will hold the fate of the nation towards the direction they want.

First and foremost, children's education is within the family. According to Deliati (2022) stated that “the family also has a very important role for the growth and development of a child's personality. Most of a child's time is spent with his family while the time at school is not more than 8 hours. Therefore, the family becomes a decisive place in shaping the child's


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personality.The family is also the smallest institution in society that functions as a vehicle for realizing a peaceful, safe, peaceful, and prosperous life in an atmosphere of love and affection among its members.Every parent wants the best for their children. In addition to the family, the school plays an important role in building children's independence, and the community also contributes to the development of children. Early childhood education should be able to provide a good and comprehensive service. This is expected to help optimize the potential of all children.

**Educational Challenges**

Globalization is something that can not be released in the current era. Although there is no single sense in explaining what is globalization but at least in terminology the word globalization can be defined as a worldwide process. The word globalization originated from the word globe which means world and global means worldwide. From the above view can be understood in a simple way globalization is the era of tadarinpa boundary marked by changes in social structure in society. The change is evident from the high linkages between communities and the elements that occur due to tranculturation through rapid technological and communications developments. The flow of globalization is also interpreted as a worldwide movement that affects the formation of systems and values of life that inevitably must be faced. There are three emphases as keywords in the face of globalization, among others, namely: 1) Deterritialization which means geographical boundaries nullified or no longer play a role and no longer determine in trade between countries, 2) Transnationalisme is - geographic boundaries such as blocks, 3) Multilocal and translocal, where globalization provides an opportunity for humans in different parts of the world to open the horizon of life as wide as the world, without losing its locality.

Departure from the above explanation of course globalization is an inevitable necessity for those who expect a progress. The presence of globalization demands a fundamental change for every individual in view of the flow of globalization as a matter of necessity not as a threat. In response to the challenges of globalization, it takes human resources that are characterized by reliable and highly competitive. To make it happen then this is where education must present themselves as part of the challenge of globalization. Education is challenged to be able to educate and produce highly qualified graduates (qualified) is not exactly sterile in the face of the onslaught of various progress dynamics of globalization.

The presence of globalization is a big challenge for education. Some of these challenges, according to Khaerudin Kurniawan (1999) in Arifin (2000) are: 1) challenges to increase added value, that is how to improve national work productivity and growth and equity of the economy as an effort to maintain and improve sustainable development; 2) comprehensive research into the era of reform and transformation of community structures, from traditional agrarian societies to modern society-industrial and information-communication, and how the implications for the improvement and development of the quality of life of human resources, 3) the challenges in increasingly fierce global competition, the competitiveness of nations in producing quality creative works as a result of thought, discovery and mastery of science, technology and art, 4) the challenge to the emergence of new invasions and colonialism in the field of science and technology, vasi and colonialism in politics and economics.

Schools as educational institutions are required to be able to print quality generation in accordance with some of the challenges of globalization above. Educational institutions

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should be able to prepare graduates who are ready to dive and compete with foreign workers who have entered the global market today. When this can be realized then the educated unemployment rate that happens today can be suppressed gradually.

The orientation and education system needs to be seriously disentangled. There are several aspects that become the focus of education today include: 1) education should be directed to the process of high skill formation for learners. Therefore, in the process of learning is required balance of learning-based and theory-based learning. 2) The learning process should prioritize student based learning (student center oriented).

Many schools in Indonesia in recent years began to globalize in the school's internal education system. This is seen in schools known as bilingual school, with the introduction of foreign languages such as English and Mandarin as compulsory school subjects. Besides the various levels of education ranging from high school to college both public and private that opened the international class program

The globalization of education is done to address the increasingly stringent market demand for quality labor. With the globalization of education, Indonesian workers are expected to compete in the world market. Especially with the implementation of free trade, for example within the scope of ASEAN countries, inevitably the world of education in Indonesia must produce graduates who are ready to work in order not to become "slaves" in their own country.
Competition to create a strong Country, especially in the economic field, so it can enter the ranks of the world's giants of course desperately need a combination of the ability of the brain accompanied by high creativity skills. One of the keys is the globalization of education combined with the cultural richness of the Indonesian nation. In addition, the improvement of education quality should be in harmony with the condition of the Indonesian people who are below the poverty line. In this case, to enjoy education with good quality of course requires a considerable cost. Of course, this becomes one of the causes of education globalization has not been felt by all circles of society for example to be able to enjoy the international class program at the leading universities in the country require funds more than 50 million rupiah.

Technological advancement due to the rapid flow of globalization, changing the pattern of teaching in the world of education. Classical teaching is transformed into new technology-based teaching such as internet and computer. In the past, the teacher wrote with chalk, now there is a computer, so writing, movies, sound, music, live images, can be combined into a communication process.

The negative impact of globalization on education in Indonesia is as follows:

A. Commercialization of Education

The era of globalization threatens purity in education. Many established school premises main purpose as a business medium. John Micklethwait illustrates a story of business competition that began to reach the world of education in his book "The Perfect Future", that the arrival of educational companies marks the approach back into the future.

B. The Dangers of the Virtual World

Virtual world other than as a means to access information easily can have negative impact for students. There are many kinds of materials that have negative influence on the internet. For example pornography, hatred, racism, crime etc.This is very dangerous in teaching and learning process.

**Discussion**

Child education should be started in the womb. In this period the mother can talk to the fetus in the womb, playing the holy verses of the Qur'an or playing music. The Law number 20 of 2003 on the National Education system mandates the importance of the handling of early childhood education. Efforts to handle early childhood education as one of the efforts of human resource development strategy is considered as a central point and very basic and strategic. No wonder the government is very aggressive campaigning on the importance of early childhood education in the community. Not only stop there, the government in this case National Education Minister encourage and facilitate the construction of PAUD posts at the level of citizen assosiation to accommodate children of early age that have not been handled by early childhood education institutions that exist, both the play group and kindergarten, for various reasons. Could be due to the high cost of schooling in early childhood education institutions, as well as because there are no early childhood education institutions.

When this PAUD post was proclaimed by the government, there was a high expectation of the presence of the ECD post. Post PAUD is expected to be able to serve as a vehicle to serve the needs of early childhood will be a place to play, learn and perform activities that stimulate children's intelligence and growth optimally. Many obstacles that must be faced by PAUD post in carrying out duties and obligations as planned. The establishment of PAUD post does not seem to be preceded by adequate socialization and prepares adequate human resources. So often only rely on housewives and volunteers who do not have enough ability to handle early childhood. Because it is voluntary, learning at PAUD post was just just got it. Consistency and routine are often ignored. Though the early age is the golden period, where this period is a good time to provide good habits in children, introducing discipline and integrity. Early childhood is a crucial period, in which children absorb a lot of very much and quickly whatever they see, hear and feel. And usually what they absorb in this period, will settle and stick in their memories almost all their lives. Handling, treatment and improper stimulation of these children, can even be very detrimental to their physical, mental and intellectual development

The government has been trying to improve the competence of PAUD school teachers with various trainings, workshops, training and so on. Thus, training has not been absorbed optimally, even no longer touched after the event is over. Not yet implemented improved service quality in PAUD post. So the standard of competence of early childhood educator in the regulation of national eduacation minister number 58 has not been fully fulfilled.

Some PAUD posts are staffed by passionate and willing volunteers / educators working to improve the quality of their own services and competencies. The government needs to conduct a survey or research to find out the extent of effectiveness for early childhood so that effective steps can be taken as future improvements.

In addition to issues of educator competence and service quality, place and location is a separate issue to be considered. Many PAUD posts only occupy the terrace of the Citizen Assosiation chairman's house, or borrow a schoolyard, or citizen's yard, making it very inadequate to use as a place of learning. This poses other difficulties, on the administrative

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order, the storage of the equipment, as well as the continuity of the service. Therefore, cooperation between the community and the government is needed.

Although it aims to facilitate humans, devices or gadgets are devices whose use should be restricted. Therefore, the tool can be addictive that will affect the body system. Child and family psychologist Ajeng Raviando said the restrictions need to be done from an early age. Since the first time the gadget is given to the child, the parent must already know the limits. Research shows, gadgets should not be given to babies. Children 0-2 years old should not be introduced first on the gadget. There are blue rays from the gadget screens that are harmful to their brain development. Not only mobile phones or tablets, computers and televisions also include electronic devices that should be limited use.

For example, for children aged 2-6 years, the use of gadgets is only allowed a maximum of 1 year. Ajeng explains, children who are still in growth under 6 years still need the development of a system of motor rough and smooth very much. In fact, if we play gadgets we do not know how to move, children aged 6 years still have to develop a rough motor system such as walking, running, playing, physical activity, so the use of gadgets must be very limited," said Ajeng told Liputan6.com, some time ago in Jakarta.

For children over 6 years old, the use of gadgets should only be 2 hours maximum per day. In this way, children can be trained to take advantage of 2 hours of time to use gadgets as well as possible. Meanwhile, if the child has reached schoolage then it may be more difficult to be limited too narrow. Because, it could be children need a gadget to do the task. However, at least there are rules that bind children to limit the use of gadgets. Gadgets are the result of today's technological advances that can benefit not only by adults but teenagers, children, and even more gadgets are no longer foreign stuff for young children who should not be worthy of using gadgets. The form of a very thin and attractive gadget and its diverse applications make every parent think "instant" in educating their children so that parents often provide gadget facilities for the media in educating their children. Early childhood is the future assets of a nation that must be considered in every period of development so that the role of parents and institutions of early age education in educating young children.

How when gadgets are used early childhood? Gadgets are more suitable for developing a mind, idea, business, and lifestyle of teenagers or parents who have special needs in their use. But in modern times as it is now impossible to keep children from the media information and technology increasingly sophisticated. So as to reduce the number of children to stutter the technology. This does not mean letting children play more because they are interested in the diverse images and sounds of gadgets. Early childhood should play with peers, socialize with the environment where he lives. Ease of use in the form of gadgets and applications in the form of games and or websites has given freedom to early childhood to be free to get things that should not be deserved they get diusianya. This situation provides various benefits to facilitate a child to hone creativity and intelligence of the child. Various applications such as coloring, learning to read, and writing letters give a good impact on the development of the child's brain. Simply use the gadget as a fun learning tool. Children are more eager to learn because this kind of app has an interesting animation, bright colors, and a cheerful song track. On the otherhand the continuous use of gadgets to addicted gadgets give a bad influence for the development of early childhood psychological. Before knowing the psychological impact that occurs in children, as parents should know whether during this child has been addicted to gadgets. What are the signs of early childhood addiction gadgets?

- The child has begun to lose the desire for activity
- Talking about technology continuously
- Often refutes a command if it prevents itself from being able to access the gedget
- sensitive and irritable, causing a fickle attitude
- Selfish, hard to share time with others.
- Often lie because can not get out of gadget.

Disruption of psychological development from various sides will occur when an early child is already addicted in the use of gadgets. Starting from the physical-motor development, the child becomes lazy to move and beraktivitas that adversely affect the health and development of the child's body. An early child should play with peers to socialize and get to know the surroundings and show his ability. As well as children it becomes more difficult to concentrate in the real world because it is accustomed to living in the world of technology so as not to get used to talking with the surroundings. Parents play a leading role in early childhood education. Parents should be more creative in educating children, providing play and learning facilities and other media more healthier than child's growth. So, playing outside the home is much better than the silence is focused on the gadget. Therefore, the role of parental supervision becomes an obligation that must be fulfilled. Parents should assist and guide their children while using information and technology media. In addition, the usage time limit must be determined in a disciplined manner so that the child does not experience dependency that causes a negative impact on the child. (Crain, 2014)

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# READINESS OF EDUCATIONAL PROGRAM STUDENTS TOWARDS ENTREPRENEURSHIP COURSES

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## ABSTRACT

Education needs to be implemented to ensure that students are exposed to knowledge, skills and benefits in the field of entrepreneurship and a mindset shift from job seeker to job creator. Educational institutions as entrepreneurship development centres need to play a large role in fostering an entrepreneurial environment that combines factors that contribute to the development of entrepreneurial values. This study aims to identify the relationship between Entrepreneurship Knowledge and Skills with Student Readiness in the Education program for Entrepreneurship Courses. The quantitative research approach in this study is in the form of correlation. The population of this study is 148 Bachelor of Education students at Universiti Utara Malaysia. A purposive sampling technique was used to select the study sample. This study uses a questionnaire adapted from previous studies. The Entrepreneurial Knowledge and Skills instrument has a Cronbach alpha coefficient value of 0.89 and the Student Readiness instrument of the Education program for Entrepreneurship Courses has a Cronbach alpha coefficient value of 0.91. The data collected was analyzed using descriptive and correlational statistics. The findings of this study show that the level of readiness of Education Program students for Entrepreneurship Courses is high. The findings of the study also show that there is a significant relationship between Entrepreneurial Knowledge and Skills with Readiness of Education Program Students for Entrepreneurship Courses. This finding explains that the university needs to organize various activities to increase students' readiness for entrepreneurship.

Keywords: Student Readiness, Entrepreneurship, Knowledge, Skills, Education

## INTRODUCTION

Entrepreneurship Education is very important to provide exposure to the field of e-Entrepreneurship and shift the mindset from job seeker to job creator. The Global

Entrepreneurship Monitoring Report (GEM, 2013) shows that 41.8% of Malaysians consider entrepreneurship as a good career choice. According to the Malaysian Productivity Corporation (MPC, 2015), the majority of Higher Education Institutions have made entrepreneurship development and education one of the main agendas and performance indicators of their respective institutions. The National Entrepreneurship Policy and the IPT Entrepreneurship Action Plan 2021-2025 have a positive impact on the readiness of students to venture into entrepreneurship. This is further explained by Iklima Husna, Marry, Ahmad Shakani and Sharon (2020) and Farhana (2013) who found that the field of entrepreneurship is said to be important to produce more entrepreneurs who have the knowledge and skills to do business.

Graduates produced from Higher Education Institutions (HEIs) are formed and educated as job creators. It is consistent with the report Economic Development Collaborative (2023), that entrepreneurship should get all the support it needs because it contributes to job creation. Students need to act more entrepreneurially towards funding sources of higher education to reduce dependence on government resources. IPT has an important role in promoting entrepreneurship among students (Iklima Husna, Marry, Ahmad Shakani & Sharon, 2020).

Universities as centres of entrepreneurship need to play a major role in fostering an e-Entrepreneurship environment. The readiness of university students towards e-Entrepreneurship plays an important role for a student to get involved in the field of e-Entrepreneurship (Norain et al., 2019). Students' readiness for e-Entrepreneurship is a mental orientation such as the desires, aspirations and expectations of students that can influence the choice of e-Entrepreneurship field. The e-Entrepreneurship skills help students to strive to learn something, either through experience or formal learning to help students build entrepreneurial behaviour (Norhaidah et al.2022).

Since 2010, higher learning institutions that offer educational programs have been asked to start offering programs on an open-market basis. An Open market is no guarantee for appointment as an education service officer (teacher) under the MOE after graduation where graduates of the Education program are no longer absorbed into schools automatically as before. Therefore, an initiative to implement a program that can prepare students for educational programs must be implemented to ensure that students have exposure to knowledge, skills and benefits in the field of entrepreneurship. The application of an entrepreneurial mindset in the education system is important to produce graduates to become entrepreneurs (Norhaidah et al., 2022; Iklima Husna, Marry, Ahmad Shakani & Sharon, 2020).

In line with that, the School of Education (SoE) together with the Institution of Entrepreneurship and Cooperative Development (CEDI), Universiti Utara Malaysia (UUM) has developed an entrepreneurship module to provide exposure to students of e-Entrepreneurship knowledge and skills. The one-year workshop provided exposure to the Entrepreneurship Module and the use of digital tools to follow the module online, online industry training, running a business and online business promotion.

Preliminary data collected in March 2020 showed that 62 students were interested in getting involved in the entrepreneurship program that was introduced by SoE and CEDI, UUM. The program was developed to open the minds and opportunities to selected students to enter the field of entrepreneurship since university and further expand their business after graduation

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from university. However, after 6 months of the program, it was found that the number of students was decreasing. Only 20% survive to remain in the program.

Concerning the Higher Education Institutions Entrepreneurship Action Plan, Malaysian Education Development Plan 2015–2025 (Higher Education) Leap 1, the university agenda, CEDI and the programs that have been carried out together with the Bachelor of Education program structure that have been built in parallel to ensure that the university can produce graduates who are holistic, balanced and entrepreneurial. However, the question is whether the students of Bachelor of Education from SoE, UUM are ready to get involved in e-Entrepreneurship organized either by CEDI or by SoE. Indirectly, the objective of this study was to identify the relationship between Entrepreneurial Knowledge and Skills with Readiness towards e-Entrepreneurship.

## RESEARCH OBJECTIVES

i. Identify the level of Readiness towards e-Entrepreneurship.
ii. Identify the relationship between Entrepreneurial Knowledge and Skills with Readiness towards e-Entrepreneurship.

## LITERATURE REVIEW

### Entrepreneurship Education

Entrepreneurship education has been defined as a lifelong learning process to acquire entrepreneurial knowledge, skills and values of all activities performed by entrepreneurs through formal or informal teaching or learning to build individual entrepreneurial potential through the implementation of entrepreneurship curriculum and teaching and learning activities (Norain et al., 2019; Nor Aishah, 2006). According to Nor Aishah (2006), the entrepreneurship education curriculum is based on five main pillars namely the formation of entrepreneurial attitudes and characteristics, the formation of entrepreneurial thinking, business management skills, vocational formation and ethical practices and entrepreneurial morals. While Nabi and Holden (2008) argue that entrepreneurship, education is a lifelong learning process that starts from primary school to various levels of education. Roffe (1999) also stressed that entrepreneurship education cannot use a stagnant perspective because the field of entrepreneurship is a dynamic process.

The problem of unemployment nowadays can be overcome by making entrepreneurship a career where this is a potential opportunity to be explored (Norhaidah et al., 2022; Barnett, Byrd & Wieder, 2013). The approach used to achieve the goal of creating a Malaysian society with an entrepreneurial culture is through entrepreneurship education in IPT, which aims to provide awareness, entrepreneurial knowledge and skills (Armanurah, 2014). Therefore, it will be able to cultivate an entrepreneurial culture among graduates and change the mentality of students towards self-employment (Farhana, 2013) from working with others. In addition, entrepreneurs can be educated through the development of a comprehensive entrepreneurial ecosystem in public universities (Report of the Vice Chancellor of UMK, 2010). Furthermore, it can reduce unemployment among IPTA graduates. It can also help graduates apply what they have learned or new fields they want to explore through careers they have built themselves.


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**Entrepreneurial Knowledge**

Students who have entrepreneurial knowledge can think at a high and complex level patiently learn something, and have the ability to deal with complex and ambiguous matters effectively (Iklima Husna, Marry, Ahmad Shakani & Sharon, 2020; Armanurah, 2014). The willingness of entrepreneur's willingness to learn is influenced by the value of the utility of knowledge that is sought which encourages a person to obtain knowledge and skills that are considered useful to himself and the business he will venture into (Norashidah, Norasmah, & Noraishah, 2009).

**Entrepreneurial Skills**

Entrepreneurial skills required by entrepreneurs to conduct business activities are entrepreneurial abilities (Binks et al. 2006). Aspects of knowledge and skills when combined with aspects of desire will be able to form an effective behavior. As such, entrepreneurs always strive to learn something, either through experience or formal learning to help them build entrepreneurial behavior.

**Student Readiness towards e-Entrepreneurship**

The readiness of students for the e-Entrepreneurship plays a very important role for a person to get involved in the field of entrepreneurship. Students' readiness towards e-Entrepreneurship can be defined as mental orientation such as desires, aspirations and expectations that can influence one's entrepreneurial choices (Zhenxia Peng, Genshu Lu & Hui Kang, 2012). It is supported by the study of Ahmad Firdaus, Mohd Khatta and Dayana Farzeha (2014) that students 'readiness towards entrepreneurship describes a state of mind that initiates people to choose from self-employment instead of choosing salaried jobs. Therefore, it can be concluded that the readiness of students towards entrepreneurship is the thoughts and desires of a person in venturing into business as their career.

**Rogers Diffusion Theory (2003)**

According to Rogers (2003), an individual's acceptance of the innovations or programs introduced is not the same. Acceptance of an innovation/program is greatly influenced by personal characteristics as well as the individual's background on the extent to which they are willing to accept the innovation/program. According to Rogers (2003), there are five levels of recipients of innovations/programs, namely pioneers (innovators) (2.5%), early adopters (13.5%), early majority recipients (early majority) (34%), late majority recipients ( late majority) (34%) and laggards (16%). Overall, Rogers's Theory (2003) discusses in depth how something new whether in the form of ideas, technologies, goods or techniques develops in a wide range of audiences until it is fully accepted and practised by society.

## RESEARCH METHODOLOGY

This study uses a quantitative approach in the form of correlation. The study population was Bachelor of Education students. The purposeful sampling technique was used to select the

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study sample. The 148 students were involved as the study sample. Questionnaires were used as the main instrument in this study. The questionnaire form adapted from Harris et al. (2007) and Mohd Noor et al. (2006) contained 70 items. The instrument of Entrepreneurial Knowledge, Skills and Readiness for e-entrepreneurship has a high Cronbach alpha coefficient value of 0.89 and 0.91, respectively. The collected data were analyzed using descriptive statistics (percent & min) and inferential statistics (Correlation).

## FINDINGS AND DISCUSSION OF THE STUDY

### Respondent Demographic Findings

**Table 1: Gender of Respondents**

| Gender | Frequency (n) | Percentage (%) |
|---|---|---|
| Male | 33 | 22.3 |
| Female | 115 | 77.7 |
| Total | 148 | 100 |

The findings of this study (Table 1) show that out of 148 respondents involved in this study, it was found that the majority of respondents are female students. The distribution shows that female respondents are 115 people (77.7%) while males are only 33 people (22.3%).

### Readiness for e-Entrepreneurship

**Table 2: Level of Readiness on the of e-Entrepreneurship**

| Variable | Maximum | Minimum | Mean | SD |
|---|---|---|---|---|
| Readiness on of e-Entrepreneurship | 4.75 | 1.00 | 3.45 | 0.83 |

Table 2 shows the descriptive analysis of the level of readiness of Bachelor of Education students in e-Entrepreneurship. The findings show that the level of readiness of Bachelor of Education students in e-Entrepreneurship is high. The overall mean obtained was 3.45 (sp = 0.83). The minimum mean value of Bachelor of Education Students' Readiness for e-Entrepreneurship is 1.00, while the maximum value is 4.75.

### The Relationship between Entrepreneurial Knowledge and Skills with Readiness for e-Entrepreneurship

**Table 3: The Relationship between Entrepreneurial Knowledge and Skills with Readiness for e-Entrepreneurship**

| Variable | Level of Readiness for e-Entrepreneurship |
|---|---|
| Entrepreneurial Knowledge | 0.71** |
| Entrepreneurial Skills | 0.68** |

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The findings of this study (Table 3) indicate that Entrepreneurial Knowledge and Skills have a significant relationship with Readiness towards e-Entrepreneurship. Correlation coefficients indicate a high (Hall, 2004) and positive relationship exists between Entrepreneurial Knowledge and Skills with Readiness for the e-Entrepreneurship. Norazlina (2011) states that Entrepreneurial Knowledge and Skill level have a direct relationship with involvement in e-Entrepreneurship. Hamzah, Mohammad, Narimah, Norshahrizan and Ku Amir (2009) and Nor Aishah (2006) stated that the level of students' knowledge and skills in the field of e-Entrepreneurship would determine the readiness and involvement of students in the field of entrepreneurship. This reinforces the finding that the improvement of knowledge and skills also leads to an increase in readiness for the e-Entrepreneurship.

### Implications of the study

- Integration of e-Entrepreneurship across fields, programs or courses.
- Management must always be prepared to ensure that e-Entrepreneurship is available to all students and provides the infrastructure to support the start-up of a new business.

## CONCLUSION

The COVID-19 pandemic situation is a trigger to the readiness of students to face the challenges of engaging in digital entrepreneurship. The explosion of technological changes associated with the Industrial Revolution 4.0 also forced students to equip themselves with digital technology knowledge and skills. Therefore, through the programs that have been implemented, the findings of this study explain that students need to be given more exposure to aspects of e-Entrepreneurship to improve their knowledge and skills and be ready to venture into the field of e-Entrepreneurship.

The university needs to hold various activities, training, workshops and courses on an ongoing basis to provide exposure to students on e-Entrepreneurship to increase Readiness towards e-Entrepreneurship. When such entrepreneurship programs are implemented comprehensively, consistently and continuously at the school level and lecturers play an integrated role in incorporating the various elements of e-Entrepreneurship in the courses coupled with support and encouragement from the university entrepreneurship centre and MOHE, there is a desire to produce students. Which is competitive, holistic, balanced and entrepreneurial as stated in the National Entrepreneurship Policy and the IPT Entrepreneurship Action Plan 2021-2025 can be achieved successfully.

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**087-077**

# LEARNING MANAGEMENT BASED ON BLENDED LEARNING AMONG STUDENTS

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## ABSTRACT

In line with the implementation of the National e-Learning Policy (Depan) (2011), higher education institutions have emphasized learning through the Blended Learning mode. Learning through Blended Learning mode is learning that combines traditional methods and online methods (e-learning). This study aims to identify the relationship between Learning Management System (LMS) Design and Interactive Content with Learning Management based on Blended Learning. The quantitative research approach in this study is descriptive by using the survey method. The population of this study is 105 Master of Education students. Purposive sampling was used to select the study sample. Questionnaires are used as the main research instrument to answer the research questions. The items for the questionnaire were adapted from previous studies and have a high reliability of 0.85. The data collected was analyzed using descriptive and inferential statistics. The findings of this study show that the level of Learning Management Based on Blended Learning is at a high level. The findings of the study show that there is a significant relationship between the LMS Design and Interactive Content with Learning Management based on Blended Learning. This finding explains that online teaching planning needs to focus on LMS Design and Content factors to improve Learning Management based on Blended Learning.

Keywords: Blended Learning, Design, Interactive Content, Learning Management, Learning Management System

## INTRODUCTION

The Malaysia Education Development Plan (Higher Education) 2015-2025 was launched in 2015. The plan contains 10 major Shifts and one of the Shifts is Globalized Online Learning. The shift explains that the integrated learning model (Blended Learning) will be the main

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pedagogical approach of all Institutes of Higher Learning. This situation makes e-learning an important component of higher education.

Blended Learning has created a learning environment that contains the attributes of learning through virtual reality, online content, collaborative, assessment and online reference materials. The characteristics of Blended Learning are the transition from lecturer-centred learning to student-centred learning, increased interaction between students and lecturers, fellow students, students and content as well as students and information (Anthony et al., 2022; McDowell, 2020). Learning Management based on Blended Learning is an effective combination of delivery methods that can enrich the learning environment and serve to support students' self-learning style (Adzhar et al., 2020). The content of the Learning Management System (LMS) related to teaching materials and activities provided is clear and easy to understand and the activities provided promote an active and interactive teaching and learning process by using various Web 2.0 Tools in the UUM Online Learning platform.

Thus, Blended Learning is an effective combination of delivery methods that can enrich the learning environment and serve to support students' self-learning style (Suganti & Khairul, 2022). According to Anthony et al. (2022) and Starr (2011), good use of Blended Learning in the classroom allows instructors to tailor learning to students 'needs and even optimize time in turn giving instructors more time for projects, one-on-one coaching, and more activities that are creative. The advantages found in face-to-face learning and e-learning have been applied in Blended Learning to ensure successful learning to achieve goals (Amrien Hamila & Mohamed Amin, 2016). Izudin Syarif (2013) reported that there was an increase in motivation and performance because of the application of Blended Learning. Gecer and Dag (2012) stated that students recognized that Blended Learning supports active learning and the use of online materials is interesting.

A large number of students agreed with the use of the Blended Learning approach that this method has allowed them to further explore other reference materials and sources, deepen lessons, have extensive knowledge of the topic and related topics, increase student constructivism and improve student understanding. In addition, this critical thinking also helps students to analyze statements and find solid evidence before making any decision (Ungku Khairul Fadzli, Muhammad Syafiq & Izzati Firdiana 2020; Mohd Sani, 2017; Nurul Nadirah & Fariza, 2016).

Thus, this study aims to explore the level of Learning Management based on Blended Learning among Master of Education students to identify the relationship between LMS Design and Interactive Content with Learning Management based on Blended Learning.

## RESEARCH OBJECTIVE

i. Identify the level of Learning Management based on Blended Learning.
ii. Identify the relationship between Interactive LMS Design and Content with Learning Management based on Blended Learning.


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## LITERATURE REVIEW

### Learning Management Based on Blended Learning

The Blended Learning approach also allows instructors or lecturers to implement effective teaching and learning through pre-class or lecture planning. Blended Learning allows for more in-depth and meaningful interaction between students and lecturers and between students and students compared to face-to-face learning, especially in the culture of Malaysian students who do not like to ask questions during lectures (University Teaching and Learning Center (UTLC), 2013). This concept also supports the statement by McDowell (2020) and Mosa, Yoo and Sheets (2011), where there are two main elements mixed in the concept of Blended Learning, which is learning in the classroom with online learning.

Effective learning through Blended Learning can have a huge impact on students because the knowledge gained can be utilized for a long time, and not just used to face exams and continue to be forgotten after the end of the learning session (Suganti & Khairul, 2022; Faustino & Kaur, 2021). In addition, existing conventional learning is said to be more lecturer-centred and does not encourage the active involvement of students in the teaching and learning process. The Blended Learning approach causes students to lose interest and become passive as well as resulting in the teaching and learning process in the lecture room becoming one-way communication and boring (Zuraidah, 2011).

### LMS Design

A study by Rosnaini et al. (2007) explained that the appropriate presentation design for LMS affects user satisfaction. The Pearson Correlation value between presentation design and user satisfaction is 0.678. The results of the study show that for LMS to give a good visual impact to users, screen design plays an important role. In screen design, the findings of the study show that text size, background colour, graphics loaded on the screen, audio used and video used affect user satisfaction in using LMS. The results of this study show that multimedia presentations in the form of songs, sounds and animations affect user satisfaction with an LMS.

Studies also show that good interaction design for LMS affects user satisfaction. The Pearson Correlation value between interaction design and user satisfaction is 0.675. Interaction design ensures that users can access information easily and can easily explore the LMS. The results of this study show that to build an interaction design of an LMS that can be well received by users, several things need to be paid attention to, namely the button design must be consistent and easily identifiable by users, access to appropriate information on each designed screen, users to return to the original information after being on another screen, and the user to exit the screen at any desired time.

### Interactive Content

Interactive Content refers to lessons and academic content taught in a school or university in a particular course or program. Interactive Content also usually refers to the knowledge and skills expected to be learned by students that include learning standards or learning objectives, teacher-taught units and lessons, assignments and projects assigned to students,

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books, materials, videos, presentations, and readings used in the course, as well as tests, assessments, and other methods used to assess student learning.

Each content should be compiled based on the course syllabus. A study conducted by Wan Mohd (2001) found that 35% of respondents strongly agree and 65% agree that interactive teaching modules that meet the curriculum content of a subject are suitable as a medium for teaching and learning. Therefore, the content of an LMS developed for teaching and learning purposes must be guided by the syllabus and learning objectives set because the teaching process will be more interesting, focused, structured and on time.

A large number of students agreed with the use of the Blended Learning approach that this method has allowed them to further explore other reference materials and sources, deepen lessons, have extensive knowledge of the topic and related topics, increase student constructivism and improve student understanding. In addition, this critical thinking also helps students to analyze statements and find solid evidence before making any decision (Nurul Nadirah & Fariza, 2016).

### Technology Acceptance Model (1989)

The Technology Acceptance Model (TAM) was developed by Davis (1986) and introduced by Davis, Bagozzi and Warshaw (1989). This model is an adaptation of the Theory of Reasoned Action. In TAM, there are two important constructs involved in the acceptance of information technology, namely the perception of usefulness (perceived usefulness) and the perception of ease of use (perceived ease-of-use). TAM emphasizes that the intention to use a system is determined by both perceptions of usefulness and perceptions of ease of use.

## RESEARCH METHODOLOGY

This study uses a quantitative approach that applies survey methods. The study population was Master of Education students and purposive sampling was used to select 105 Master students as the study sample. Questionnaires are the main instrument of this study. The items for the questionnaire were adapted from Level of Technology Integration (LoTi) (Moersh, 2001), and Abdul Rasid and Norhashimah Shamsudin (2012). The items for the questionnaire adapted from previous studies have a high level of reliability of 0.85. The collected data were analyzed using descriptive and correlation statistics.

## STUDY FINDINGS AND DISCUSSION

**Table 1: Gender of Respondents**

| Variable | Frequency | Percentage (%) |
|---|---|---|
| Male | 32 | 30.5 |
| Female | 73 | 69.5 |
| Total | 105 | 100.0 |

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Table 1 shows that 105 Master of Education students were involved as respondents in this study. Female students are the majority of respondents in this study, which is 69.5%.

### Management of Blended Learning

**Table 2: Level of Learning Management based on Blended Learning**

| Variable | Mean | SD |
|---|---|---|
| Learning Management based on Blended Learning | 3.81 | 0.493 |

Based on Table 2, it is found that Learning Management based on Blended Learning is at a high level because the mean score value is 3.81. The mean score at the level of Learning Management based on Blended Learning is between a mean score of 3.67 to 5.00. Thus, Blended Learning is seen to be able to meet the self-learning needs of students and contribute to meaningful learning. This situation may be due to students being confident to manage learning by using Blended Learning.

### The Relationship between LMS Design and Interactive Content with Learning Management based on Blended Learning

**Table 3: The relationship between LMS Design and Interactive Content with Learning Management based on Blended Learning**

| Variable | Learning Management Based on Blended Learning |
|---|---|
| LMS Design | .71* |
| Interactive Content | .58* |

LMS Design and Interactive Content have a significant relationship with Learning Management based on Blended Learning as well and the relationship is positive and moderate (Interpretation of Correlation Coefficients proposed by Guildford (Hall, 2004)). These findings explain that teaching materials that have appropriate Interactive Content also have a high level of Learning Management based on Blended Learning. Zakiah (2012) found that there is a significant relationship between the levels of student acceptance with the use of Blended Learning for the FP101 course, which is the Basic Programming course. The findings of this study explain that students are interested in following Learning Management based on Blended Learning because the content is clear and easy to understand.

### Implications of the Study

- Assist lecturers in providing better quality teaching aids so that the online learning environment is more attractive and effective.
- Students need to be given continuous training to further improve the management of Blended Learning.

## CONCLUSION

Overall, the findings of this study indicate that there is a significant relationship between LMS Design and Interactive Content with Learning Management based on Blended Learning among Master of Education students. The findings of this study have also had positive implications on the level of Learning Management based on Blended Learning. Blended Learning is seen to have great potential in the field of education. The integration between face-to-face learning and e-learning gives students and teachers more choice in the teaching and learning process. The findings of the study clearly show that most students know and are sensitive about the concept of Blended Learning and accept this form of learning. Students also know the benefits or benefits they get from Blended Learning compared to conventional methods.

Therefore, continuous efforts need to be made to further encourage the development of learning modules based on Blended Learning with emphasis on the quality of Content. University management needs to develop an orientation development program for students on the importance and advantages of using Blended Learning in the management of student learning. The construction of effective information technology infrastructure such as the use of good servers, speed of internet browsing, adequate computer and internet facilities and other ICT-related facilities needs to be improved.

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**099-088**

# INVESTING IN THE FUTURE OF REFUGEE CHILDREN IN MALAYSIA THROUGH EDUCATION

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**ABSTRACT**

Malaysia, despite not being a signatory to the 1951 Refugee Convention, is home to a substantial refugee population who has limited access to education, particularly children. The plight of refugee children in Malaysia presents a complex and pressing challenge with far-reaching implications for the nation's future. The education of refugee children is a crucial issue affecting both the host nation and the children personally. This study looks at the general situation of education for refugee children with particular consideration to existing problems, possible solutions, and the wider implications for human rights and social integration. It begins by exploring the current educational landscape for refugee children in Malaysia, highlighting the barriers they face, especially zero access to formal education, financial constraints, and the absence of a standardised curriculum. It then emphasises how crucial education is for developing self-reliance, giving underprivileged communities more power, and advancing social cohesiveness. In identifying a durable solution to the education problem, this paper examines the long-term effects and benefits of giving refugee children in Malaysia access to high-quality education. This study finds that refugee children and the host country will benefit from formal education and concerted effort is needed to provide access to quality education.

Keywords: refugee children; right to education; refugee integration; inclusive education, empowerment

## INTRODUCTION

The plight of refugee children worldwide is a pressing humanitarian concern, with millions of young lives disrupted by conflict, persecution, and displacement. In Malaysia, a country marked by its diverse population and vibrant culture, the challenges faced by refugee children are particularly acute. These children, defined as individuals outside their country of nationality or habitual residence due to a well-founded fear of persecution (1951 United Nations Convention Relating to the Status of Refugees and its 1967 Protocol) often grapple with a myriad of obstacles to their well-being and future prospects.

Malaysia's approach to refugee protection is complex because the country is not a signatory to the 1951 Convention and its 1967 Protocol. Despite hosting a significant refugee population, refugees do not have legal recognition and formal rights in the country. Instead, the United Nations High Commissioner for Refugees (UNHCR) operates in Malaysia, providing de facto status to refugees but without legal protection under Malaysian law. This leaves almost 200,000 refugees, including 25% who are children, in a state of uncertainty

e ISBN : 978-967-2072-44-7

(Supaat, 2015; Shaw et al., 2018; Chuah et al., 2019; Kaur et al., 2020; Rajaratnam & Azman, 2022).

These refugee children come from various countries and backgrounds, each facing unique challenges and vulnerabilities. Economic insecurity, mental health issues, and legal barriers further compound their already precarious situation. Among these children, Rohingya refugees make up a significant portion and face additional hurdles such as poverty, precarious employment, and mental health challenges (Supaat, 2015; Shaw et al., 2018; Chuah et al., 2019; Kaur et al., 2020; Rajaratnam & Azman, 2022; Nungsari et al., 2020; Tay et al., 2020). Moreover, navigating the social environment and accessing comprehensive healthcare remain significant challenges for refugee children in Malaysia (Rajaratnam & Azman, 2022). These issues highlight the urgent need for targeted interventions to ensure the well-being and prospects of refugee children in Malaysia.

In this article, the crucial role of education as a cornerstone for investing in the future of refugee children in Malaysia is examined. Through an exploration of existing challenges, opportunities, and best practices, we aim to shed light on the transformative potential of education in empowering refugee children and fostering their integration into Malaysian society. By advocating for holistic approaches and collaborative efforts, we envision a future where every refugee child in Malaysia has the opportunity to thrive and make positive contributions to their communities.

## PROBLEM STATEMENT

Refugee children residing in Malaysia will greatly benefit from unobstructed access to formal education, healthcare, and psychosocial support services, as mandated by the international legal framework. However, there is a significant disparity between theory and practice. Public schools systematically exclude refugee children, informal education is limited, and accessing basic needs and essential healthcare services is challenging. Displacement and exposure to violence worsen the already precarious situation of refugees.

Addressing these pressing issues is crucial to prevent a cycle of marginalization that could impede the long-term prospects and well-being of refugee children. Neglecting the needs of refugee children results in missed opportunities for inclusive growth and understanding within Malaysian society. By ensuring inclusivity and promoting the well-being of refugee children through education, we uphold fundamental human rights and foster a more compassionate and equitable society. Providing material and financial support for education initiatives bridges existing gaps in education and well-being, paving the way for a brighter future for both refugee children and the society to which they will contribute. Fostering a more inclusive and equitable society in Malaysia requires addressing these challenges. Every child, regardless of their background or circumstances, must have the opportunity to thrive and contribute meaningfully to society.

## LITERATURE REVIEW

Malaysia currently hosts around 200,000 refugees, with children making up approximately 25% of this population. Despite the UNHCR's efforts to establish community learning centres and offer placement opportunities to almost 45% of refugee children, access to formal education remains a significant challenge.

Access to education is an undeniable human right that empowers and develops skills (Candappa, 2000; Supaat, 2015). Despite this, refugee and asylum-seeking children in Malaysia face significant obstacles in attending public/government schools and must instead rely on informal, community-based learning centres, which can present financial and regulatory challenges (UNHCR, 2023).

Refugee children face numerous barriers and challenges on their educational journey. These include ambiguity in legal status, poverty, language barriers, discrimination, and gaps in educational history. The lack of formal education not only hinders their psychosocial development but also limits their long-term socio-economic prospects.

The lack of formal education exacerbates the social exclusion of refugees and hinders their access to essential services, impeding their integration into host societies (Njororai & Lee, 2018). This exclusion disproportionately affects refugee girls, increasing their vulnerability to early/child marriages and limiting their opportunities for higher education (Arar, 2021).

Integration into formal education is a crucial policy objective for refugee resettlement. It requires engaging with receiving communities and facilitating opportunities in employment and housing (Ager & Strang, 2008; Lumley-Sapanski & Callahan, 2019).

Despite the challenges, research on the barriers, educational experiences, facilitators, and support systems for refugee children in Malaysia is lacking (Cowling & Anderson, 2021; Loganathan et al., 2022; Saleh et al., 2023; Crendy et al., 2021; Letchamanan, 2013). Thus, further investigation is urgently needed to explore the feasibility and potential impact of integrating refugee children into formal education systems.

## DISCUSSION

Addressing the educational requirements of refugee children is of utmost importance, especially considering the extended duration of refugee situations in Malaysia. Despite hosting refugees for 50 years, their legal status remains unchanged, and refugee children often find themselves at the bottom of the priority list, facing prolonged stays of about 10 to 25 years in Malaysia. It is crucial to recognize that education is not a luxury but a necessity for their survival and long-term well-being.

Education is a crucial factor in providing refugee children with the necessary skills and knowledge to improve their economic prospects (Yanay & Battle, 2021), break the cycle of poverty (McKeary & Newbold, 2010; Chen et al, 2019), and increase their chances of integrating into communities (Bajwa et al, 2017; Şafak-Ayvazoğlu & Künüroğlu, 2021).

It is clear that the financial burden faced by refugee families and the limited funding available for Community Learning Centres (CLCs) must be addressed to ensure that all refugee children have access to education. UNHCR, NGOs, and private donors partially fund these centres. However, they only cater to about 45% of refugee children, leaving a significant portion without access to formal education.

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Despite the operational costs, including rental space, school facilities, staff wages, and educational materials, CLCs remain a crucial resource for refugee children in need of education. The absence of a comprehensive framework for refugee education severely limits educational opportunities. Secondary education, vocational training, and education for children with special needs are all inadequately provided for. This lack of access to education puts female refugee children at risk of early marriages, while male children are vulnerable to human trafficking.

Integrating refugee children into formal education is imperative despite the complexities surrounding durable solutions such as repatriation, local integration, and resettlement. It is important to consider various factors, including conditions in the refugees' home country and the voluntariness of the return, when assessing the feasibility and desirability of repatriation, which is often seen as the most desirable solution. Resettlement and local integration are two alternative pathways for refugees. Resettlement transfers refugees to third countries, while local integration involves integrating them into the host community.

Local integration emphasizes the establishment of sustainable livelihoods, access to essential services, and the development of social connections within the local community. Malaysia can contribute to durable solutions and foster a more inclusive and equitable society for all by addressing the educational needs of refugee children and promoting their integration into formal education systems.

## BENEFITS OF REFUGEE INTEGRATION

Malaysia has historically provided temporary settlements for refugees, offering humanitarian refuge while awaiting resettlement or repatriation. Resettlement has emerged as the preferred solution due to the perceived difficulty of repatriation and local integration within the country. While acknowledging the challenges and limitations of local integration in Malaysia, it is imperative to recognize that refugees may spend up to 25 years in the country before durable solutions are realized. Leaving them to fend for themselves without the necessary assistance or tools is not a sustainable approach (Kirui et al., 2020).

Refugee integration benefits not only the refugees themselves but also the host country. It fosters positive effects across economic, social, and cultural dimensions. Successful integration of refugees leads to improved economic outcomes and enhanced workforce participation, contributing to overall economic growth. This is supported by research conducted by Vroome & Tubergen (2010), Herlina (2022), and Javaid et al. (2022).

Furthermore, refugee integration fosters positive relationships and understanding between refugees and the host society, leading to improved social cohesion and community relations (Khuu & Bean, 2021; Şimşek, 2018; Hellmann et al., 2021). Diverse and inclusive communities promote tolerance, enrich cultural diversity, and enhance social capital and community networks, benefiting both refugees and the host society (Martén et al., 2019; Hussain, 2019).

Moreover, refugee integration enriches the cultural of the host country by facilitating the exchange of ideas, traditions, and perspectives (Martén et al., 2019; Abramitzky et al., 2021). This cultivates creativity, innovation, and a more vibrant society, while also preserving and sharing diverse cultural heritage to enrich the host country's cultural landscape (Marshall & Begoray, 2019; Sathiyamoorthy, 2018).

Successful integration of refugees can have positive implications for their well-being. This includes ensuring access to healthcare and social support services, which can improve health outcomes and overall quality of life. Integrating refugees into the healthcare system can address health disparities and promote inclusive healthcare services, benefiting both refugees and the wider community. To summarize, the adoption of refugee integration in Malaysia not only addresses the immediate needs of refugees but also fosters a more inclusive, prosperous, and culturally rich society for all.

## CONCLUSION AND RECOMMENDATIONS

It is vital to recognize that refugee children are, above all, children, and therefore entitled to the same rights and opportunities as their peers. However, the current education provided through alternative channels falls below international standards, leaving refugee children excluded from mainstream educational frameworks and at risk of being left behind, and unable to access essential services. To tackle these inequalities and secure a better future for refugee children in Malaysia, immediate action is required.

Increasing funding and investment to support refugee education in Community Learning Centres (CLCs) and other alternative education settings is crucial. Additionally, a comprehensive education framework that caters to the specific needs of refugee children, taking into account integration into public schools as a feasible option, is urgently needed. The integration we offer promotes inclusivity and facilitates access to educational opportunities and essential services for refugee children.

In conclusion, Malaysia will undoubtedly create a more inclusive, equitable, and prosperous society for all its inhabitants by prioritising the education and well-being of refugee children. With collective action and unwavering commitment, we can ensure a brighter future for refugee children in Malaysia and empower them to realise their full potential.

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**046-039**

# A STUDY OF WAGE DIFFERENTIAL USING OAXACA-BLINDER DECOMPOSITION METHOD

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## ABSTRACT

The study of discrimination in the labour market was officially initiated in 1957. It led to several subsequent economic analyses of wage differential which adapted to different geographical and demographic settings. Many studies with the wage gap as their central focus exhibit the importance of this topic for the labour market worldwide. Wage is an important variable in microeconomic and macroeconomic because it affects economic growth and economic development. To investigate the contributing factors of wage gap in Malaysia, we adopted Oaxaca-Blinder Decomposition Method. The factors are classified into two categories, namely endowment effect and coefficient effect. Endowment effect captures productivity or observable characteristics that may define wage gap, while coefficient effect is wage structure built from discrimination or unobservable characteristics. The study utilised data from the Department of Employment Information and Analysis Services (EIAS) of the Social Security Organisation (SOCSO). The findings from this paper will be a starting point for more in-depth research on wage gap in the future. Policy suggestions will be provided for the improvement and effectiveness of current policies.

Keywords: Oaxaca-Blinder Decomposition Method, wage differential, wage gap

**066-054**

# MODEL SPECIFICATIONS IN OKUN'S LAW: A LITERATURE SURVEY

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## ABSTRACT

This article presents a comprehensive literature review of empirical studies that examine the validity of Okun's Law across various model specifications - difference, gap, dynamic, and asymmetric models. Okun's Law, a well-explored theoretical concept in economics, posits an inverse relationship between unemployment and economic output. The examination of diverse model specifications in empirical research offers a nuanced understanding of this fundamental relationship under varying economic contexts and conditions.

The difference model of Okun's Law, primarily concerned with the relationship between changes in unemployment and changes in economic growth, provides valuable insight into the immediate, real-time ramifications of economic fluctuations on employment levels. Studies employing this model exhibit a spectrum of results, shedding light on the varying sensitivity of unemployment to economic changes across different economies. The gap model, another essential analytical tool, evaluates the disparity between actual and potential output, facilitating a more longitudinal analysis of unemployment and economic growth interplay. Empirical studies utilizing the gap model contribute to a deeper, more temporally extensive understanding of the economic dynamics articulated by Okun's Law. Exploration using the dynamic model incorporates lagged variables, affording a more layered, time-sensitive examination of economic and unemployment variations. This model reflects the temporal aspects of economic adjustments and their corresponding impacts on unemployment. Lastly, the asymmetric model allows for the investigation of non-linear aspects of Okun's Law. This model's application reveals insights into the disparate effects of economic expansions and contractions on employment, highlighting the non-uniform nature of these relationships.

Despite the diverse methodologies and contexts explored in the literature, the consensus on the absolute validity of Okun's Law remains elusive. Empirical findings present mixed evidence, with the effectiveness and accuracy of these models varying across different countries, timeframes, and economic conditions. The review synthesizes these diverse findings, offering an integrated perspective on the empirical robustness of Okun's Law within various modeling frameworks. This comprehensive exploration contributes to the ongoing academic discourse, providing a consolidated foundation for future research and policy formulation in understanding the intricate interplay between unemployment and economic growth.

Keywords: Okun's Law, literature survey.

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## 1. INTRODUCTION

Okun's Law, postulated by Arthur Okun in 1962[7], posits an inverse relationship between unemployment and national output. Okun (1962) hypothesizes that an increase in output corresponds to a proportional decrease in unemployment, a theory that has garnered significant attention in empirical economic research. Numerous studies have sought to validate this economic proposition across varied economic landscapes and contexts, utilizing diverse model specifications such as difference, gap, dynamic, and asymmetric models. The diverse and extensive body of research provides a rich terrain for examination and critical analysis. This literature review seeks to aggregate, synthesize, and critically analyze the empirical studies investigating the validity of Okun's Law with respect to these different model specifications. Through a comprehensive examination of the available literature, this review aims to elucidate the strengths and limitations of each model specification in capturing the relationship between unemployment and economic output as articulated by Okun's Law. This endeavor seeks to provide valuable insights for economic researchers and policymakers, enhancing the understanding of the unemployment-output dynamic, and informing more effective and context-responsive economic policy development. The rest of the study is structured as follows: Section 2 provides a literature survey. Section 3 gives concluding remarks.

## 2. LITERATURE REVIEW

When we look at the historical background of analyzing the relationship between economic growth and the unemployment rate, it can be seen that the first study was conducted by Okun (1962). Okun (1962) found that there was a statistically inverse relationship between the unemployment rate and real GDP growth in the USA in the period from 1947:Q2 to 1964:Q4. Accordingly, every 1% increase in the unemployment rate exceeding the 4% unemployment rate, which is accepted as the natural unemployment rate, is associated with an approximately 3% decrease in real GDP growth. Okun hypothesizes that the unemployment rate can serve as a useful summary of the amount of labor used in the economy. In reality, Okun's Law is a statistical relationship rather than a structural feature of the economy.

Following Okun (1962), many studies have been conducted examining the relationship between economic growth and the unemployment rate. When studies investigating the relationship between these two variables are examined; the countries or groups of countries differ from each other in terms of the period covered and the model/method used. The literature has been classified according to the difference model, gap model, dynamic model, and dynamic model which are the models used in Okun's Law.

### 2.1. First Differences Model

Canarella and Miller (2017) investigated the US economy using the AutoRegressive Distributed Lag (ARDL) approach in Okun's Law difference model for three different periods

[7] This paper will be addressed as Okun (1962) hereinafter.

with quarterly data in the 1949:Q1-2015:Q4 period. As a result, the relationship between output and unemployment after the great recession was found to have non-linear (asymmetric) characteristics.

In the Indonesian economy, Suryono et al. (2020) examined it using the difference model within the framework of Okun's Law during the period 1986–2018. It has been found that Okun's Law is valid in the Indonesian economy with a significant coefficient of -0,18. It has been stated that the economic growth in the country's economy in the specified periods reduced the number of unemployed people in Indonesia.

Karadzic et al. (2021) tested the short and long-term validity of Okun's Law in the Montenegrin economy using the Error Correction Model (ECM) with annual data for the period 2007-2019, using the difference model of Okun's Law. It has been concluded that for every 1% increase in economic growth in Montenegro, the unemployment rate will decrease by 0,27% in the short term and 1,46% in the long term. With these results, it was stated that the lowest value of Okun was valid in Montenegro.

Examining the country group specifically, Hashmi et al. (2021) tested the sensitivity of changes in the unemployment rate to changes in GDP for Brazil, Russia, India, China, and South Africa (BRICS) in the pre- and post-2007-2008 global financial crisis periods from 1991 to 2018. The difference model of Okun's Law was preferred to check its validity for BRICS countries. The empirical result shows that there is a negative relationship between the unemployment rate and GDP. In addition, it has been stated that focusing on sustainable economic growth will reduce the unemployment rate in the country.

### 2.2. Gap Model

Prachowny (1993) examined Okun's Law using Time Series and Regression Analysis, Chow Test and open model with annual data for the US economy in the period 1947–1986. Then, the negative relationship between the relevant variables was determined by calculating the Non-accelerating Inflation Rate of Unemployment (NAIRU) and the output gap. As a result, it is found that a 1% decrease in unemployment will result in a 2/3% increase in output.

For the Spanish economy and its regions, Villaverde and Maza (2009) analyzed the validity of Okun's Law with Ordinary Least Squares (OLS) estimation with data from 1980-2004. For this purpose, the open model of Okun's Law and Quadratic, Hodrick-Prescott and Boxter-King filtering methods were used. The results of the analysis show that there is an inverse relationship between unemployment and output, which is valid for the Spanish economy and most of the regions. However, it has been determined that the Okun coefficient varies by region due to regional productivity differences.

Arshad and Erixon (2010) conducted their research to determine the existence of Okun's Law in the Swedish economy with quarterly data for the period 1993:Q1-2009:Q2. For this, the open model of Okun's Law and the Hedrick-Prescot filter technique were used. The two-stage Engle-Granger method and ECM were used to test the relationship between unemployment and GDP in the long and short term. Okun's Law shows that there is an empirically significant negative relationship between GDP and unemployment in the Swedish economy during the examined periods. Empirical findings have revealed that if there is a 1 percent change in the GDP gap, there will be a 2,2 percent change in the unemployment gap in the opposite direction. It has also been stated that there is a long and short term relationship between unemployment and GDP.

In the Malaysian economy, Ting and Ling (2011) investigated the existence of Okun's relationship with quarterly data between 2000:Q1-2007:Q4 by choosing an open model and using the Hodrick-Prescott Filter technique. In addition, ARDL was applied to determine the cointegration between variables. While a negative relationship was detected between output increase and unemployment rate, Okun's coefficient was determined as -1,82. In other words, it shows that a 1 percent decrease in output growth will increase the unemployment rate by 1,82 percent. Thus, it was concluded that Okun's Law is valid in the Malaysian economy.

Elshamy (2013) tested the validity of Okun's Law for the Egyptian economy using the open model with annual data from 1970 to 2010. Cointegration test and ECM method were used for analysis. In the study, results supporting the Okun relationship were obtained. Okun's coefficient was determined as -0,022. It has been stated that Okun's Law is significant with the expected sign of the coefficient in the long and short run in the Egyptian economy.

Alamro and Al-dalaien (2014) examined the effect of economic growth on unemployment in the short and long term in the Jordanian economy with annual data from 1980-2011. Hodrick-Prescott filter and Okun's Law open model were used to calculate potential GDP, and ARDL approach and ECM were used to analyze the short- and long-run relationship. The findings show that economic growth has a negative and significant effect on unemployment in the short and long term. In another for the Jordanian economy, Alamro and Al-dalaien (2016) investigated the impact of economic growth on unemployment in the short and long term from 1980 to 2011. It was carried out using the explicit model with the Hodrick-Prescott filter to calculate the potential GDP. For this purpose, ARDL cointegration and ECM were used to represent the short- and long-run relationship. It has been determined that economic growth has a weak negative effect on unemployment in the short and long term. It was concluded that a 1 percent decrease in GDP would increase the unemployment rate by 0,013 percent. Again, for the Jordanian economy, Al-Sawaiea (2020) examined the relationship between unemployment and economic growth in the period 1976–2018. To determine the relationship between them, the open model of Okun's Law, ARDL analysis and Granger causality tests were used. A bidirectional relationship from real GDP to unemployment has been determined in the long term. However, real GDP has been found to have a negative relationship with unemployment in the short run. It was concluded that a 1 percent decrease in GDP growth would increase the unemployment rate by 0,256 percent. It has also been found that a 1 percent decrease in the unemployment rate increases real GDP growth by 3,9 percent. In this case, the opposite has also proven to be true.

Chifaâ and Rached (2015) used the error correction model and the explicit model of Okun's Law in order to check whether Okun's Law is valid in the Tunisian economy with quarterly time series data in the period 1990:Q1-2014:Q1. Hodrick-Prescott, Chiristiano-Fitzgerald and Butterworth filtering techniques were used for the open model. The validity of Okun's Law was confirmed by the finding of an inverse relationship between unemployment and output in the short and long run for the Tunisian economy. However, it was determined that the Okun coefficient was lower than required. It was concluded that a 1% increase in GDP in the Tunisian economy would reduce the unemployment rate by 1,4% in the long run.

In the Romanian economy, Ruxandra (2015) analyzed the deficit model of Okun's Law for the years 2007-2013 with the help of the Hodrick-Prescott filter. Using the open model, the

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Okun coefficient was found to be -0,61. As a result, with the Hodrick-Prescott filter, it was determined that the output gap would decrease by 0,61% with a 1% increase in the unemployment rate.

Louail and Riache (2019) preferred to use the open model and ARDL bounds test approach to detect the existence of Okun's Law in the Saudi Arabian economy between 1991 and 2017. According to empirical results, it is concluded that a 1% increase in GDP is associated with a 0,29% decrease in the unemployment rate. It was also determined that the GDP gap had a negative and significant effect on the unemployment rate. However, the existence of Okun's Law in the Saudi economy has been determined.

Pasipanodya (2020) used the two-state Markov Regime Switching Model between 1991 and 2018 to empirically test Okun's Law in Zimbabwe. It was estimated with the Hodrick-Prescott and Butterworth filters used to determine the cyclic components of the open model of Okun's Law. Empirical findings show that Okun's Law is valid during economic expansion, the Okun coefficient is between -0,01 and -0,003, and there is an inverse relationship between economic growth and unemployment.

Louail and Benarous (2021) determined the validity of Okun's Law using annual data on the Algerian economy for the period 1991–2019. For this purpose, Okun's Law open model and ARDL bounds test were used together. According to the deficit model results, it was determined that the GDP gap had a negative and significant effect on unemployment rates. Although there is a decline in unemployment as GDP increases, the increase in employment for every 1% increase in GDP remains relatively weak. Empirical results show that Okun's Law is valid in the Algerian economy.

There are studies in the literature that find the invalidity of Okun's Law. Batavia and Salam (2012) applied Okun's Law to the Pakistan economy using an annual time series from 1985 to 2010. The Hodrick-Prescot filter approach was used in the open model of Okun's Law to examine both the direction and long-run relationship between unemployment and GDP. Research findings show that unemployment does not have a significant impact on output in the case of Pakistan. Chuttoo (2020) tested the validity of Okun's Law using the open model of Okun's Law with data from 1983–2017 in Mauritius. For this purpose, the ARDL cointegration test was used. According to the analysis results, it has been determined that there is a negative cointegration between economic growth and unemployment in the short and long term, but this situation is not statistically significant, therefore unemployment does not affect economic growth in Mauritius. Although economic growth is not affected by the change in unemployment, it is concluded that a 4% increase in economic growth will reduce unemployment by 1%.

Examining the country group specifically, Boďa et al. (2015) tested its empirical validity using the open model of Okun's Law with quarterly data in the period 1998:Q1-2014:Q2 for four Visegrad Group countries. A nonlinear ARDL model was used in the study. It was observed that Okun's Law was valid in the economies of the Czech Republic, Hungary and Poland during the research period. The values of the Okun coefficient were found to be approximately -0,12 for the Czech Republic, approximately -0,06 for Hungary and approximately -0,07 for Poland. For Slovakia, the validity of Okun's Law was found only when a positive output gap occurred, the Okun coefficient being -0,34. An important result of the study is that Okun's Law is valid if GDP is above its potential level. If GDP falls below this level, unemployment is observed to be stable. Therefore, it has been determined that


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unemployment does not respond to the change in GDP. In another study for the country group, Faramarzi and Maraui (2022) analyzed the validity of Okun's Law in the period 1989-2018 in four Scandinavian countries (Sweden, Norway, Finland and Denmark) using the open model of Okun's Law. It has been determined that there is a negative relationship between the unemployment rate and economic growth. However, the result is that different Okun coefficients were calculated for the four Scandinavian countries. It has been found that a 1% increase in the output gap in the Swedish economy will result in a decrease of approximately 0,569% in the unemployment rate. In the Norwegian economy, the results show that a 1% increase in the output gap leads to a 0,521% decrease in the unemployment rate. In addition, it was concluded that for every 1% increase in the output gap in the Finnish economy, the unemployment rate will decrease by 0,633%. Finally, it has been stated that for every 1% increase in the output gap in the Danish economy, the unemployment rate will decrease by approximately 0,689%. Denmark's Okun coefficient was found to be the highest among all Scandinavian countries, with a value of -0,689.

### 2.3. Dynamic Model

Adeyeye et al. (2017) investigated Okun's Law in the Nigerian economy between 1985 and 2015 using a dynamic model. It is noted that past output growth is negatively related to the unemployment rate, while past unemployment is significantly and positively related to current unemployment. Additionally, using Toda-Yamamoto Granger noncausality and Generalized Moment Method, it was found that there is no causality between unemployment and economic growth.

Onakoya and Seyingbo (2020) investigated the applicability of Okun's Law in Nigeria, South Africa and United States with annual data for the period 1980-2018. Empirical results show that the dynamic model of Okun's Law is valid in all three countries.

Nadeshan and Gnanachandran (2021) used the dynamic model proposed by Okun's Law to determine the relationship between unemployment rate and GDP growth rate in Sri Lanka. The study is based on quarterly data for the period 2004:Q1-2019:Q4. Although the results were not statistically significant, the Okun coefficient was found to be negative in all models.

There are also studies in the literature that found Okun's Law is not valid. Sadiku et al. (2015) used the dynamic model to analyze the Okun coefficient with quarterly data 2000:Q1-2012:Q3 for Macedonia. The findings showed that Okun's Law is not valid in the Macedonian economy.

### 2.4. Asymmetric Model

Lee (2000) conducted an analysis of the robustness of the Okun relationship for 16 OECD countries (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom and United States). For this, annual data from 1955 to 1996 were used. Only data from Germany after 1960 were used in the analysis. The variables used were separated into their cyclical components using the Hodrick-Prescott filtering method. In the analysis made using the difference and deficit model of Okun's Law, the findings support Okun's Law, although they are weaker than what


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Okun (1962) stated. In addition, this situation reveals that the effect of growth on employment varies from country to country.

Hassan and Hossain (2013) examined the validity of Okun's Law in the Bangladesh economy using annual data from 1973-2010 within the framework of the difference and deficit model. Empirical results have shown that there is a negative relationship between real GDP and unemployment, but no long-term relationship has been found between these two variables. In another study conducted for the Bangladesh economy, Amin and Lima (2019) tested the validity of Okun's Law using annual time series data from 1984-2017. Johansen Cointegration Test was used to determine long-term relationships and then Vector Error Correction Model (VECM) was used to determine short-term dynamics. It was preferred to use both the difference and deficit models of Okun's Law to determine the relationship between variables. The study reveals that Okun's Law is valid for the Bangladesh economy. Moreover, although the Okun coefficient was negative and statistically significant, the coefficients were found to be very low in both models. In the long run, the Okun coefficient in the difference model of Okun's Law is -0,1036, while in the deficit model, the Okun coefficient is -0,0096.

Kim et al. (2015) examined Okun's Law for the economies of Japan, Korea, Hong Kong and Singapore during the period 1986:Q1-2011:Q4. The relationship between real output and unemployment rate was determined by using Okun's Law difference and gap models and GARCH and EGARCH methods. Empirical findings show that there are time-varying negative relationships between real output and unemployment rate for all country economies examined.

For the Saudi Arabian economy, Amor and Hassine (2017) discussed the validity of Okun's Law in the period 1980-2015 using the difference and deficit model with the Hodrick-Prescott filter. A cointegrated relationship between variables was revealed using the ARDL model. It has been shown that there is a significant unidirectional causality between the unemployment rate and real output in the long run. According to the findings of the study, a 1% increase in real output for the open model leads to an approximately 0,33% decrease in the unemployment rate; In the difference model, it was determined that a 1% increase in real output led to an approximately 0,54% decrease in the unemployment rate.

Blázquez Fernández et al. (2018) analyzed the validity of Okun's Law using data from a selected group of European countries in the period 2005-2017. For this purpose, four macro areas based on geographical location are taken into consideration: Continental European countries (Austria, Belgium, France, Germany, Luxembourg and Netherlands), Scandinavian countries (Denmark, Finland and Sweden), Southern European countries (Portugal, Italy, Greece and Spain) and analyzed with data from Anglo-Saxon countries (Ireland and United Kingdom). For this purpose, Okun's difference and deficit model was used. The relevant data for the open model were generated from the Hodrick-Prescott filter. Empirical results show that the inverse relationship between unemployment and output holds for the entire sample and subsamples.

Acaroğlu (2018) tested the validity of Okun's Law for G-20 countries with data for the period 1991-2014 using difference and open models. Hodrick-Prescott, Chiristiano-Fitzgerald and Butterworth filtering techniques were used for the open model. In both models used, it was found that there was an inverse relationship between output and unemployment in the majority of countries. In addition, the Okun coefficient for China, Indonesia, Saudi Arabia and Turkiye could not be found with at least one of these filtering techniques.

Mihajlović and Fedajev (2021) detected asymmetric effects in the relationship between unemployment and real GDP in Southeastern European countries (Bulgaria, Croatia, Greece, Montenegro, North Macedonia, Romania, Serbia and Slovenia) by applying the Okun Law difference and deficit model and using the non-linear ARDL approach. For this, quarterly data between the periods 2000:Q1-2019:Q1 were used. Time series were seasonally adjusted and converted into logs. It reveals Okun's Law asymmetry in the short or long term in five of the eight countries observed. It also shows that the unemployment response is more pronounced in economic declines than in rises. In the economies of Bulgaria, Greece and Slovenia, positive output shocks exhibit weaker long-run effects on unemployment compared to negative shocks, indicating long-run asymmetry.

There are also studies in the literature that found Okun's Law is not valid. Moosa (2008) investigated the validity of Okun's Law in Algeria, Egypt, Morocco and Tunisia using Okun's difference and deficit models and applying the Hodrick-Prescott Filter with data from 1990-2005. It was concluded that Okun's Law is not valid for these four countries. Ahmed et al. (2011) analyzed whether Okun's Law is valid for the Pakistani economy using difference and deficit models with data from 1974-2009. As a result of the analysis, no findings were found regarding the validity of Okun's Law in the Pakistani economy. Yaumidin (2015) examined the validity of Okun's Law for Indonesia using Okun's difference and deficit models with annual data from 1980 to 2013. It has been stated that the difference model of Okun's Law is not suitable for analyzing Okun's Law. Pehlivanoğlu and Tanga (2016) used Hodrick-Prescott Filtering technique and Okun's Law in obtaining annual data and deficit series in the BRICS (Brazil, Russia, India, China and South Africa) countries and the Turkish economy between 1990 and 2014 tested its validity. According to the results of the analysis conducted with Engle-Granger cointegration test and Fully Modified Ordinary Least Square (FMOLS), it has been determined that Okun's Law is not valid in the BRICS countries, South Africa and Brazil, and in the Turkish economy.

## 3. CONCLUSION

The empirical exploration of Okun's Law using diverse model specifications – difference, gap, dynamic, and asymmetric models – offers a multifaceted view of the relationship between unemployment and economic output. Each model provides unique insights and carries its inherent strengths and limitations. The difference model offers immediacy and responsiveness, whereas the gap model provides a more longitudinal view. The dynamic model captures temporal nuances, and the asymmetric model sheds light on non-linearities and differential impacts of economic growth and contraction. Despite the extensive empirical investigation, a universal consensus on the Law's validity across diverse economic contexts remains elusive. This literature review highlights the importance of context sensitivity and model appropriateness in empirical analyses of Okun's Law. Furthermore, it underscores the necessity for continuous, nuanced, and innovative research approaches to decipher the intricate dynamics between unemployment and economic output comprehensively. As economic landscapes evolve and transform in an ever-globalizing world, the insights gleaned from empirical studies of Okun's Law will remain pivotal in guiding effective and sustainable economic policy development and implementation, ensuring responsiveness, and resilience in the face of economic fluctuations and shifts.

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# THE INFLUENCE OF ORGANIZATIONAL COMMITMENT, ORGANIZATIONAL CULTURE AND MOTIVATION ON EMPLOYEE PERFORMANCE IN PT. PERKEBULAN NUSANTARA III MEDAN

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## ABSTRACT

The purpose of this research is to determine the influence of organizational commitment, organizational culture and motivation on employee performance at PT Perkebunan Nusantara III Medan, either partially or simultaneously. This research uses a quantitative approach with multiple linear analysis techniques. The research results showThere is a significant influence between Organizational Commitment and Performance. There is a significant influence between Organizational Culture and Performance. There is a significant influence between Motivation on Performance. There is a significant influence between Organizational Commitment, Organizational Culture, and Motivation on Performance among PT Employees. Perkebunan Nusantara III Medan. So if organizational culture, organizational commitment and motivation are high or increase, then performance can increase. On the other hand, if Organizational Commitment, Organizational Culture and Motivation are low or decreasing, performance will decrease. The known R Square value is0.406 or 40.6%shows that around 40.6% of the Performance variable (Y) is influenced by Organizational Commitment (X1), Organizational Culture (X2) and Motivation (X3). The remaining 40.6% is influenced by variables not examined in this study.

Keywords**:** Organizational Commitment, Organizational Culture, Motivation, Performance.

## INTRODUCTION

In this research the author uses organizational commitment, organizational culture and work motivation.PT Perkebunan Nusantara III Medan is a company that operates in the plantation sector and has quite a large number of employees. Employees of PT Perkebunan Nusantara III Medan certainly have the hope of feeling satisfied at work. Employee performance is important because it can affect the company's overall work productivity. One factor that can influence employee work performance is organizational commitment. Organizational commitment is the employee's desire to remain in the company and work well to achieve common goals. The higher the level of organizational commitment, the greater the likelihood that employees will feel satisfied at work. Therefore, it is important for organizations to pay attention to factors that can influence organizational sympathy and take action to increase employee trust and loyalty to the organization. A strong sense of belonging will make employees feel useful and comfortable in the organization(Robbins & Coulter, 2015).Kurniawan (2013)Organizational commitment is a commitment created by all individual components in carrying out organizational operations. In implementing programs and policies to increase employee job satisfaction, companies also need to pay attention to employee needs and preferences. Employees have different needs and preferences, therefore, companies need to understand this and provide programs and policies that can meet employee needs and preferences.

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Apart from organizational commitment, organizational culture can also influence employee performance. Organizational culture includes the values, norms and beliefs held by the company and internalized by employees. If organizational culture supports employee job satisfaction, then it is likely that employees will feel comfortable and happy at work. Organizational culture problems can arise when the values upheld by the organization are not in accordance with the values held by employees or are not in accordance with demands and expectations. from the surrounding environment. For example, if an organization holds values that do not value diversity and inclusion, then employees who feel unappreciated because of their background or their sexual orientation may lose motivation and feel uncomfortable at work.

According to Zebua, (2009) Organizational culture is the "soul" of the organization, because there resides the philosophy, vision and mission of the organization which will become an important strength for the company to compete. A company or organization that has a strong culture will produce good performance in the long term. Apart from that, organizational culture problems can also arise when the organization does not have clarity in the values and norms it holds. This can lead to differences in perception among employees and lead to contention in organizational performance. If the values upheld by the organization are not implemented in daily practices, then employees may lose trust and confidence in the organization. According to (Hendra et al. 2020) that organizational culture also has an important role in influencing employee job satisfaction. Organizational culture includes the values, norms and beliefs held by the company and internalized by employees. If organizational culture supports employee performance, employees will feel comfortable and happy at work. According to Samsudin (2010) Motivation is the process of influencing or encouraging someone or a work group from outside so that they want to carry out something that has been determined. It can be concluded that motivation is an encouragement or stimulant that makes someone do the work they want willingly without feeling forced so that the work done can run well or produce something satisfying. Motivation is also an important factor in influencing employee performance. Motivation can come from within the employee or from the work environment. If employees feel motivated at work, then they will most likely feel satisfied with the work they do. According to Anoraga (2003) Motivation allows a person to manage their emotions well so that the person is able to work together to achieve the goals they have set.Motivation can come from within the employee or from the work environment. If employees feel motivated at work, then they will most likely feel satisfied with the work they do.

According to(Adhan, Prayogi, & Siswadi 2020)states that performance has great significance in self-development efforts for employees. When someone feels satisfied with their work, they will likely be more enthusiastic, productive, and have better psychological well-being. Conversely, lack of employee performance can lead to dissatisfaction, frustration, and even unhappiness in the work context. According to (Triany et al., 2022) Performance is a positive response shown by employees to the work they do and the factors related to that work. This factor plays a crucial role in creating a balanced work environment in an organization. If job satisfaction is not met, employee performance will not reach the desired standards, which in turn will hinder the achievement of the company's stated goals.

PT Perkebunan Nusantara III Medan is a company that operates in the plantation sector and has many employees. Like employees in other companies, employees of PT Perkebunan Nusantara III Medan have the hope of feeling satisfied at work. Employee performance is important because it can affect work productivity and overall company performance. Factors that influence employee job satisfaction are very diverse, and among them are organizational commitment, organizational culture, and motivation. Organizational commitment is an employee's desire to continue working at the company and contribute to achieving common

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goals. The higher the level of organizational commitment, the greater the likelihood that employees will feel satisfied at work.

In the initial research conducted by researchers, the problem was found that employee performance at PT. Perkebunan Nusantara III Medan is not optimal, this can be seen from the lack of individual awards given by the company to its employees, the company only gives awards in the form of certificates. Lack of organizational commitment is indicated by the presence of employees who do not carry out the Moral Program emphasized by PT. Perkebunan Nusantara III Medan is one of them by playing games during working hours, actions like this clearly violate the rules that have been emphasized by the company, this was seen during pre-research.

The following is the phenomenon of organizational commitment problems at PT. Perkebunan Nusantara III Medan based on pre-research of 20 respondents.

**Table 1: Results of Pre-Research Survey on Organizational Commitment at PT. Perkebunan Nusantara III Medan**

| No | Statement | Yes | No |
|---|---|---|---|
| 1 | I regularly participate in the moral program at the company | 40% | 60% |
| 2 | I give examples of roles/figures of good moral models to fellow colleagues | 70% | 30% |
| 3 | Each part of the company regularly carries out monthly and annual Akhlak Heroes | 45% | 55% |

**Source: Pre Research**

Based on the data above, there are still many employees who are not enthusiastic enoughThis is indicated by the moral program implemented in the company, 40% 60% of employees do not routinely participate in the moral program implemented in the company.

The low organizational culture of employees is considered to still not be in line with the leadership's expectations, this can be seen from the lack of conduciveness and effectiveness, and this can also be seen from the work culture in the company.

**Table 2: Results of Pre-Research Survey on Work Culture at PT. Perkebunan Nusantara III Medan**

| No | Statement | Yes | No |
|---|---|---|---|
| 1 | I procrastinating on work that I received from my boss | 35% | 75% |
| 2 | I charge assignments that I received from superiors to honorary staff | 45% | 55% |
| 3 | I come to the office not on time repeatedly | 50% | 50% |
| 4 | I leave office during working hours | 60% | 40% |
| 5 | The service I provide as much as possible | 40% | 60% |

**Source: Pre Research**

From the data above, it can be seen that the work culture lacks responsibility for the work and obligations entrusted to PT employees. Perkebunan Nusantara III Medan, as can be seen, there are still many employees who like to postpone their work and also some employees delegate work to honoraria where they should be doing the work and there are still employees who after being absent in the morning are outside the office. Besides that, some employees extend their break times. This needs to get attention from the leadership in the office so that employee job satisfaction increases.

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**Table 3: Results of Pre-Research Survey on Motivation at PT. Perkebunan Nusantara III Medan**

| No | Statement | Yes | No |
|---|---|---|---|
| 1 | The work carried out is always on time from the specified time | 40% | 60% |
| 2 | Every employee has the opportunity to receive education and job training | 45% | 55% |
| 3 | I am often late to the office after break time | 30% | 70% |
| 4 | There is recognition from the company for the work provided | 55% | 45% |
| 5 | Every employee who has high work performance will get the opportunity to develop their career | 50% | 50% |

**Source: Pre Research**

Lack of motivation at PT. Perkebunan Nusantara III Medan, which is seen from the pre-research carried out previously thatmotivation that exists at PT. Perkebunan Nusantara III Medan shows that 60% of employees stated that the work carried out was not always on time according to the specified time. Lack of appreciation and recognition for employee performance is important in improving employee performance. If employees feel underappreciated or do not receive proper recognition, then this can have an impact on employee motivation and performance.

## LITERATURE REVIEW

### Employee performance

Performance comes from the English word performance, which means performance. The concept of performance is an abbreviation of work energy kinetics. Performance is the output produced by the functions or indicators of a job or profession within a certain time(Wirawan, 2014). Broadly speaking, performance can be understood as the work results that can be achieved by a person or group of people in an organization in accordance with their respective authority and responsibilities, in order to achieve the goals of the organization concerned legally, without violating the law and in accordance with morals and ethics. According to(Tika, 2017)someone will always crave appreciation for the results of their work and expect fair rewards. Performance appraisal needs to be done subjectively because it will motivate employees to carry out their activities. In addition, performance appraisals can provide information for the purposes of providing salaries, promotions and the work environment regarding employee behavior. An organization, whether government or private, is always driven by a group of people who play an active role in achieving the goals the organization wants to achieve. Of course, organizational goals will not be achieved if the performance of its members or employees is not optimal. According to(Tika, 2017)Performance is the results of work functions/activities of a person or group in an organization which are influenced by various factors to achieve organizational goals within a certain time period. The various types of work carried out by employees, of course, require clear criteria, because each type of work has different standards for achieving results.

### Organizational Commitment

High organizational commitment can provide benefits to the organization, such as low turnover rates, better performance, and a more positive organizational reputation in the eyes of the public. Therefore, it is important for organizations to pay attention to the factors that influence the level of organizational commitment and ensure that employees feel valued and motivated at work. Organizational commitment is defined as a form of love and loyalty possessed by employees. Indicators of organizational commitment consist of employee


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willingness, employee loyalty and employee pride in the organization (Sangadji & Sopiah, 2013). Pramadani and Fajrianthi (2012) Quoting Griffin states that organizational commitment shows a person's ability to identify his involvement in a part of the organization. Organizational commitment is built on the basis of workers' trust in the organization's values, workers' willingness to help realize organizational goals and loyalty to remain members of the organization. Therefore, organizational commitment will create a sense of belonging for workers towards the organization. According toSianipar and Haryanti (2014) Organizational commitment is the feelings and attitudes of employees towards their organization and has a concrete form in the form of an individual's decision to continue their membership in the organization, and wholeheartedly accept the company's goals and make the best contribution to the progress of the company..From the description above it can be concluded that organizational commitment is very important for the success of an organization. Employees who have a high level of organizational commitment will tend to have a high level of job satisfaction, better performance and will stay in the organization longer. Therefore, organizations must pay attention to factors that can influence the level of organizational commitment, such as organizational culture and employee motivation. In creating a high level organization, organizations must ensure that employees feel valued and motivated at work, and feel they have an important role in achieving organizational goals.

**Organizational culture**

Organizational culture is a set of norms, values, beliefs, practices, and behaviors that are recognized, shared, and followed by members of an organization. Organizational culture often reflects the characteristics of the organization and can influence the performance, efficacy and success of the organization. Organizational culture can influence employees in the way they think and act in their work, because organizational culture regulates work procedures and influences communication between employees, management, and other stakeholders. A positive organizational culture can create a healthy, productive and enjoyable work environment, where employees feel valued, supported and have opportunities to grow and develop in their work. Conversely, a negative organizational culture can create an unhealthy, less productive, and unpleasant work environment, where employees feel unappreciated, unsupported, and have no opportunities to grow and develop in their work. According toJufrizen (2017) Organizational culture is concerned with how employees prepare for the characteristics of an organization's culture, rather than with whether they like the culture or not. This means that culture is a descriptive term. Organizational culture states a shared perception held by members of the organization. According to Tika (2008) states, organizational culture is the basis for resolving external and internal problems whose implementation is carried out consistently by a group which is then passed on to new members as the right way to understand, think and feel about related problems. Meanwhile, according toSutrisno, (2010)Organizational culture is a system of values, or norms, assumptions, or norms that have long been in effect, agreed upon and followed by the members of an organization as a guide for behavior and solutions. organizational problems. From the description above, it can be concluded that organizational culture is a system consisting of norms, values, beliefs, practices and behaviors that are recognized, shared and followed by members of the organization. Organizational culture influences the organization's performance, efficacy and success, as well as influencing the way employees think and act in their work

**Motivation**

Every employee who works in a company or organization needs motivation from a leader. Because motivation can facilitate an employee's work. According toNawawi, (2011) The

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word motivation comes from the basic word motive which means encouragement because or the reason someone does something. Thus, motivation is a condition that encourages or makes someone carry out activities directly and consciously. According to (Munandar, 2028) Motivation is a process where needs encourage a person to carry out a series of activities that lead to achieving certain goals. Meanwhile, according to (Rivai 2004) Motivation is a series of attitudes and values that influence individuals to achieve specific things in accordance with individual goals.Work motivation is motivation that occurs in work situations and environments in an organization or institution. The success and failure of an organization is often linked to employee work motivation. Basically, humans always want good things, so the driving or driving force that motivates their work enthusiasm depends on the hope that will be obtained in the future. If that hope comes true then a person will tend to increase their work motivation.Hasibuan, (2008) states that motivation is the provision of driving force that creates enthusiasm for a person's work so that they are able to collaborate, work effectively and be integrated with all their efforts to achieve satisfaction. Meanwhile, according to Dessler (2009) Theoretically, motivation is formed because humans have categories of basic needs such as physiological, security, social, ego and self-realization needs. FurthermoreSamsudin (2010) stated that motivation is "the process of influencing or encouraging someone or a work group from outside so that they want to carry out something that has been determined". Motivation refers to the amount of force that produces, directs and sustains effort in a particular behavior. Based on the description of the experts' opinions above, it can be concluded that motivation is an encouragement or stimulant that makes someone do the work they want willingly without feeling forced so that the work done can run well or produce something satisfying.

## METHOD

In this research, associative research methods are used to explore the relationship between three or more variables. This method will allow researchers to analyze the relationship between the variables in the research using relevant statistical measures. The main aim of this method is to test hypotheses related to the relationship between these variables. In this research, there are two types of variables observed, namely independent variables and dependent variables. An independent variable is a variable that is believed to have an influence on other variables, while a dependent variable is a variable that is influenced by other variables. By using an associative approach, researchers can analyze and identify relationships that may exist between independent and dependent variables. Through relevant statistical analysis, researchers can test hypotheses and gain a better understanding of how these variables relate to each other in the context of the research being conducted. The approach in this research uses an associative approach, according to (Sugiono, 2011) Associative research is research that aims to find out the relationship between two or more variables. This research will explain the influence of organizational commitment, organizational culture, and motivation on performance.

## RESEARCH RESULT

### Partial test (t test)

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The calculated value of the correlation coefficient (rxy) will be tested for its level of significance using the t test. The partial hypothesis is as follows:
Ho = 0 (there is no significant influence of the independent variable on the dependent variable)
Ha = p ≠ 0 (there is a significant influence of the independent variable on the dependent variable.).

**t test**

**Coefficientsa**

| Model | | Unstandardized Coefficients | | t | Sig. |
|---|---|---|---|---|---|
| | | B | Std. Error | | |
| 1 | (Constant) | 10,375 | 4,281 | 2,424 | ,018 |
| | Organizational Commitment | ,368 | ,112 | 2,496 | ,008 |
| | Organizational culture | ,468 | ,123 | 3,801 | ,000 |
| | Motivation | ,340 | ,075 | 4,556 | ,000 |

a. Dependent Variable: Employee Performance
Source: Processed Data (2023)

## DISCUSSION

### The Effect of Organizational Commitment on Employee Performance

There is an influence of the Organizational Commitment variable (X1) on Performance (Y) shown by tcount of2,496 > ttable1.987 with a sig probability of 0.008 < of α = 0.05. With a relationship like this, it means that the higher/better variable X1 (Organizational Commitment), the higher/better variable Y (Performance). Organizational commitment is a strong emotional, psychological and moral connection between employees and the organization where they work. This involves employee loyalty, involvement and dedication to the organization and its goals. Organizational commitment includes a positive attitude and active contribution provided by employees in achieving organizational success.

Strong organizational commitment can also influence employees' identity with the organization where they work. This is not because their work is not just a routine activity carried out to earn a salary, but also becomes part of their identity and the emotional connection they have with the organization. The relationship between employees and the organization or company is known as organizational commitment. One thing that can influence employee performance is organizational commitment. What an organization demands of its members is employee commitment to the organization at work. Then Alwi (Nidya et al. 2013) defines organizational commitment as the attitude of employees to remain in the organization and be involved in efforts to achieve the mission, values and goals of the organization. The research results concluded that organizational commitment has a significant influence on employee performance, which can be seen from the research results (Daulay et al., 2019), (Muis et al., 2018), (Jufrizen et al., 2017), (Jufrizen et al., 2018), (Adhan et al., 2019), (Lubis, 2015), (Putra, 2015), (Novelia et al., 2016), (Rosmiati et al., 2017), (Hikmah & Susanta, 2018), (Miswar & Setiawan, 2019), (Latief et al., 2019), (Hardani et al., 2018), (Said etal., 2021). With good organizational commitment, employees will always complete their tasks and responsibilities quickly, systematically and efficiently so that employees will be more productive.

**The Influence of Organizational Culture on Employee Performance**

There is an influence of the Organizational Culture variable (X2) on Performance (Y)showedby tcount of3,805 > ttable1.987 with a sig probability of 0.000 < of $\alpha = 0.05$. With a relationship like this, it means that the higher/better variable X2 (Organizational Culture), the higher/better variable Y (Performance).Organizational culture can be defined as a system of values, beliefs, assumptions or norms that have long been in effect, agreed upon and followed by members of an organization as a guide for behavior and solving organizational problems (Darodjat, 2015).
Priansa & Garnida, (2013) argue that organizational culture is a value system that is developed and applies within an organization, which makes it a distinctive characteristic of an organization. Organizational culture has several functions, namely providing boundaries to define roles so as to show clear differences between organizations, providing a sense of identity towards something greater than the interests of individual organizational members, showing the stability of the social system, and ultimately organizational culture can shape the thought patterns and behavior of organizational members. Cultural indicators Organization includes self-awareness of organizational members, aggressiveness in setting goals, good personality, performance, team orientation where members work well together and carry out effective communication and coordination. Thus, organizational culture is a value system that is developed and applies within an organization to carry out employee work performance. This is in line with research (Muis, Jufrizen, & Fahmi, 2018), (Jufrizen & Rahmadhani, 2020), (Yusnandar, Nefri, & Siregar, 2020), (Jufrizen, Gultom, Sitorus, Sari, & Nasution, 2018), (Arianty, 2014), (Jufrizen, 2017), (A. Rivai, 2020), (Indajang, Jufrizen, & Juliandi, 2020), (Andayani & Tirtayasa, 2019), (Jufrizen, Lumbanraja, Salim, & Gultom, 2017 ), (Ainanur & Tirtayasa, 2018) and (Jufrizen, Mukmin, Nurmala, & Jasin, 2021) which shows that there is an influence of organizational culture on performance.

**The Effect of Motivation on Employee Performance**

There is an influence of the Motivation variable (X3) on Performance (Y) shown by tcount of4,556 > ttable1.987 with a sig probability of 0.000 < of $\alpha = 0.05$. With a relationship like this, it means that the higher/better variable X3 (Motivation), the higher/better variable Y (Performance). Work motivation is very much needed for a job, because basically humans are easily motivated by giving what they want, so that other needs will be more motivated to achieve (security/safety, acceptance, appreciation, and self-actualization). It is impossible for humans to directly achieve higher needs without going through basic needs (physical needs). The importance of motivation in organizations causes someone to work if there is motivation because without motive, people will not do anything. Motivation can arise from within because there are basic human needs that are universal but cannot be stimulated. Stimulation from outside can be physical or non-physical which is called motivation while the object is called a motivator. From several studies, it is stated that motivation has a positive and significant effect on employee work performance and in this research it also states that motivation is the dominant factor that influences the increase in employee work performance. The relationship between motivation and employee work performance is that the higher the employee's motivation in working, the greater the resulting achievement. increasingly effective and competent in their field. The learning process must become a company culture so that employee skills can be maintained. In this case, the loyalty of competent employees must be taken into account. One of the results of previous research (Lesmana, 2019), (Jufrizen, 2017), (Hasibuan & Silvya, 2019); (Jufrizen & Pulungan, 2017), (Franciska &

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Tupti, 2020), (Jufrizen et al., 2020); (Tanjung, 2018), (Marjaya & Pasaribu, 2019), (Rizal & Radiman, 2019); (Jufrizen, 2017); (Andayani & Tirtayasa, 2019); (Ainanur & Tirtayasa, 2018); (Gultom, 2014); (Harahap & Tirtayasa, 2020); (Hidayat et al., 2020); (Farisi et al., 2020); (Rosmaini & Tanjung, 2019) and (Manihuruk & Tirtayasa, 2020) states that motivation influences work performance.

**The Influence of Organizational Commitment, Organizational Culture, and Motivation on Employee Performance**

The Fcount value in the table above is 19.128 while the Ftable is 2.71 with sig0,000 < α = 0.05 or Fcount 19.128 > from Ftable 2.71, a significance value of 0.000 is obtained < from a probability value of 0.05. Showing that Ho is rejected and Ha is accepted, it means that Organizational Commitment (X1), Organizational Culture (X2) and Motivation (X3) have a positive and significant effect on Performance (Y) at the α = 0.05 level. Organizational Commitment, Organizational Culture and Motivation are factors that are interconnected and have an influence on performance. The following is the influence of organizational commitment, organizational culture, and motivation on performance which can be explained as follows: High organizational commitment tends to contribute to higher performance. Employees who have a strong commitment to the organization feel connected to the organization's values, goals and mission. A positive and supportive organizational culture can have a positive effect on performance. A culture that values teamwork, collaboration, open communication, and providing constructive feedback creates a constructive and enjoyable work environment. High motivation tends to contribute to better performance. When employees feel motivated and feel like their achievements and efforts are appreciated, they tend to feel more satisfied with their jobs.

## CONCLUSION

There is a significant influence between Organizational Commitment on Employee Performance at PT. Perkebunan Nusantara III Medan. So that Organizational Commitment is high or increases, then Performance can increase. Conversely, if Organizational Commitment is low or decreasing, then Performance will decrease. There is a significant influence between Organizational Culture on Employee Performance at PT. Perkebunan Nusantara III Medan So that if the Organizational Culture is high or increases, then Performance can increase. On the other hand, if organizational culture is low or decreasing, then performance will decrease. There is a significant influence between motivation and employee performance at PT. Perkebunan Nusantara III Medan. So if motivation increases, performance will also increase. Conversely, if motivation is low or decreases, performance will decrease. There is a significant influence between Organizational Commitment, Organizational Culture and Motivation on Employee Performance at PT. Perkebunan Nusantara III Medan. So if Organizational Culture, Organizational Commitment and Motivation are high or increasing, then Performance can improve. Conversely, if Organizational Commitment, Organizational Culture and Motivation are low or decreasing then Performance will decrease

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**Accounting and Finance**

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# ANALYSIS OF DETERMINANTS OF EARNING MANAGEMENT IN INSURANCE COMPANIES

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## ABSTRACT

This research aims to determine the influence of the Investment Opportunity Set (IOS) on earnings management, the influence of leverage on earnings management, the influence of firm size on earnings management and the influence of the Investment Opportunity Set (IOS), leverage and firm size simultaneously on earnings management. This type of research is associative research with a quantitative approach. The sample in this study consisted of 11 companies using purposive sampling techniques. The data analysis techniques used are descriptive statistical analysis, multiple linear regression analysis, classical assumption test, t test, F test, and coefficient of determination analysis test. The research results show that the Investment Opportunity Set (IOS) has no significant effect on earnings management, Leverage has a significant effect on earnings management, Firm Size has a significant effect on earnings management and the Investment Opportunity Set (IOS), Leverage and Firm Size together have a significant effect on earnings management.

Keywords: Investment Opportunity Set, Leverage, Firm Size, Earning Management

## INTRODUCTION

Financial Accounting Standards (SAK), provide flexibility for management to choose accounting policies that better represent the company's actual situation. This flexibility is sometimes used by management to carry out *earnings management* . The increasing need for information and the desire to know reliable financial reports makes auditors increasingly needed in both the private and government sectors (Riva & Khairul, 2019) . The level of understanding of accounting is the extent of the ability to understand accounting both as a set of knowledge and as a process or practice (Hafsah et al., 2022) . The preparation of quality financial reports must meet accounting standards, which have reliable and relevant quality (Hani, 2016) . One measure of company performance can be seen from the company's financial reports . The financial performance of a company is a description of the activities carried out to achieve business goals in a certain period. Company performance can be measured by analyzing and evaluating past financial reports and used to predict future financial position and performance (Saragih, 2013) . Therefore, management has a tendency to take actions that can make financial reports better. This encourages managers to carry out earnings management. This situation is recognized by management, especially among managers themselves, and their performance is measured based on this information. A company carries out earnings management *(Earning Management)* because profit is one of the pieces of information in financial reports which is often used as a basis for determining management compensation and is an important source of information for carrying out income smoothing practices. The financial report is

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a description of the company's financial position which can be used as a decision maker for company management (Sinambela & Rachmawati, 2021) . Efforts to reduce profit fluctuations are a form of profit manipulation so that the total profit for a period is not too different from the total profit for the previous period.
Therefore, income smoothing involves the use of certain techniques to reduce or increase the amount of profit for a period as well as the amount of profit for the previous period. (Salno & Z, 2000).

At several insurance companies showing a positive value on the earnings management value indicates that these companies tend to take earnings management actions. This is not in accordance with the theory that earnings management activities are a deviation from normal operational practices and are also driven by the desire of company managers to mislead several stakeholders into giving them confidence in financial reporting. (Roychowdhury & Sugata, 2006) .

There has been an increase in *the Investment Opportunity Set (IOS)* in several insurance companies listed on the Indonesia Stock Exchange, however, *the earnings management* carried out by the companies has decreased. This is not in accordance with the theory that companies with high IOS values contain high information asymmetry between managers and shareholders. This increase in information asymmetry can then trigger earnings management practices. (Shanti et al., 2007) . When a company's *IOS* increases, earnings management practices also increase because management requires good decision making to achieve the targets (investments) desired by the principal with the aim of developing the company itself.

Insurance company experience leverage increases , but *earnings management* carried out by the company has decreased. This is not in accordance with the theory that if leverage in a company is high then the earnings management practices that occur in that company are also high and the opposite applies and there has been an increase in *firm size* in several insurance companies, but *the earnings management* carried out by the company has also increased. This is contrary to the theory that the bigger the company, the greater the attention and observation the company will receive (Agustia, 2013) .

Companies with high *IOS* values contain high information asymmetry between managers and shareholders, this increase in information asymmetry can then trigger *earnings management practices.* (Shanti et al., 2007) . When a company's *IOS* increases, earnings management practices also increase because management requires good decision making to achieve the targets (investments) desired by the principal with the aim of developing the company itself. Which means that increasing IOS will also improve earnings management in the company.

According to Dani et al., (2014) *leverage* shows the proportion of debt used to finance investments. The higher the proportion of debt ratio will cause a decrease in profits, which will provoke management to increase profits or carry out *earnings management* to make it look stable. If a company's *leverage* is high, the company tends to carry out earnings management to survive violations of debt agreements by reporting higher profits to maintain its credibility in the eyes of creditors. (Purwanti et al., 2012)

*Firm Size* shows the size of a company as described by the number of employees, sales and assets. Assets that can indicate the size of the company are total assets, both non-current assets and current assets (Zadeh et al., 2012) . The bigger the company, the greater the spotlight and observation the company will receive (Agustia, 2013) . This means that management cannot freely carry out *earnings management practices* , so it is said that if the size of the company increases, earnings management in that company will decrease .

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*Investment Opportunity Set (IOS)* is a company's opportunity to grow. Companies that have a high level of IOS tend to be assessed positively by internal parties or investors who are interested in investing with the aim of getting a high return in the future. This makes it possible for company management to carry out earnings management to maintain company growth. Widyaningdyah ( 2001) believes that companies that have a high leverage ratio because of the large amount of debt compared to the assets owned by the company, are suspected of carrying out earnings management. Because the company is threatened with default, that is, it will not be able to fulfill its debt payment obligations within the specified time. Companies will try to avoid this by making policies that can increase revenue and profits. Ahrony et al. (1993) also found additional evidence stating that earnings management practices tend to appear in companies that have a high *debt/equity ratio. Firm Size* is a value that indicates the size of a company. The larger the assets, the more capital invested, the more sales, the greater the circulation of money and the greater the market capitalization, the greater the recognition in society.

## METHOD

The approach research used types associative.Study This use method quantitative that is method Which aim to test the hypothesis in order to find out the influence between the independent variables (X) with the dependent variable (Y) where in this study the variables (X1 *) Investment Opportunity Set* (IOS) , (X2) *Leverage ,* (X3) *Firm Size* And variable (Y *) Earnings Management* .

## RESULTS AND DISCUSSION Normality Test

The normality test aims to test whether the regression model, dependent variable and independent variable both have a normal distribution or not. A good regression model has a normal data distribution.

Table 1.
**One-Sample Kolmogorov-Smirnov Test**

| | | Unstandardized Residuals |
|---|---|---|
| N | | 47 |
| Normal Parameters [a, b] | | |
| | Mean | .0000000 |
| | Std. Deviation | .03893000 |
| Most Extreme Differences | Absolute | ,084 |
| | Positive | ,084 |
| | Negative | -.059 |
| | | ,084 |
| Statistical Tests | | |
| Asymp . Sig. (2-tailed) | | ,200 [c,d] |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Based on Table 1 above, the sig value shows results more big of 0.050 ie of 0.200. So you can is said to be a regression model in study This Already normally distributed.

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### Multicollinearity Test

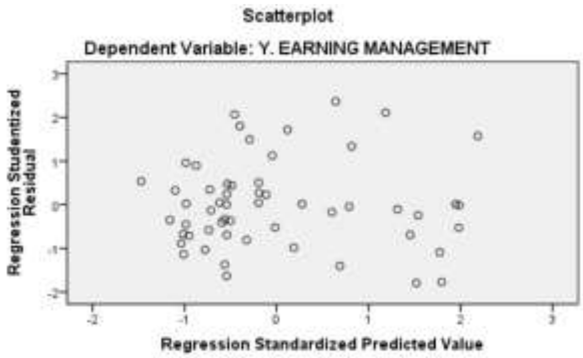
Table 2.
Multicollinearity Test

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | X1. iOS | ,398 | 2,513 |
| | X2. LEVEREGE | ,357 | 2,805 |
| | X 3.FIRM SIZE | ,816 | 1,226 |

a. Dependent Variable: Y. EARNING MANAGEMENT

Based on the test results above, it can be concluded that there are no symptoms of multicollinearity between the independent variables, which is indicated by the tolerance value of each independent variable being greater than 0.1 and the VIF value being smaller than 10.

### Heteroscedasticity Test




```
COMPUTE ABRESID=ABS(RES_1).
EXECUTE.
```

From the Scatterplot graph above, it can be concluded that there is no particular pattern because the points are spread irregularly above and below the 0 axis on the y axis. So it can be concluded that there are no symptoms of heteroscedasticity.

### Autocorrelation Test

**Table 3.**

**Model Summary [b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | ,494 [a] | ,244 | ,199 | .043608 | 1,554 |

a. Predictors : (Constant) , IOS, X2. LEVEREGE

b. Dependent Variable: Y. EARNING MANAGEMENT

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From the results table above _ is known that Durbin-Watson value obtained of 1.554 which means included in the criteria secondly, so can concluded that regression model free from problem autocorrelation.

## Hypothesis Test

### Test t

The t test was carried out to see the influence of the independent variables Alone - itself on the dependent variable is obtained by conducting a t test. If the t test results If the value obtained is tcount > ttable and the significance value is <0.05, it is concluded there is influence Which significant to the dependent variable.

**Table 4. T test Coefficients [a]**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | Q | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | ,219 | ,078 | | 2,788 | ,007 |
| | X1. iOS | ,040 | ,030 | ,238 | 1,368 | ,177 |
| | X2. LEVEREGE | -.071 | ,032 | -.413 | -2,244 | ,029 |
| | X 3.FIRM SIZE | -.006 | ,002 | -.335 | -2,756 | ,008 |

a. Dependent Variable: Y. EARNING MANAGEMENT

Based on table 4 above variable *Investment Opportunity Set* (X1) mark significant ( 0, 177 > 0.05) , then it can be concluded that No There is influence significant *investment opportunity set* to *earnings management* . On variable leverage (X2) mark significant ( 0.0 29 < 0.05 ), then it can be concluded that There is influence significant *leverage* against *earnings management* . On el variable *firm size* (X3) mark significant ( 0.0 08 < 0.05 ) so can concluded that There is influence significant *firm size* to *earnings management* .

### Test F

F test done For see influence variable free in a way together –
The same to variable bound. Stages test F namely formulating hypothesis.

**Table 5. F test**
**ANOVA**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .019 | 3 | ,006 | 10,673 | ,000 [b] |
| | Residual | .031 | 51 | ,001 | | |
| | Total | ,050 | 54 | | | |

a. Dependent Variable: Y. EARNING MANAGEMENT
b. Predictors : (Constant) , IOS, X2. LEVEREGE

Based on table 5 above obtained significant < 0.05. So the significance value is 0.000, which is 0.000 < 0.005. This means that *the Investment Opportunity Set* ( *IOS), leverage* and *firm size* together have a significant effect on *earnings management t.*

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## DISCUSSION

### Influence *Investment Opportunity Set* to *Earnings Management*

The results of the hypothesis test show a significant value of 0.177 using a significant limit or p-value of 0.05, which is 0.177 > 0.05. Based on the results of this hypothesis, the *IOS* variable has no significant effect on *earnings management* in insurance companies listed on the Indonesia Stock Exchange.

*Investment Opportunity Set* does not have a direct impact on *Earning Management* because companies with high growth opportunities do not always have a tendency to practice *earnings management* . A company's investment opportunities are an important component of market value. This is *because the Investment Opportunity Set (IOS)* or the investment opportunity set of a company influences the way managers, owners, investors and creditors view the company . Regarding with theory agency that is exists asymmetry information between manager as agent and holder share as principal where manager naturally own more comprehensive about circumstances company to the front Because manager down _ direct in all operation activity company (Jensen & Mecling, 1976) .

### Influence *Leverage* to *Earning Management*

The partial hypothesis test results show a significant value of 0.029 using a significant limit or p-value of 0.05, which is 0.029 < 0.05. Based on the results of this hypothesis, *the Leverage* variable has a significant effect on *earnings management* in insurance companies listed on the Indonesian Stock Exchange.

Increasing *leverage will lead to increased earnings management practices.* Companies that have a high level of leverage tend to carry out income smoothing. The greater the *leverage ratio* indicates that the greater the company's level of dependence on external parties (creditors) and the greater the debt costs (interest costs) that must be paid by the company (Astuti et al., 2017) . The higher the debt ratio will cause a decrease in profits which will provoke management to increase profits to make them look stable or what is usually called *earnings management practices* (Dani et al., 2014) .

### The Influence of *Firm Size* to *Earning Management*

The results of the hypothesis test show a significant value of 0.008 using a significant limit or p-value of 0.05, which is 0.008 < 0.05. Based on the results of this hypothesis *, the firm size* variable has a significant effect on *earnings management* in insurance companies listed on the Indonesia Stock Exchange.

Companies that have large assets will attract investors' attention because investors believe in the company's capabilities because they have large amounts of assets. Management cannot freely carry out *earnings management practices* considering that the company experiences losses or is even proven to have committed fraud. This has a detrimental impact on the company's image, both internal and external. To provide an assessment that investors can trust, company management tends to carry out earnings management so that in the eyes of investors the company obtains stable profits (Brigham & Eugene. Joel, 2001) .

### The Influence of *Investment Opportunity Set (IOS), Leverage* and *Firm Size* to *Earning Management*

The results of hypothesis testing together have a significance value of 0.000 using a significant limit or p-value of 0.05, which is 0.000 < 0.05. Based on the results of this hypothesis, the variables *IOS, leverage* and *firm size* together have a significant effect on *earnings management* in insurance companies listed on the Indonesia Stock Exchange.

These three variables simultaneously obtain results that have a positive and significant effect on earnings management. So it can be interpreted that if the company has a profit, the company will immediately divide it for several needs, namely as funds to invest so that it can become an asset that can become a reserve for the company in the future . *IOS,* high leverage and low *firm size tend to carry out earnings management,* because the company will increase the value of investment, reduce the value of debt and also with a low company size of course supervision will be more relaxed towards the company. Therefore, the company chose to carry out *earnings management* in order to make profits look stable .
(Brigham & Eugene. Joel, 2001)

## CONCLUSION

Based on results data analysis and discussion Analysis of Determinants of *Earning Management* in Insurance Companies can concluded as following :

1. Variable *Investment Opportunity Set (IOS)* No influential significant to *earnings management* in companies insurance registered on the Indonesian Stock Exchange , proven with a partial test ( t test) on the IOS variable with number significant = 0.177 > 0.05
2. Variable *Leverage* influential significant to *earnings management* in companies insurance registered on the Indonesian Stock Exchange , proven with a partial test ( t test) on the leverage variable with number significant = 0.029 < 0.05
3. Variable *Firm Size* influential significant to *earnings management* in companies insurance registered on the Indonesian Stock Exchange , proven with a partial test ( t test) on the firm size variable with number significant = 0.008 < 0.05
4. Variable *IOS, leverage* and firm *size* together influential significant to to *earnings management* in companies insurance registered on the Indonesian Stock Exchange , proven with simultaneous (f test) on IOS, leverage and firm size variables with number significant = 0.000 < 0.05.

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**053-041**

# THE EFFECT OF TOTAL ASSET TURN OVER AND NET PROFIT MARGIN ON STOCK PRICES IN FOOD AND BEVERAGE

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## ABSTRACT

The purpose of this study is to determine the effect of *Total Asset Turn Over* and *Net Profit Margin* on Stock Prices both partially and simultaneously in *food and beverage* sub-sector companies listed on the Indonesia Stock Exchange for the 2017-2021 period. The research population was 25 companies, while the sampling technique used was *purposive sampling*, with a total sample of 12 companies. This research approach is an associative approach. This study used classical assumption tests, multiple linear regression tests, hypothesis tests (t test and f tests) and coefficients of determination using SPSS software version 26. If the value of t calculates < t table it means that H0 is accepted and Ha is rejected, so there is no significant influence between *Net Profit Margin* and share price and simultaneously *Total Asset Turn Over* and *Net Profit Margin* have no effect on the share price F calculate < of F table (0.873 < 3.16) then H0 is accepted and Ha is rejected. So *Total Asset Turn Over* and *Net Profit Margin* have no significant effect on the stock price.

Keywords: Total Asset Turn Over, Net Profit Margin, and Stock Price

## INTRODUCTION

Entering the era of globalization, where the rapid development of technology and information, competition in the business world has become so fast. Companies can maintain their business continuity by improving and maintaining their performance. The role of the capital market today is felt to be very important related to the function of the capital market itself, namely bringing together parties who raise funds with parties who want to invest in the capital market. (Nainggolan, 2016)

Stocks are one of the capital market instruments, which are used as a tool to increase funds for the operations of an issuer and as a place to distribute funds for investors with the same expectation, namely maximum profit. Stocks are securities traded in the capital market that can provide profits or losses for a company within a certain period of time, stocks are also often called securities or securities (Gunawan, 2020)

Stock price is one of the indicators of the success of managing a company, if the stock price of a company always increases, then investors or potential investors assess that the company is successful in managing its business. (Alpi, 2018)

Since the COVID-19 pandemic that emerged starting from 2019 until now, the government has set a PPKM policy (Enforcement of Restrictions on Community Activities) to avoid the spread of the COVID-19 virus during the first year during the emergence of the covid-19 virus in Indonesia, then slowly the government gave permission back for community activities. This greatly affects the company's operational activities and performance to be ineffective and efficient, so that some companies have experienced a decrease in profits and some even go bankrupt because market sales are not active as usual, however there are also companies that can maintain and increase their profits . It all depends on the company's policy in dealing with these conditions.

One of the financial statement analyses used by investors is financial ratios. The financial ratio acts as a benchmark for investors to assess the effectiveness and efficiency of the company's performance. Financial ratio analysis is one of the things that can be useful as a reference for investors in making decisions to buy or sell shares of a company, so that it has an impact on the stock price on the stock exchange experiencing fluctuating movements every day. (Surya Sanjaya, 2019)

In this study, one of the activity ratios was used , namely *total assets turnover* which is a ratio used to measure the effectiveness of the total assets owned by the company and measure how many sales are generated from each rupiah of funds in total assets. (Hanum, 2009) and the profitability ratio is *Net profit margin* which is a ratio used to measure how much net profit on net sales (Hery, 2015, p. 235).

## METHODS

The type of research used in this study is associative. According to (Sugiyono, 2016, p. 62) the associative method used is a causal relationship, which is a causal relationship between independent variables and dependent variables. While the research method used is quantitative, (Juliandi et al., 2015) which is research that emphasizes objective phenomena that are studied quantitatively. This research was conducted using figures, statistical management, structure and controlled experiments. The place of this research is the 2017-2021 *food and Beverages* Sub-Sector company listed on the Indonesia Stock Exchange (IDX) (www.idx.co.id) Jl. Ir. Juanda Baru No. A5-A6 Medan. The timing of the in research is carried out from March 2022 to July 2022. In this study, the population used was a 2017-2021 *food and Beverages* Sub-Sector company listed on the Indonesia Stock Exchange, and the sample used in this study was 12 companies based on the sampling technique, namely *purposive sampling*. The data collection technique in this study is the documentation method. Based on the objectives of the study and the characteristics of the data obtained, the technical analysis used is descriptive.

## RESULTS

### 1. Descriptive Statistics

**Table 1. Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| TATTOO | 60 | 0.09 | 3.51 | 1.1745 | 0.71241 |
| NPM | 60 | 0.01 | 0.95 | 0.1150 | 0.15271 |
| Share Price | 60 | 168 | 11150 | 2356.73 | 2914.487 |
| Valid N (listwise) | 60 | | | | |

Source : Data processed spss 21

Based on the table above , it can be seen that from the number of data (N) as many as 60 calculated from 12 samples of Food and Beverage Sub-Sector companies on the Indonesia Stock Exchange during the 2017-2021 period (5 years).

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From the results of the study, the Variable Total Asset Turnover (TATO) has a minimum value of 0.09. TATO has a maximum value of 3.51. TATO has an average value of 1.1745. TATO has a standard deviation value of 0.71241 which indicates tattoo deviation limit this study.

From the results of the research, the Net Profit Margin (NPM) variable has a minimum value of 0.01. NPM has a maximum value of 0.95. NPM has an average value of 0.1158. NPM has a standard deviation value of 0.15241 which indicates that the npm deviation limit in this study.

And in the variable company's share price from the SPSS data process, the stock price has a minimum value of 168. The stock price has a maximum value of 11,150. The share price has an average value of 2,356. The stock price has a standard deviation value of 2,914,487 which indicates that the limit of stock price deviation in this study.

**2. Test of Classical Assumptions**

a) Normality Test

Normality test is a test carried out to find out whether in the regression model, dependent variables and independent variables or both have a normal distribution or not (Ghozali, 2013). Using the normal graph P-P Plot of regression standard, with this test required as follows :

a) If the data spreads around the diagonal line and follows the direction of the diagonal line then the regression model meets the assumption of normality.
b) If the data spreads far from the diagonal or does not follow the direction of the diagonal line then the regression model does not meet the assumption of normality.

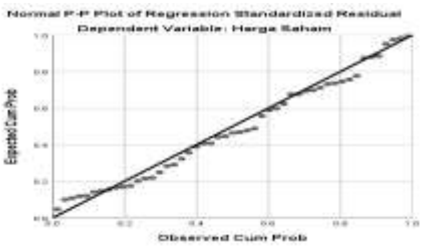


**Figure 1 Probability Plot Normality Test Results**
Source : Data processed spss 21

Based on the figure above, it shows that the normality probability graph, namely plotting data, follows diagonal lines so that the regression model is normally distributed.

b) Multicollinearity Test

The multicollinearity test aims to find out whether in the regression model there is a correlation between independent (free) variables or not (Sanusi, 2014).

Detection of the presence of multicollinearity is as follows:

a. If the tolerance value > 0.100 and the VIF value < 10.00 then there is no multicollinearity.
b. If the tolerance value < 0.100 and the VIF value > 10.00 then multicollinearity occurs.

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**Table 2 Multicollinearity Test Results**

**Coefficients**[a]

| Type | | Collinearity Statistics Tolerance | VIF |
|---|---|---|---|
| 1 | (Constant) | | |
| | TATTOO | 0.996 | 1.004 |
| | NPM | 0.996 | 1.004 |

a. Dependent Variable: Share Price

Source : Data processed spss 21

From table shows that the tolerance value of the 2 variables is greater than 0.100 , and the VIF value is smaller than 10.00 so it can be concluded that the study data does not contain symptoms of multiclonality.

c) Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is a variance inequality from the residual of one observation to the observation of another. If the variance from the residual of one observation to another is fixed, then it is called homoscedasticity and if it is different, it is called heteroskedasticity (Ghozali, 2016). In this study, the chart method (Scatter Plot Diagram) was used, with the premise that:

1. If there are points that form a certain pattern that is regular then identify heteroskedasticity has occurred.
2. If there is no clear pattern, as well as dots spreading above and below the number 0 on the Y axis, then heteroskedasticity does not occur.

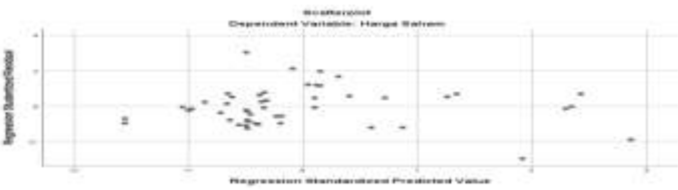

**Figure 2 Heteroskedasticity  Test Results**
Source : Data processed spss 21

Based on the table above, it can be seen that the points do not form a clear pattern, and the dots spread above and below the number 0 on the Y axis, it can be concluded that heteroskedasticity does not occur, so that a good and ideal regression model can be fulfilled.

d) Autocorrelation Test

The autocorrelation test aims to find out whether in the linear regression model there is a correlation between the intruder error (residual) in the t period and the disruptor error in the previous t-1  (Ghozali, 2011). The test used to detect the presence of autocorrelation is using the Durbin Watson (DW) test. The decision-making criteria are as follows:

a. A D-W number below -2 means there is a positive autocorrelation.
b. A D-W number between -2 to 2 means there is no autocorrelation.
c. A D-W number above 2 means that there is a negative autocorrelation.

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**Table 3 Autocorrelation Test Results**

**Model Summary[b]**

| Type | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | 0.143[a] | 0.021 | -0.022 | 747.544 | 0.937 |

a. Predictors: (Constant), NPM, TATO

b. Dependent Variable: Share Price

Source : Data processed spss 21

From the results of the table above, it is known that the Durbin-Watson value obtained is 0.973 which means it is included in the criteria of point-2, so it can be concluded that the regression model does not have autocorrelation.

## 1. Multiple Linear Regression Analysis

**Table 4 Multiple Linear Regression Test Results**

**Coefficients[a]**

| Type | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | T | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 3259.988 | 813.011 | | 4.010 | 0.000 |
| | TATO | -706.144 | 536.541 | -0.173 | -1.316 | 0.193 |
| | NPM | -637.888 | 2508.005 | -0.033 | -0.254 | 0.800 |

a. Dependent Variable: Share Price

Source : Data processed spss 21

From the table above, the values are known as follows:

Constant = 3259.988

TATO (X1) = -706.144

NPM (X2) = -637.888

The results are incorporated into the multiple linear regression equation as follows:

**Y = 3259.988 - 706.144 X1 - 637.888 X2 + e**

Information:

1) The constant of 3259.988 indicates that if the independent variable values of TATO (X1) and NPM (X2) are considered constant, the Share Price (Y) in the Food and Beverage Sub-Sector Company is 3259.988.
2) The TATO coefficient of -706.144 with a negative sign indicates that the direction of the influence is negative on the stock price. This means that if each TATO goes up by 1 unit, then the Share Price will decrease by 706,144 assuming other independent variables are considered constant.
3) The NPM coefficient of -637,888 with a negative sign indicates that the direction of the influence is negative on the stock price. This means that if each NPM increases by 1 unit, the Share Price will decrease by 637,888 assuming other independent variables are considered constant.

## 2. Hypothesis Test

a) Partial Test ( t test )

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**Table 5 t Test Results (Partial Test)**

**Coefficients[a]**

| Type | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | T | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 3259.988 | 813.011 | | 4.010 | 0.000 |
| | TATO | -706.144 | 536.541 | -0.173 | -1.316 | 0.193 |
| | NPM | -637.888 | 2508.005 | -0.033 | -0.254 | 0.800 |

a. Dependent Variable: Share Price
Source : Data processed spss 21)

Based on the results of the data in the table above, it can be concluded as follows:

1) The TATO variable has a negative calculated $t_{value}$ of -1,316,and a table $t_{value}$ with a sig value of α= 5% ( 0.05 ) and df = n-k ( 60-3=57 ) then a table $t_{value}$ of 1.672 is obtained. The calculated $t_{value}$ < $t_{table}$ is -1,316 < 1,672. If the value of $t_{counts}$ < $t_{table}$ it means that $H_0$ is accepted and $H_a$ is rejected, it means that there is no significant influence between TATO and the Share Price. Furthermore, the sig value in the TATO variable is 0.193 while the α significant rate set earlier is 0.05, if the sig value < 0.05 it means that the variable X has a significant effect on the variable Y but vice versa if the sig value > 0.05 it means that the variable X has no significant effect on the variable Y . The results of the t test of this study were a sig value of 0.193 > 0.05. So, it can be concluded that TATO partially has no significant effect on the Share Price of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

2) The NPM variable has a positive calculated t value of - 0.254, and the table $t_{value}$ with sig values α= 5% ( 0.05 ) and df = n-k ( 60-3=57 ) of 1.672 . The calculated $t_{value}$< $t_{table}$ - 0.254 < 1.672. If the value of $t_{counts}$ < $t_{table}$ it means that $H_0$ is accepted and $H_a$ is rejected, so there is no significant influence between NPM and Share Price. Furthermore, the sig value on the NPM variable is 0.800 while the significant rate of α set earlier is 0.05, if the sig value is < 0.05 it means that the variable X has a significant effect on the variable Y but vice versa if the sig value > 0.05 it means that the variable X has no significant effect on the variable Y. T test results the study had a sig value of 0.800 > 0.05. So, it can be concluded that NPM partially does not have a significant effect on the Share Price of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

b) Simultaneous Test ( Test f )

**Table 6 Test Result f (Simultaneous Test)**

**ANOVA[a]**

| Type | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 14901231.236 | 2 | 7450615.618 | 0.873 | 0.423[b] |
| | Residual | 486258664.498 | 57 | 8530853.763 | | |
| | Total | 501159895.733 | 59 | | | |

a. Dependent Variable: Share Price

b. Predictors: (Constant), NPM, TATO
Source : Data processed spss 21

Based on the value of the F test in the table above, a calculated F value of 0.873 with a significant level of 0.423 besides the F value of the table with df (N1) = k-1 ( 3-1 = 2 ) and df(N2) = n-k ( 60-3 = 57 ) is 3.16.
Based on these results it can be seen that $F_{counts}$ < from $F_{table}$ ( 0.873 < 3.16 ) then $H_0$ is accepted and $H_a$ is rejected.

So, it can be concluded that the *variables of Total Asset Turn Over* and *Net Profit Margin* together have no significant effect on the Share Price of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

3. Coefficient of Determination (R-Square)

**Table 7 Coefficient of Determination Results**
**Model Summary[b]**

| Type | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | 0.143[a] | 0.021 | -0.022 | 747.544 | 0.937 |

a. Predictors: (Constant), NPM, TATO
b. Dependent Variable: Share Price
Source : Data processed spss 26 (2022)

From the table above, it can be seen that the R-Square value in this study was 0.021. This figure identifies that the Stock Price ( independent variable) of 2.1 % while the remaining 97.9 % is explained by other causes that were not studied in this study. Then the standard error of the estimate is 747,544. Where the smaller this number will make the regression model more precise in predicting the Stock Price.

## DISCUSSION

### 1. Effect of Total Asset Turn Over on Stock Price

Based on the results of research on the effect of Total Asset Turn Over on Stock Price in Food and Beverage Sub-Sector Companies on the Indonesia Stock Exchange which states the calculated value of t < $t_{table}$, namely -1,316 < 1,672. If the value of $t_{counts}$ < $t_{table}$ it means that $H_0$ is accepted and $H_a$ is rejected, it means that there is no significant influence between TATO and the Share Price. Furthermore, the sig value in the TATO variable is 0.193 while the α significant rate set earlier is 0.05, if the sig value < 0.05 it means that the variable X has a significant effect on the variable y but vice versa if the sig value > 0.05 it means that the variable X has no significant effect on the variable Y. The results of the t test of this study were a sig value of 0.193 > 0.05. So, it can be concluded that TATO partially has no significant effect on the Share Price of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

### 2. The Effect of *Net Profit Margin* on Stock Price

Based on the results of the research above regarding the effect of Net Profit Margin on Stock Prices in Food and Beverage Sub-Sector Companies on the Indonesia Stock Exchange which states the calculated value of t < $t_{table}$, namely - 0.254 < 1.672. If the value of $t_{counts}$ < $t_{table}$ it means that $H_0$ is accepted and $H_a$ is rejected, so there is no significant influence between NPM and Share Price. Furthermore, the sig value on the NPM variable is 0.800

while the significant rate of α set earlier is 0.05, if the sig value < 0.05 it means that the variable X has a significant effect on the variable Y but vice versa if the sig value > 0.05 it means that the variable X has no significant effect on the variable Y. The results of the t test of this study were a sig value of 0.800 > 0.05. So, it can be concluded that NPM partially does not have a significant effect on the Share Price of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

**3. Effect of Total Asset Turn Over and Net Profit Margin on Stock Price**

Based on the ratio of the F test in the table, a calculated F value of 0.873 was obtained with a significant level of 0.423 while the F value of the table with df (N1) = k-1 ( 3-1 = 2 ) and df (N2) = n-k ( 60-3 = 57 ) was 3.16. Based on these results, it can be seen that $F_{counts}$ < from $F_{table}$ ( 0.873 < 3.16 ) then $H_0$ is accepted and $H_a$ is rejected. So, it can be concluded that the variables of Total Asset Turn Over and Net Profit Margin together have no significant effect on the Share Price of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2017-2021 period. This is because there are still other factors that affect the stock price. The stock price in the capital market will always change according to the state of the market.

This is because there are still other factors that can affect the stock price. According to (Sembiring, 2020), mentioned that the factors that affect stock prices include non-financial factors and financial factors. Non-financial factors are in the form of stock trend price movements, which are usually used by investors for decisions to buy or sell shares. Financial factors are in the form of information contained in financial statements such as profitability and rentability. (Saragih et al., 2017)

The stock price in the capital market will always change according to the state of the market. Factors affecting stock prices are unstable political and economic circumstances, rising or falling interest rates and unpredictable exchange rates. (Lufriansyah, 2021). Therefore, *Total Asset Turn Over* and *Net Profit Margin* are not enough to be used as an assessment of the stock price.

**CONCLUSION**

From the results of the discussion above, it can be concluded from this research as follows: Based on research conducted on 12 Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2017-2021, it can be concluded that *the Total Asset Turn Over* partially has no significant effect on the Stock Price , Based on research conducted on 12 Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2017-2021, it can be concluded that *Net Profit Margin* partially has no significant effect on the Stock Price, Based on research conducted on 12 Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2017-2021, it can be concluded that *total asset turns over and net profit margin* together (simultaneously) have no significant effect on the stock price.

**IMPLICATIONS**

Total Asset Turnover partially has a significant effect on stock prices, Net Profit Margin partially has a significant effect on stock prices as well as Total Asset Turnover and Net Profit Margin simultaneously have a significant effect on stock prices in Food and Beverage Sub Sector Companies listed on the Indonesia Stock Exchange in 2017-2021?

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**055-043**

# THE INFLUENCE OF ACCOUNTING PRACTICES AND TAX INCENTIVES ON MSME TAX REVENUE IN MEDAN MARELAN DISTRICT

By Assoc. Prof. Dr. Zulia Hanum

**ABSTRACT**

This research aims to determine the influence of accounting practices and tax incentives on MSMEs tax revenues simultaneously and partially in Medan Marelan District. This research uses quantitative research with a survey research type because the data used in this research is primary data obtained through questionnaires. The sample in this study was calculated using the Slovin formula to obtain 66 MSMEs actors who were research respondents. The data collection technique was carried out by distributing questionnaires to respondents. The data analysis technique used in this research is multiple linear regression analysis using Smart PLs Version 4 software. The results of this research show that Accounting Practices and Tax Incentives do not have a significant effect on MSMEs Tax Revenues partially and simultaneously in Medan Marelan District.

Keywords: Accounting Practices, Tax Incentives, Tax Revenue, MSMEs

## INTRODUCTION

The private sector that is currently and increasingly increasing is Micro, Small and Medium Enterprises (MSMEs). Micro, Small and Medium Enterprises (MSMEs) are a business sector that produces various kinds of products and services and have an important role in creating business opportunities as a solution to overcoming the problem of unemployment (Ardila et al., 2020). As is clearly projected by the Central Statistics Agency, MSMEs can absorb up to 89.2 percent of the total workforce, MSMEs provide 99 percent of the total existing employment opportunities, MSMEs are able to contribute 60.34 percent of the total national GDP. MSMEs contributed 14.17 percent of total exports, and MSMEs contributed 58.18 percent of total investment (www.kompas.com, 20 December 2019 edition). The turnover and profits generated are still much smaller compared to large companies. However, the existence of this business which can almost be found along the road is actually able to provide benefits for economic growth. The large contribution of taxes as the main source of state income which is always increasing makes the Directorate General of Taxes (DGT) continue to improve and look for the best ways to increase tax revenues in country.

In the previous regulation, in an effort to encourage voluntary fulfillment of tax obligations, as well as encouraging contributions to state revenues from the MSME sector, the government issued Government Regulation (PP) Number 46 of 2013 concerning Income Tax on Income from Businesses Received or Obtained by Taxpayers Who Have Gross Turnover Certain. PP Number 46 of 2013 is intended to provide convenience and simplification in calculating income tax for the public in carrying out their tax obligations, educate the public about orderly administration and transparency in reporting their income and provide opportunities for the public to contribute to state administration. MSME tax is

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contained in PPh Article 4 paragraph (2), the practice of which is further regulated through Government Regulation Number 23 of 2018 (PP 23/2018). Entrepreneurs with certain gross turnover (MSMEs) with a turnover not exceeding IDR 4.8 billion per year are subject to a tariff of 0.5%. This regulation has been in effect since July 1 2018 and is intended for MSME players which include individuals and entities (cooperatives, firms, CVs and limited liability companies) (www.online-pajak.com, regarding VAT invoices/MSME taxes 2022).

The growth of micro, small and medium enterprises (MSMEs) cannot be separated from the government's attention because MSMEs can still survive amidst the global crisis. MSME actors occupy the largest share of all people's economic activities, starting from farmers, fishermen, livestock breeders, miners, craftsmen, traders and service providers (Ningsih & Saragih, 2020). The development of MSMEs in Indonesia occurs very rapidly every year, but this is not in line with fulfilling their tax obligations. Atawodi and Stephen stated that taxpayer compliance among micro, small and medium enterprises (MSMEs) is still poor (Oliviandy et al., 2021).According to the Central Statistics Agency (BPS), the number of Micro, Small and Medium Enterprises (MSMEs) has reached 64 million. This figure reaches 99.9 percent of all businesses operating in Indonesia. The following is the amount of Income Tax revenue for 2018-2022:

**Table 1.1**

**Total Income Tax Revenue 2018-2022**

| Source of Revenue | Realization of State Revenue (Billions of Rupiah) | | | | |
|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 |
| Income tax | 749977.00 | 772265.70 | 594033.33 | 696676.60 | 895101.00 |

*Source: Central Statistics Agency, 2023*

The number of MSME units in Indonesia should be directly proportional to the amount of tax revenue originating from the MSME sector. However, unfortunately up to now, MSME tax revenues have not been able to make a significant contribution in terms of their impact on the economy and employment in Indonesia. In order to maintain business continuity and save the stability of the national economy, the government has made various efforts, one of which is by establishing policies in the field of taxation, namely incentives. tax. According to the Big Indonesian Dictionary, incentives mean additional income in the form of money or goods given to increase work morale. Tax incentives in Indonesian tax regulations are called tax facilities. Tax facilities can generally be interpreted as convenience provided by the government in terms of taxation. However, most of the UMKM taxpayers in Medan Marelan District are not aware of the change in the UMKM tax rate. The tax rate which was previously priced at 1% of gross turnover has now been reduced to 0.5% of gross turnover. The respondents admitted that they had not received tax outreach from the local tax office. From the results of interviews, researchers found that there were still many MSMEs who did not know about these regulatory changes (Daulay, 2013).

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In the province of North Sumatra there are 33 districts/cities, Medan City as a metropolitan city has great potential in terms of the economy, especially micro-economics such as business and home industry which is included in the MSME sector category. The development of MSMEs in Medan Marelan District is quite a significant development. The following shows the number of MSME units in Medan Marelan District in 2023:

**Number of MSME Business Sectors in Medan Marelan District in 2023**

| No | MSME Business Sector | Number of MSME units |
|---|---|---|
| 1 | Wholesalers and Retailers | 898 |
| 2 | Accommodation, Food and Drink | 555 |
| 3 | Industry | 9 |
| 4 | Service | 25 |
| 5 | Agriculture, Forestry and Fish | 69 |
| **Total** | | 1,556 |

*Source: Medan Marelan Subdistrict Office, 2023*

From the table above, Medan Marelan District has an MSME Business Sector spread across 1,556 business units. The largest number of MSMEs are in Rengas Pulau Subdistrict with 483 MSME units, followed by Tanah Enam Ratus and Terjun Subdistricts with 431 MSME units. To find out whether MSME actors carry out accounting practices, the author conducted interviews with 30 MSME actors as samples for this research. From the interview results, there were 14 MSME actors using Accounting Practices and 16 MSME actors not using Accounting Practices. Based on this description, research was carried out to find out more with the title: "The Influence of Accounting Practices and Perceptions of Tax Incentives on MSME Tax Revenue in Medan Marelan".

## LITERATURE REVIEW

### Understanding Tax

Definition of tax according to Law no. 28 of 2007 in accordance with article 1 concerning general provisions and procedures for taxation: "Tax is a mandatory contribution to the state owed by an individual or entity that is coercive based on the law, without receiving direct compensation and is used for state needs in the amount of -the great prosperity of the people." According to Prof. Dr. Rochmat Soemitro, SH: "Taxes are people's contributions to the state treasury based on law (which can be enforced) without receiving reciprocal services (contrapretation) which can be directly demonstrated, and which are used to pay for public expenses." This definition was then refined to: "Taxes are the transfer of wealth from the people to the state treasury to finance routine expenditure and the "surplus" is used for public savings which is the main source for financing public investment."

## Accounting Practice

Accounting practices are the processes and activities of recording the daily financial operations of a business entity. Accounting practices are necessary to produce a company's legally required annual financial reports. There are various accounting methods that companies can choose to use, and there are principles that companies must adhere to. Generally accepted accounting principles refer to a set of general accounting principles, standards, and procedures issued by the Financial Accounting Standards Board. Accounting practices are necessary for companies to produce annual and legally required financial reports: profit and loss statements, comprehensive income statements, balance sheets, cash flow statements, and equity statements

## Tax Incentives

Tax incentives are an offer provided by the government through tax benefits in certain activities, such as monetary contributions for quality activities (Dewi et al., 2020). Tax incentives take the form of special provisions in tax laws and regulations which can result in a reduction in the amount of tax paid to the state in order to help the country's economic development (Kartiko, 2020). Bearing in mind that currently the Covid-19 pandemic has ended, the government has issued PMK 3/PMK.03/2022 concerning tax incentives for taxpayers affected by the 2019 Corona Virus Disease pandemic on January 25 2022 as an extension of the tax incentive period until June 2022. The conditions that must be considered when taking advantage of tax incentives for MSMEs include, firstly, taxpayers who have a certain gross profit turnover, secondly, they are subject to Final Income Tax according to No. 23 of 2018, the three taxpayers must report the realization report of Final Income Tax borne by the government every month which only needs to be reported no later than the 20th of the following month, the four taxpayers who do not report the realization report on time cannot take advantage of the tax incentive (Fazriputri et al., 2021).

## Tax revenue

According to the Ministry of Finance of the Republic of Indonesia, revenue is the main source of income in the APBN. Tax revenues average around 70 percent of total state income. Because the role of taxes is increasingly important, tax revenues require a better management system so that tax revenues are more optimal in accordance with economic conditions and community capabilities. The Directorate General of Taxes (DJP) as one of the government institutions under the Ministry of Finance which has the task of securing state tax revenues is required to always be able to meet the achievement of tax revenue targets which continue to increase from year to year amidst the challenges of changes that occur in social and economic life in the country. public.

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## RESEARCH METHODS

### Types of research

This research is associative research using quantitative descriptive methods. Quantitative research is research related to numbers, where the numbers are in the form of numbers which are analyzed using statistics to answer specific research questions or hypotheses and to make predictions about a variable. Meanwhile, associative research is research that aims to determine the influence or relationship between two or more variables.

### Population and Sample

In this research, the author used the Slovin formula with the saturated sample method. According to Sugiyono (2013), the sample is part of the number and characteristics of the population. The research was conducted at the Marelan sub-district office on Jalan Captain Rahmad Buddin No. 190, Plunge. Of the 1,556 MSMEs in Medan Marelan that meet the accounting practice criteria, 361 of the population.

### Definition of Operational Variables

| Variable | Operational definition | Indicator | Measurement Scale |
|---|---|---|---|
| | | Dependent | |
| Tax revenue | Tax revenue is income obtained by the government which comes from people's taxes. | 1. Tax payment is made<br>2. Tax payments are made on time<br>(Febrianti, 2013) | Likert |
| | | Independent | |
| Accounting Practice | Accounting practices are the processes and activities of recording the daily financial operations of a business entity. | 1. Collect, store and process accounting information<br>2. Using an accounting information system<br>(Saputro & Meivira, 2020) | Likert |
| Tax Incentives | Tax incentives are a form of convenience provided by the government to taxpayers both for economic development and for the success of government programs (Rahmawati & Apriliasari, 2021). | 1. MSME tax rate policy<br>2. Perception of MSMEs' rights and obligations regarding taxes<br>3. Receipt of MSME tax subsidies<br>(Saputro & Meivira, 2020) | Likert |

### Data collection

The data used in this research is primary data, namely data that is obtained and must be reprocessed, namely a questionnaire. Collecting data related to what will be discussed is carried out directly using the questionnaire method. The questionnaire method is a data

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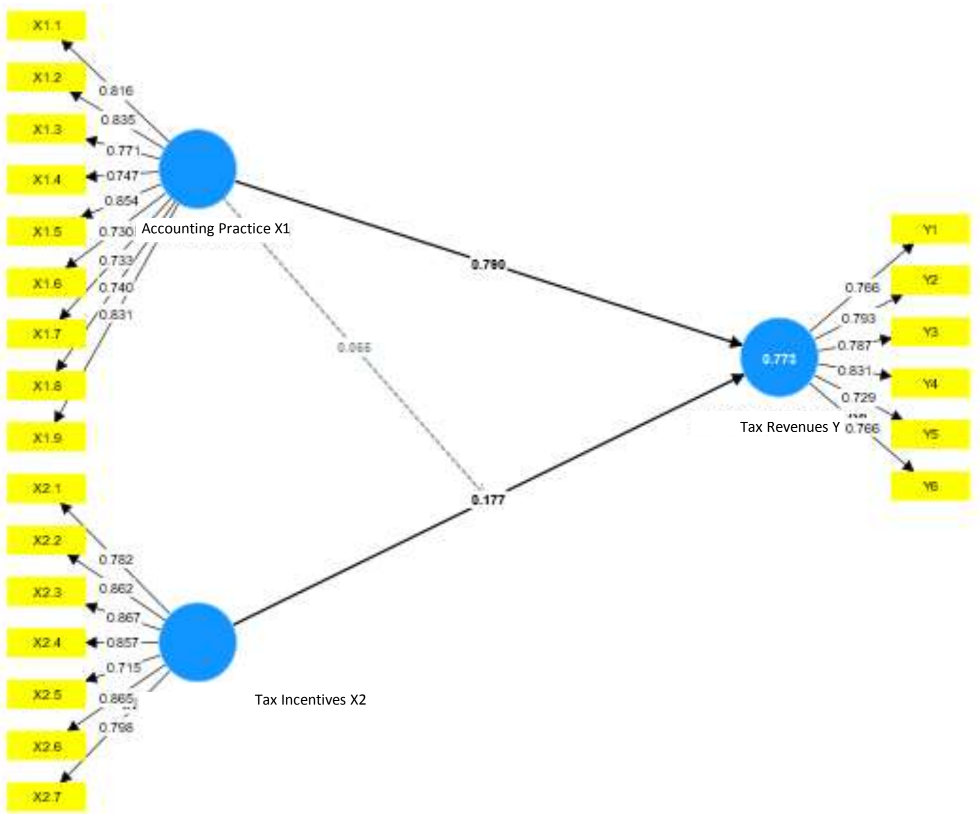
collection technique through a form containing questions asked in writing to a person or group of people to obtain answers or responses and the required information.

**Measurement Model Analysis (Outer Model)**

Evaluation of the outer model in PLS-SEM is carried out to assess the validity and reliability of the model (Ghozali, 2021). By using valid and reliable instruments in data collection, it is hoped that the research results will be valid and reliable (Sugiyono, 2017).




**Convergent Validity**

According to Hair et al (2021), Factor Loading (LF) or outer loading is the correlation between each measurement item and a variable. This measure describes how well the items reflect/describe the measurement of the variable (Sofyan Yamin, 2023). Hair et al (2021), Henseler et al (2009) use an LF value ≥ 0.70 as acceptable or valid.

| INDICATOR | Outer loadings | INFORMATION |
|---|---|---|
| X1.1 <- Accounting Practices (X1) | 0.816 | Valid |
| X1.2 <- Accounting Practices (X1) | 0.835 | Valid |
| X1.3 <- Accounting Practices (X1) | 0.771 | Valid |
| X1.4 <- Accounting Practices (X1) | 0.747 | Valid |

| | | |
|---|---|---|
| X1.5 <- Accounting Practices (X1) | 0.854 | Valid |
| X1.6 <- Accounting Practices (X1) | 0.730 | Valid |
| X1.7 <- Accounting Practices (X1) | 0.733 | Valid |
| X1.8 <- Accounting Practices (X1) | 0.740 | Valid |
| X1.9 <- Accounting Practices (X1) | 0.831 | Valid |
| X2.1 <- Tax Incentive (X2) | 0.782 | Valid |
| X2.2 <- Tax Incentive (X2) | 0.862 | Valid |
| X2.3 <- Tax Incentive (X2) | 0.867 | Valid |
| X2.4 <- Tax Incentive (X2) | 0.857 | Valid |
| X2.5 <- Tax Incentive (X2) | 0.715 | Valid |
| X2.6 <- Tax Incentive (X2) | 0.865 | Valid |
| X2.7 <- Tax Incentive (X2) | 0.798 | Valid |
| Y1 <- Tax Revenue (Y) | 0.766 | Valid |
| Y2 <- Tax Revenue (Y) | 0.793 | Valid |
| Y3 <- Tax Revenue (Y) | 0.787 | Valid |
| Y4 <- Tax Revenue (Y) | 0.831 | Valid |
| Y5 <- Tax Revenue (Y) | 0.729 | Valid |
| Y6 <- Tax Revenue (Y) | 0.766 | Valid |

**Average Variance Extracted (AVE)**

Average Variance Extracted (AVE) is a measurement model with reflexive indicators assessed based on cross-loading of measurements with constructs. AVE is the average variation of each measurement item contained by the variable. How far overall the variable can explain variations in measurement items. This measure also describes how good the convergent validity of the variable is. According to Hair et al (2021), the value (AVE) ≥ 0.50.

**Composite Reliability**

Composite Reliability is an indicator for measuring a construct that can be seen in the latent variable coefficient view. A CR value of 0.60 – 0.70 is still acceptable (Ghozali, 2021).

**Cronbach's Alpha**

Cronbach's Alpha is a reliability test that is carried out as a result of composite reliability. A variable can be declared reliable if it has a Cronbach's Alpha value > 0.7

| | Cronbach's alpha | Composite reliability (rho_c) | (AVE) |
|---|---|---|---|
| (X1) | 0.922 | 0.935 | 0.617 |
| (X2) | 0.920 | 0.936 | 0.677 |
| (Y) | 0.870 | 0.902 | 0.607 |

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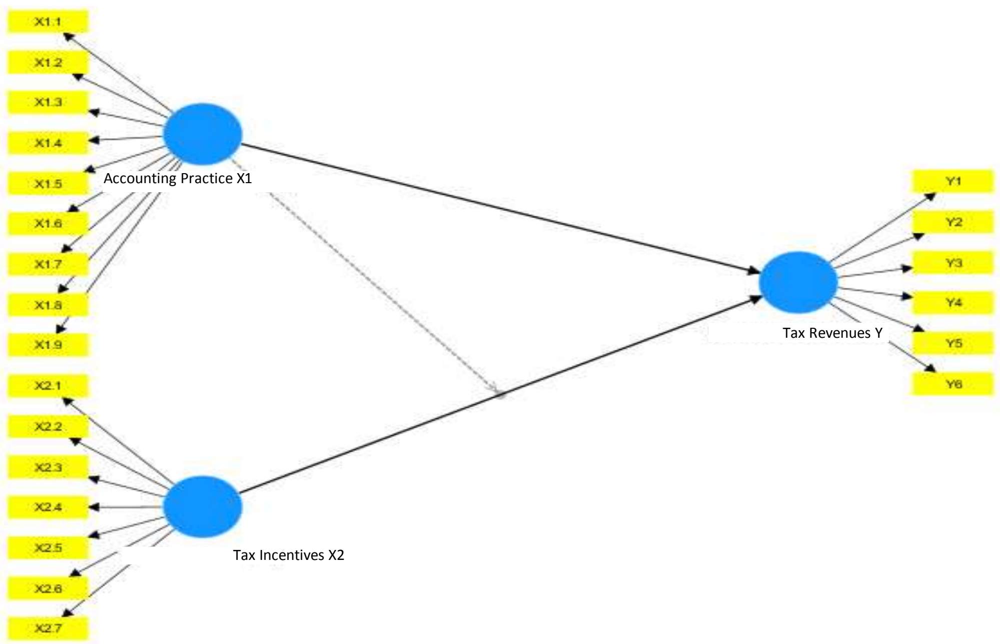
**Structural Model Analysis (Inner Model)**

The first step in evaluating a structural model is to check for collinearity between constructs and the predictive ability of the model (Sarstedt et al., 2017). Testing on the structural model (inner model) basically aims to see the relationship between variables. The structural model evaluation measurements are seen from Boostraping or Hypothesis Testing and R-square

**Hypothesis Testing or Boostraping**

In carrying out Inner Model Analysis, it can be expressed through a path diagram, using bootstrapping analysis. So you get the image below:




This research was carried out by looking at the t-statistic and p-value. The independent variable is declared to have an effect on the dependent variable if the t-statistic is> 1.99 and the p-value is <0.05 (Dahrani et al., 60 2022). The following are the results of data processing in this research using SmartPLS version 4:

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (\|O/STDEV\|) | P values |
|---|---|---|---|---|---|
| (X2) -> (Y) | 0.177 | 0.202 | 0.147 | 1,198 | 0.231 |
| (X1) -> (Y) | 0.790 | 0.755 | 0.129 | 6.125 | 0,000 |

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| | | | | | |
|---|---|---|---|---|---|
| (X1) x (X2) -> (Y) | 0.055 | 0.050 | 0.041 | 1,334 | 0.182 |

Based on the table above, hypothesis testing can be stated as follows:

1. The influence of accounting practices (X1) on tax revenues (Y) has a t-statistic value of 6.125 > 1.99 and has a p-value of 0.00 < 0.05, meaning accounting practices on tax revenues in the district. Medan Marelan was declared influential.

2. The effect of tax incentives (X2) on tax revenues (Y) has a t-statistic value of 1.198 < 1.99 and has a p-value of 0.231 > 0.05. It can be stated that tax incentives on tax revenues in the district. The Marelan terrain has no effect.

3. The influence of accounting practices (X1) and tax incentives (X2) on tax revenues (Y) has a t-statistic value of 0.041 < 1.99 and has a p-value of 0.182 > 0.05. It can be stated that the effect of tax incentives weakens the relationship between accounting practices and tax revenues. in District. Medan Marelan.

**R-Square**

Based on data processing carried out with SmartPLS Version 4, the R-Square values are obtained as follows:

| Variable | R-square |
|---|---|
| Tax Revenue (Y) | 0.773 |

shows the R-Square value for the tax revenue variable of 0.773. This value shows that the tax inspection and tax sanctions variables have an effect on the tax revenue effectiveness variable by 7.73%, it can be said that this model is in the strong category. And the rest is influenced by other variables outside the variables in this research. R Square values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak (Sarstedt et al., 2017).

## DISCUSSION

### The Influence of Accounting Practices on MSME Tax Revenues

From the results of the hypothesis testing analysis, it is known that accounting practices have a significant effect on tax revenues. With a t-statistic value of 6.125 > 1.99 and a p-value of 0.000 < 0.05, H1 is accepted. This states that accounting practices influence MSME tax revenues in Medan Marelan.

This means that the higher a person's accounting practices, the higher the tax revenue, and vice versa, if accounting practices are low, the tax revenue will also be low. Accounting practices enable individuals to sort out their financial income and expenses. By thinking about taxes in every financial decision, the individual realizes that taxes are something

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important and is willing to voluntarily carry out their tax obligations, in other words it can influence tax revenues.

**The Effect of Tax Incentives on MSME Tax Revenue**

From the results of the hypothesis testing analysis, it is known that tax incentives do not have a significant effect on tax revenue. With a t-statistic value of 1,198 < 1.99 and a p-value of 0.231 > 0.05, so H2 is not accepted. This states that tax incentives have no effect on MSME tax revenues in Medan Marelan.

Research conducted by Marlinah (2020) and Padyanoor (2020) states that providing tax incentives is only used by MSMEs to be able to survive during the Covid-19 pandemic. Incentives are no longer used to increase business production, but are more appropriate to cover business losses due to business expenses that exceed the amount of business income obtained. The impact is that the realization of existing MSME tax incentives is unable to increase tax revenues because the production process actually decreases and even causes many MSMEs to go bankrupt and have to close their businesses. This is in line with research (Gilbert, 2020) which states that tax incentives have no effect on tax revenue. The data and results obtained by the author state that the tax incentive program is still less effective.

**The Influence of Accounting Practices and Tax Incentives on MSME Tax Revenues**

From the results of the hypothesis testing analysis, it is known that accounting practices and tax incentives do not have a significant effect on tax revenues. With a t-statistic value of 1,334 < 1.99 and a p-value of 0.182 > 0.05, so H3 is not accepted. This states that accounting practices and tax incentives have no effect on MSME tax revenues in Medan Marelan.

Accounting practices can influence how companies report their revenues, expenses, and profits. If a company uses an accounting method that reduces reported income or increases reported expenses, this can have an impact on the amount of profit stated in the financial statements. This impact will then influence the amount of tax that must be paid by the company. However, the impact of accounting practices on tax revenues can be very complex and depends on various factors, including the type of practice used and the tax regulations in force.

Tax incentives are incentives given by the government to companies or individuals to stimulate certain economic activities, such as investment in certain sectors or technological development. Tax incentives can impact tax revenues because the government may have to reduce tax rates or provide tax reductions as part of the incentives. In this case, tax revenues may be reduced in the initial stages, but it is hoped that the positive impact of incentivized economic activity will compensate for the reduction in the long run.

**CONCLUSION**

Based on the results of the research and discussion in the previous chapter, it can be concluded that research on the influence of accounting practices and tax incentives on MSME tax revenues in Medan Marelan is as follows:

a) Accounting practices influence MSME tax revenues in Medan Marelan
b) Tax incentives have no effect on MSME tax revenues in Medan Marelan
c) Accounting practices and tax incentives have no effect on MSME tax revenues in Medan Marelan

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**061-048**

# DIGITAL INNOVATION OF FINANCIAL MANAGEMENT IN THE DEVELOPMENT OF CREATIVE INDUSTRY IN INDONESIA

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## ABSTRACT

This study aims to analyze the existing literature on the importance of digital innovation and its possible impact on the development of creative industries in Indonesia. The research method uses a literature review approach to digital innovation and its application to the creative industry in Indonesia. Data analysis techniques are carried out by clarifying several terminologies related to digital innovation, and the future challenges of the creative industry. The results of this study indicate that digital innovation as a Financial Information Recording Application System (SIAPIK) can make it easier to record financial transactions and prepare financial reports for business people easily and simply to improve financial performance and business development as well as increase financial access for creative industries in Indonesia.

Keywords: Digital, Innovation, Financial Management, Creative Industry.

## INTRODUCTION

Indonesia's current economic growth is closely related to digital developments that continue to transform. Digital transformation breaks business barriers in every industry(Yousaf et al., 2021). By overcoming barriers to business, they can create new products, and services and find more efficient ways of doing business. This means while service to customers is increasing to get a higher level of satisfaction. Hope is always available for businesses that are willing to reorganize their business by embracing change. Where innovation always occurs in all types of organizations in every industry. Such as creating new customer experiences, changing business models, and empowering workforce innovation(Kohli & Melville, 2019). To do this, companies need a technology-driven foundation. According to the Central Statistics Agency (BPS) and the Creative Economy Agency (Bekraf), the creative industry, or what is known as the creative economy (kraft) is one of the strategic sectors that makes a significant contribution to the Indonesian economy(Ikhsan et al., 2017). This industry, which was born from individual creativity, then again gives birth to many new job opportunities and improves the welfare of the surrounding community. The creative economy's Gross Domestic Product (GDP) in 2016 was 922.59 trillion rupiahs. The creative industry in Indonesia is currently in the spotlight because it contributes significantly to the economy of Indonesia, based on BEKRAF data, the contribution of the creative economy to Indonesia's gross domestic product in 2017 is 7.28%. Furthermore, based on data from the Ministry of Cooperatives and Small and Medium Enterprises in March 2021, the number of MSMEs reached 64.2 million with a contribution to Gross Domestic Product of 61.07 percent or Rp. 8,573.89 trillion. MSMEs can absorb 97 percent of the total workforce and can collect up to 60.42 percent of total investment in Indonesia. This means that the creative industry

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plays an important role in the Indonesian economic sector. Accounting is an information system that produces reports to interested parties regarding economic activities and company conditions. There are still many creative industries that support the nation's economy that has not implemented accounting in running their business. According to the Central Statistics Agency's 2020 survey, around 69.02 percent creative industry experienced capital difficulties during the Covid-19 pandemic. Meanwhile, according to the Complaint Report to the Ministry of Cooperatives and MSMEs as of October 2020, as many as 39.22 percent of the creative industry experienced difficulties with capital during the Covid-19 pandemic. The reason is that implementation of financial management that is not yet professional and best practice, it is still difficult to present reliable and adequate financial reports. accustomed to only relying on manual administration and cannot make financial reports so they often do not know for sure the advantages and disadvantages. and there is no separation between personal money and business money. Therefore, a digital innovation is needed that helps business people record their financial activities with a SiApik application is a simple accounting application designed by Bank Indonesia for small and medium-sized businesses or creative industries that have limitations in terms of the absence of accounting human resources, the absence of a desktop or laptop computer and the absence of fees for purchasing paid accounting applications or software.. Bank Indonesia is trying to innovate to create an application that is useful for recording financial transactions. It also provides financial reports that have been standardized by the Indonesian Institute of Accountants (IAI) in collaboration with Bank Indonesia. In addition, Si Apik is also the application of new standards and statements of financial accounting standards. This application is also by the financial accounting standards of entities without public accountability (ETAP)(Rinandiyana et al., 2020).

## LITERATURE REVIEW

### Digital Innovation

In general, “marketable products and services are the results of successful application of value-creating knowledge(Deshmukh, 2005). Furthermore, the knowledge-based view posits that innovativeness is related to a firm's knowledge base (Deloitte Insghts, 2019). However, knowledge per se is not equal to innovation but needs to be converted into the creation of new or the change of existing market offerings. In digital innovation in industrial contexts, materializing knowledge into innovation is special. First, digital innovations regularly exhibit convergence (Appio et al., 2021), requiring the combination of heterogeneous knowledge. Industrial age incumbents need to combine and span physical and digital components(Hanelt et al., 2021).

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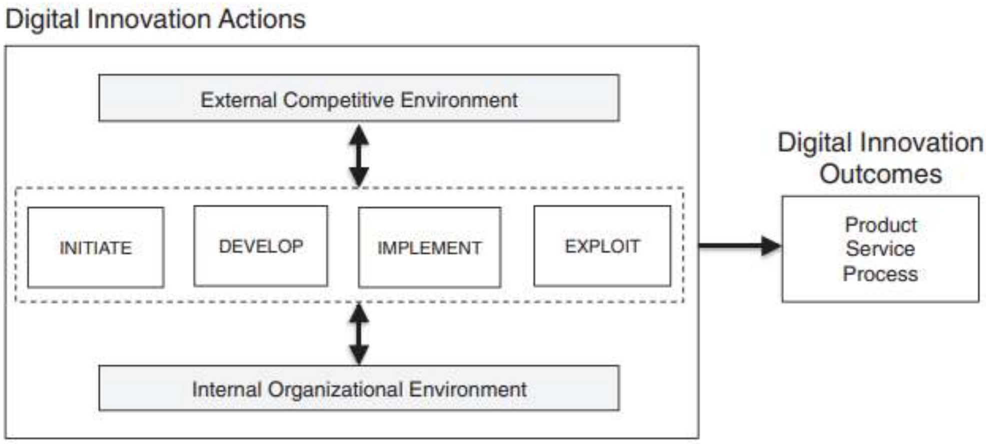


**FIGURE 1** Theoretical framework of digital innovation

**Figure 1 Theoretical Framework Of Digital Innovation**(Kohli & Melville, 2019)

The current wave of digital innovations has already been reported to lead to the transformation and disruption of established business strategies and models (Mugge et al., 2020). In digital transformation, innovation is expected to come in the form of affordance of new digital products and services, and improvisation emerges at both the managerial and operational levels. By enabling new product/service offerings (Baiyere et al., 2020a) an innovating firm may adopt operational and product attributes akin to a born-digital company (Baiyere et al., 2020b). Such changes can also lead a company to converge markets with new competitors from other (digital/IT-related) industries. in general,(Nylén & Holmström, 2015)Existing research in this regard has pointed to the substantial challenges and concerns these firms experience when embracing digital innovation (Piccinini et al., 2015). Among the multiple challenges that industrial-age incumbents encounter, which include overcoming institutionalized thinking (Maaravi & Heller, 2021) as well as changing processes, structures, or governance arrangements, capability concerns play a fundamental role (Di Vaio et al., 2021)

## Creative Industry

Business activities can grow and develop for a long period is the goal of each company. Competitiveness, innovation, creativity, and the quality of the products produced must be to the needs of consumers and can adapt to a dynamic environment. With the development of science and information technology that is so fast, the creative industry must be able to create competitive advantages to be accepted by consumers.(Rosmadi, 2018). Creative industries SMEs in Indonesia may represent a new type of Indonesian SMEs: SMEs that are focusing on innovation and resilience in doing so. This may lead to a notion that these creative industries SMEs are strongly linked with ways of absorbing and adopting innovation and benefiting from its implementation.(Games & Rendi, 2019). The idea of creative industries is built upon particular contexts and phenomena in the developed world. Now, developing countries also adopt this idea as a policy instrument.(Hidayat & Asmara, 2017). The development process of the creative industries is one of many crucial and complicated subjects in a country's policy. As for many other countries, cultures and traditions have been

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pushed as the primary source of employment and export sector in their economic and financial structure, along with the development process of creative industries in each region. Creative industries/economies have a crucial economic contribution to the development of finance and the economy since they can strengthen the identity image, produce a positive business environment, support all utilization efforts in renewable resources, and get a positive impact on the social (Wijaya et al., 2018) The following industry will be benefited from all the creative capabilities of their human resource and also the industries intellectual property that was known as the generation of intellectual property. The creative industry is an industry whose focus its activities on the creation and exploitation of intellectual rich products such as art, film, games, fashion design, or creative business-to-business services such as advertising (Kasiyan, 2019)


**Figure 1. 16 Creative Economy Sub-sector (source: Prisma.bekraf.go.id)**

## Financial Application (SI APIK)

One of these technologies is the Financial Information Recording Application System (SIAPIK). SIAPIK is a financial information recording application that makes it easy for entrepreneurs, especially micro, small and medium enterprises or creative industries to able to create balance sheets, financial reports, and profit and loss through an Android phone. This application system can be used by all creative industry entrepreneurs by downloading the program for free via Android phones on the Google Playstore.(Entrepreneur et al., 2021) In accelerating the development of creating the industry perpetrators' creative industry is also encouraged to be able to compile financial reports through the provision of training on the Financial Information Recording Application System (SIAPIK) so that the creative industry becomes *bankable* (Agustina et al., 2021). The SI APIK application is a simple accounting application designed by Bank Indonesia for small or medium-sized businesses creative industry so that they can easily make simple financial reports, either through mobile phones or computers. SI APIK can be downloaded via mobile in the Play Store.(Pramono et al., 2020) to facilitate business actors in compiling and analyzing financial reports as well as the feasibility of business financing. By Si Apik's motto, SMASH, this application carries the principles of Standard, Easy, Safe, Simple, and Reliable to support increasing financial access for perpetrators creative industry in Indonesia.(OJK, 2020)

## METHODOLOGY

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This research is a qualitative study with library research. Literature research is more than just serving the functions mentioned to obtain research data. Strictly, library research limits its activities only to library collection materials only without the need for field research. Qualitative research of literature studies is used to examine the application of the digital innovation framework in creative industries. The data source used in this study is secondary data. In this study, secondary data comes from literature, articles, journals, and sites on the internet related to the research conducted. The secondary data taken is literature on how digital innovation that will help the development creative industry of the region.

## RESULT AND DISCUSSION

To overcome this, in addition to economic stimulant support from the government, what is no less important is how MSEs manage their business finances and make financial reports so that banks in the future are easier and faster in assessing financial or business performance and providing financing for MSEs business development, especially in the post-Covid-19 recovery period. Based on the information, the creative industry is still facing problems or challenges in responding to not only economic globalization, but also the presence of the digital economy. The problems faced include classic problems related to increasing human resource capacity, access and mastery of information technology, financing and alternative funding, modern business management, global market access, and integration of regional and global chains. This can be seen from inadequate business credibility, weak business management, and lack of promotional media. However, for banking services, especially e-banking, most of the creative industry players have taken advantage of them, although the tendency to use e-banking services is still generally for all transaction activities. Weak business credibility is not caused by ignorance of the importance of this aspect, but because of the lack of ability or skill possessed by the business actors themselves. The creative industry is less able to make books and business plans, besides that it is also weak in the ability to produce promotional media, business identities, and business profiles that are relevant to the needs of the current digital economy era. The method of recording with SIAPiK can be seen in the following figure;

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With the SIAPIK application (Financial Information Recording Application Information System) it will make it easier for business actors to prepare financial reports and as a bank reference in analyzing the feasibility of MSME financing. Business owners no longer need to record step by step according to complicated cycles and understand general accounting accounts and transaction identification only, so they can record financial transactions very easily SIAPIK can be one of the solutions to face challenges and as a reinforcement financing for the creative industry through financial infrastructure and increasing the financial interaction of creative industry business actors.

## CONCLUSION

That the creative industry currently has enormous potential, especially now that the government also plays a role in supporting creative industry players in building their businesses. For this reason, the SIAPIK application (Financial Information Recording Application Information System) will facilitate business actors in compiling financial reports and as a bank reference in determining to finance in the creative industry. With the SiApik application, business people in the creative industry can manage their business finances, and make financial reports, so that banks in the future will be easier and faster in assessing their financial or business performance and provide financing for the development of creative industries in Indonesia.

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**064-052**

# THE INFLUENCE OF BUDGET PARTICIPATION AND EVALUATION BUDGET ON PERFORMANCE ACCOUNTABILITY WITH THE INTERNAL CONTROL SYSTEM AS AN INTERVENING VARIABLE AT THE BAPPEDA OFFICE MEDAN CITY

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## ABSTRACT

This research is a study conducted to determine the effect of budget participation and budget evaluation on performance accountability with the internal control system as an intervening variable at the Medan City Bappeda Office. This study uses a quantitative approach with primary data sources obtained from distributing questionnaires. The sampling technique in this study was accidental sampling technique, with a total of 50 respondents. The analysis carried out in this study includes path analysis using the PLS application. Based on the results of the study, it can be concluded that Budget Participation has a positive and significant effect on Performance Accountability on employees at BAPPEDA Kota Medan, Budget Evaluation has a positive and significant effect on Performance Accountability on employees at BAPPEDA Kota Medan, Budget Participation has a positive and significant effect on the internal control system on employees at BAPPEDA Kota Medan, Budget evaluation has a positive and significant effect on the internal control system on employees at BAPPEDA Kota Medan, the internal control system has a positive and significant effect on performance accountability on employees at BAPPEDA Kota Medan, the internal control system mediates the effect of budget participation on performance accountability on employees at BAPPEDA Kota Medan, the internal control system mediates the effect of budget evaluation on performance accountability on employees at BAPPEDA Kota Medan.

Keywords: Budget Evaluation, Budget Participation, Internal Control System, and Performance Accountability.

## INTRODUCTION

Basically, accountability is the provision of information and disclosure of financial activities and performance to interested parties (Mardiasmo, 2016). The government, both central and regional, must be able to become the subject of providing information in order to fulfill public rights, namely the right to know, the right to be informed, and the right to have their aspirations heard. Basically, the purpose of implementing accountability is to find answers to what must be accounted for, based on what really happened and compare it with what should have happened. If there is a deviation or obstacle, the deviation and obstacle must be corrected immediately. Then the implementation of an activity is expected to still achieve the expected goals. (Harjono & Zulkarnaen, 2017). The implementation of performance accountability is also a form of agency or company compliance in realizing good corporate governance (Ammy, 2017).

Budget is a plan that is systematically prepared in the form of numbers and expressed in monetary units covering all company activities for a certain period (period) in the future. Budget Participation is a periodic financial plan prepared based on approved programs. A

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budget is a written plan regarding the activities of an organization which is expressed quantitatively and generally expressed in units of money for a certain period of time (Nafarin, 2017). Meanwhile, according to (Mauliza & Astuti, 2022), Budget Participation is a formal and systematic approach to the implementation of management responsibilities in planning, coordination and supervision. Based on the description above, it can be concluded that Budget participation is a plan that is systematically prepared in the form of numbers and expressed in monetary units covering all company activities for a certain period (period) in the future.

Budget evaluation is an action taken to trace deviations from the budget to the department concerned and is used as a basis for assessing departmental accountability (Syah et al., 2023). This will affect the behavior, attitudes and accountability of managers. Punitive approach can lead to low motivation and negative attitude, while supportive approach can lead to positive attitude and behavior. Punitive evaluations can lead to low motivation, whereas supportive evaluations can produce positive attitudes and behaviors (Aira, 2012). The budget evaluation process will affect the accountability of the performance of the financial statements of a corporate agency, because if the budget evaluation process produces results for future improvement and the information can be used for future preparation and planning, it will have a positive impact on performance accountability (Aziz et al., 2016).

The Regional Development Planning Agency (BAPPEDA) is a special regional institution in the field of examination and structuring of provincial progress led by a regional organization leader who is under and responsible to the Governor / Regent / Mayor in the provincial government organization in the field of exploration and structuring of local improvements. BAPPEDA has the task of organizing agility associations for the readiness and implementation of provincial arrangements in the field of metropolitan progress arrangements. BAPPEDA as an organizer must have the option to make improvements in various fields. In this way, an improvement plan maker is expected to have extensive information and knowledge in the improvement of an area considering all the possibilities that the area will move. The following are the efficiency criteria for evaluating financial performance:

**Financial Performance Efficiency Criteria**

| **Percentage of Financial Performance** | **Criteria** |
|---|---|
| >100% | Highly Efficient |
| 90% - 99% | Efficient |
| 80% - 89% | Moderately Efficient |
| 60% - 79% | Less Efficient |
| < 60% | Not Efficient |

**Source : (Purnamasari et al., 2014)**

From the table above it can be seen that from the realization of revenue in 2018-2020 none of them reached the set target, then also with regional expenditure greater than the revenue. In 2021 the revenue budget set is not in accordance and is lower than the realization that occurs, as well as in 2022 the revenue budget set is not lower than the realization of income that occurs. According to (Purnamasari et al., 2014).

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**Medan City BAPPEDA Revenue Budget Realization Report (in thousands)**

| Year | Revenue | | Efficiency Level | Description |
|---|---|---|---|---|
| | Budget | Realization | | |
| 2018 | 4,657,852,400 | 3,680,590,700 | 79,02% | Kurang efisien |
| 2019 | 4,727,852,448 | 3,901,684,751 | 82,52% | Cukup efisien |
| 2020 | 4,857,552,448 | 4,121,585,751 | 84,84% | Cukup efisien |
| 2021 | 5,208,964,175 | 5,021,257,837 | 96,40% | Efisien |
| 2022 | 6,522,123,770 | 5,657,816,889 | 86,73% | Cukup efisien |

**Source: BAPPEDA Medan City**

**Budget and Expenditure Realization Data of BAPPEDA Medan City**

| Year | Expenditure | | Tingkat Efisiensi | Description |
|---|---|---|---|---|
| | Budget | Realization | | |
| **2018** | `18.161.993.786 | 12.240.828.664 | 67,40% | Less efficient |
| **2019** | 20.001.322.735 | 13.689.194.382 | 68,44% | Less efficient |
| **2020** | 19.476.527.595 | 12.876.730.142 | 66,11% | Less efficient |
| **2021** | 24.292.278.919 | 16.386.575.629 | 67,46% | Less efficient |
| **2022** | 27.213.216.618 | 25.005.731.674 | 91,89% | Efficient |

**Source: BAPPEDA Medan City**

Based on the table above, it shows that the realization of expenditure from 2018-2021 occurred an unfavourable difference (unfavourable) this occurred because the realization value did not reach or exceed the budget or was less efficient, while according to (Purnamasari et al., 2014) if the level of efficiency is at a value of 60%-70% it is still considered less efficient. This means that one of the measuring instruments for the accountability of the performance of government agencies, namely efficiency in BAPPEDA Medan City, is still not efficient, so it is necessary to analyze more clearly what factors can affect the accountability of the agency's performance.
Internal control is a process that is influenced by human resources and information technology to help organizations or companies achieve their respective goals and also to protect the company's internal assets. It is also used to ensure compliance with applicable policies and regulations. Internal control means that all data in one department will be checked automatically by other departments within the company. (Mulyadi, 2016). There are 5 (five) components of internal control according to COSO 2013, which include Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring.
Based on observations and initial interviews conducted by researchers related to the control system carried out at BAPPEDA Medan City, there are several findings of phenomena including those related to the control environment where the division of tasks in BAPPEDA still overlaps where one unit or section can do a lot of work at once, this needs to be avoided so that the focus of work is achieved. Then on information and communication, there are still information sites that are not updated at BAPPEDA Medan City.

**LITERATURE STUDY**
**Budget Participation**

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Budget participation is a formal and systematic approach to the implementation of management responsibilities in planning, coordination and supervision. Based on the description above, it can be concluded that Budget participation is a plan that is systematically prepared in the form of numbers and expressed in monetary units covering all company activities for a certain period (period) in the future (Mauliza & Astuti, 2022).
Indicators of Budget Participation
Some indicators from research conducted by (Anggasta & Murtini, 2014) are as follows:

1. The influence of the apparatus in budget setting.
   Apparatus in Budget Determination are parties who are directly involved in the process of setting the budget.
2. The frequency of superiors asking for opinions on proposals when the budget is prepared.
   The frequency of superiors asking for opinions on proposals when the budget is prepared is the behavior of superiors to ask for opinions from subordinates during the organizational culture process.
3. Decisions in Budget Determination.
   Decisions in Budget Determination are the final decisions of the organizational culture that have been agreed upon together until the budget is determined.

Some indicators from research conducted by (Ardila, 2013) are as follows:

1. Involvement
2. Budget Revision
3. Providing Opinions.
4. Proposal
5. Contribution of Soliciting Opinions.

**Budget Evaluation**
Budget evaluation is an action taken to trace deviations from the budget to the department concerned and is used as a basis for assessing departmental accountability (Syah et al., 2023). This will affect the behavior, attitudes and accountability of managers. Punitive approach can lead to low motivation and negative attitude, while supportive approach can lead to positive attitude and behavior. Punitive evaluations can lead to low motivation, while supportive evaluations can produce positive attitudes and behaviors (Aira, 2012).

Budget Evaluation Indicators
Based on the measurement aspects and budget evaluation indicators are classified into four aspects which include (Safitri & Sasanti, 2022):

1. Conformity to planning
   The aspect of conformity to planning is an assessment of the conformity between budget implementation and what is planned and stipulated in DIPA.
2. Compliance with budget implementation regulations
   The aspect of compliance with regulations assesses the compliance of work units with laws and regulations in the field of budget implementation.
3. Effectiveness of budget implementation
   The effectiveness aspect of budget execution assesses the achievement of outputs and the completion of payment execution.
4. Efficiency of budget implementation
   The efficiency aspect of budget execution assesses the accuracy of the satker in making payments at the expense of DIPA. With the existence of IKPA, the Directorate General

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of Treasury can assess the performance of satker budget implementation through comparison of K / L performance quality scores.

**Performance Accountability**

Accountability is the provision of information and disclosure of financial activities and performance to interested parties (Mardiasmo, 2016). The government, both central and regional, must be able to become the subject of providing information in order to fulfill public rights, namely the right to know, the right to be informed, and the right to have their aspirations heard (Abdullah, 2016).

Performance Accountability Indicators

Performance Accountability indicators that must be carried out by public sector organizations according to (Melia & Sari, 2019) are as follows:

1. Legal Accountability and Honesty
   Legal accountability and honesty are the accountability of public institutions to behave honestly at work and comply with applicable legal provisions. The use of public funds must be done correctly and have obtained authorization. Legal accountability relates to compliance with laws and other regulations required in running the organization, while honesty accountability relates to the avoidance of abuse of power, corruption and collusion.
2. Managerial Accountability
   Managerial accountability is the responsibility of public institutions to manage the organization efficiently and effectively. Managerial accountability can also be interpreted as performance accountability.
3. Program Accountability
   Program accountability relates to consideration of whether the objectives set can be achieved or not, and whether it has considered alternative programs that provide alternative programs that provide optimal results at minimal cost.
4. Policy Accountability
   Policy accountability is related to the accountability of public institutions for the policies taken. Public institutions should be able to account for policies that have been determined by considering future impacts.
5. Financial Accountability
   This accountability is the responsibility of public institutions to use public funds (public money) economically, efficiently and effectively, without waste and leakage of funds, and corruption. Financial accountability is very important because it is the main spotlight of society (Harahap & Sari, 2023).

**Internal Control System**

The internal control system is a system that can assist leaders in carrying out their duties and functions and has a very important role for the company so that leaders can assess and see the existing organizational structure in the activities they carry out (Purnomo, 2014).

Internal Control System Indicators

According to (Fauziah, 2017), the principles of internal control consist of:

1. Assignment of responsibility.
2. Separation of duties.
3. Documentation.
4. Physical, mechanical, and electronic controls.
5. Independent checks or internal verification.


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| Components | | Principle |
|---|---|---|
| **Control Environment** | 1 | Commitment to integrity and ethical values |
| | 2 | Independence of directors from management in carrying out their duties |
| | 3 | Structure, reporting lines, authorization and accountability |
| | 4 | Accountability |
| | 5 | Commitment to competence |
| **Risk Assessment** | 6 | Developing accountability |
| | 7 | Clearly set objectives |
| | 8 | Identify and analyze risks that affect goal achievement |
| | 9 | Assess potential fraud risks |
| **Control Activities** | 10 | Identify and analyze significant changes |
| | 11 | Significant changes |
| | 12 | Establish and develop control activities |
| **Information and Communication** | 13 | Establish and develop control activities |
| | 14 | General controls over technology |
| | 15 | Establish controls through policies and procedures |
| **Monitoring Activities** | 16 | Obtain, generate and use |
| | 17 | Quality and relevant information |

## METHODS

This type of research used is the associative method. Associative research is research that aims to analyze the relationship between one variable and another or how a variable affects another variable. According to (Sugiyono, 2016b) "An associative approach is the formulation of a research problem that asks about the relationship between two or more variables". This research is included in the type of quantitative research. According to (Juliandi et al., 2015) "Research with a quantitative approach emphasizes its analysis of numerical data (numbers) processed by statistical methods". The place of implementation of this research is the Medan City BAPPEDA office. The data collection technique used in this research is using a questionnaire / questionnaire. Population is the whole of the object under study. (Sugiyono, 2016a) argues that population is a generalization area consisting of objects / subjects to study and then draw conclusions. The population in this study were 50 employees of BAPPEDA Medan City.

## RESULT

**Convergent Validity**

| | Performance Accountability | Budget Evaluation | Budget Participation | Internal Control System |
|---|---|---|---|---|
| x1.1 | | | 0.887 | |
| x1.10 | | | 0.860 | |
| x1.2 | | | 0.930 | |
| x1.3 | | | 0.881 | |
| x1.4 | | | 0.843 | |
| x1.5 | | | 0.825 | |

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| | Performance Accountability | Budget Evaluation | Budget Participation | Internal Control System |
|---|---|---|---|---|
| x1.6 | | | 0.800 | |
| x1.7 | | | 0.733 | |
| x1.8 | | | 0.706 | |
| x1.9 | | | 0.833 | |
| x2.1 | | 0.906 | | |
| x2.2 | | 0.926 | | |
| x2.3 | | 0.896 | | |
| x2.4 | | 0.902 | | |
| x2.5 | | 0.906 | | |
| x2.6 | | 0.774 | | |
| x2.7 | | 0.874 | | |
| x2.8 | | 0.709 | | |
| y.1 | 0.863 | | | |
| y.10 | 0.810 | | | |
| y.2 | 0.813 | | | |
| y.3 | 0.913 | | | |
| y.4 | 0.888 | | | |
| y.5 | 0.906 | | | |
| y.6 | 0.946 | | | |
| y.7 | 0.931 | | | |
| y.8 | 0.684 | | | |
| y.9 | 0.820 | | | |
| z.1 | | | | 0.668 |
| z.10 | | | | 0.814 |
| z.2 | | | | 0.889 |
| z.3 | | | | 0.944 |
| z.4 | | | | 0.910 |
| z.5 | | | | 0.923 |
| z.6 | | | | 0.916 |
| z.7 | | | | 0.903 |
| z.8 | | | | 0.897 |
| z.9 | | | | 0.883 |

**Source: Data Processing (2023)**

Based on the table above, it can be seen that the outer loading value for the Budget Participation variable is greater than 0.4, so all indicators on the Budget Participation variable are declared valid. The outer loading value for the Budget Evaluation variable is greater than 0.4, so all indicators on the customer's Budget Evaluation variable are declared valid. The outer loading value for the Performance Accountability variable is greater than 0.4, so all indicators on the Performance Accountability variable are declared valid. The outer loading value for the Internal Control System variable is greater than 0.4, so all indicators on the Internal Control System variable are declared valid.

**Discriminant Validity**

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| | **Performance Accountability** | **Budget Evaluation** | **Budget Participation** | **Internal Control System** |
|---|---|---|---|---|
| **Performance Accountability** | | | | |
| **Budget Evaluation** | **0.846** | | | |
| **Budget Participation** | **0.789** | **0.855** | | |
| **Internal Control System** | **0.737** | **0.802** | **0.865** | |

**Source: Data Processing (2023)**

Based on the table above, the results of the correlation of the Heterotrait - Monotrait Ratio Of Corelation (HTMT) variable Budget Participation with Budget Evaluation are 0.859 <0.900, the correlation of the Heterotrait - Monotrait Ratio Of Corelation (HTMT) variable Budget Participation with Performance Accountability is 0.789 <900 correlation of the Heterotrait - Monotrait Ratio Of Corelation (HTMT) variable Budget Participation with Internal Control System is 0.865 <0.900, thus all correlation values of Budget Participation are declared valid.

***Colinierity / Variance Inflaction Factor (VIF)***

| | **Performance Accountability** | **Budget Evaluation** | **Budget Participation** | **Internal Control System** |
|---|---|---|---|---|
| **Performance Accountability** | | | | |
| **Budget Evaluation** | 4.862 | | | 4.812 |
| **Budget Participation** | 4.016 | | | 3.812 |
| **Internal Control System** | 4.267 | | | |

**Source: Data Processing (2023)**

The data above can be described as follows:

a) VIF for the correlation of Budget Participation with Performance Accountability is 4.016 < 5.00 (no collinearity problem occurs).

b) VIF for the correlation of Budget Evaluation with Performance Accountability is 4.862 < 5.00 (no collinearity problem occurs)

c) VIF for correlation of Budget Participation with Internal Control System is 3.812 < 5.00 (no collinearity problem occurs)

d) VIF for correlation of Budget Evaluation with Internal control system is 4.812 < 5.00 (no collinearity problem occurs)

e) VIF for the correlation of the internal control system with performance accountability is 4.267 < 5.00 (no collinearity problem occurs)

**Significance Testing of Structural Model Path Coefficients**


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(Co. Reg. 1136118-A)

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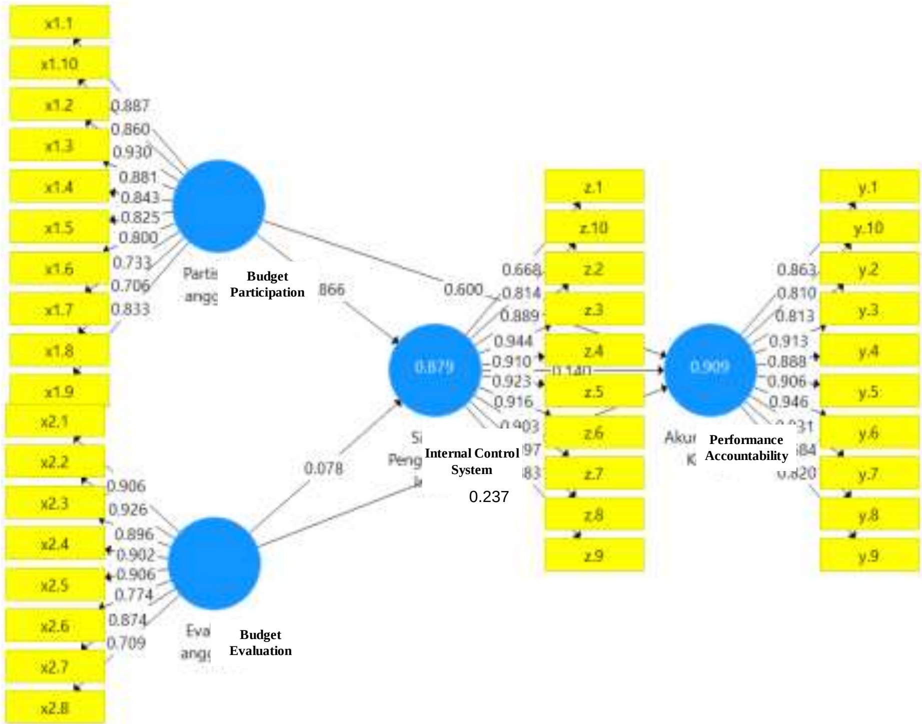


**Figure Hypothesis Testing**

**Direct Effect Testing**

**Direct Effect Hypothesis**

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| **Budget evaluation -> Performance Accountability** | 0.237 | 0.224 | 0.116 | 2.048 | **0.041** |
| **Budget evaluation -> Internal Control System** | 0.078 | 0.071 | 0.140 | 2.554 | **0.010** |
| **Budget participation -> Performance Accountability** | 0.600 | 0.611 | 0.146 | 4.108 | **0.000** |
| **Budget participation -> Internal Control System** | 0.866 | 0.869 | 0.126 | 6.863 | **0.000** |
| **Internal Control System -> Performance Accountability** | 0.140 | 0.137 | 0.115 | 2.215 | **0.025** |

**Source: Data Processing (2023)**

Based on the table above, the direct effect of variable X1 (Budget Participation) on variable Y (Performance Accountability) has a path coefficient of 0.600 (positive), so an increase in the value of the Budget Participation variable will be followed by an increase in the Performance Accountability variable. The influence of the Budget Participation variable on Performance Accountability has a P-Values value of 0.000 <0.05, so it can be stated that the influence between Budget Participation on Performance Accountability is significant.
The direct effect of variable X2 (Budget Evaluation) on variable Y (Performance Accountability) has a path coefficient of 0.237 (positive), so an increase in the value of the Budget Evaluation variable will be followed by an increase in the Performance

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Accountability variable. The influence of the Budget Evaluation variable on Performance Accountability has a P-Values value of 0.041 <0.05, so it can be stated that the influence between Budget Evaluation on Performance Accountability is significant.

The direct effect of variable X1 (Budget Participation) on variable Z (Internal control system) has a path coefficient of 0.866 (positive), so an increase in the value of the Budget Participation variable will be followed by an increase in the Internal control system variable. The influence of the Budget Participation variable on the internal control system has a P-value of 0.000 <0.05, so it can be stated that the influence between Budget Participation on the internal control system is significant.

The direct effect of variable X2 (Budget Evaluation) on variable Z (Internal control system) has a path coefficient of 0.078 (positive), so an increase in the value of the Budget Evaluation variable will be followed by an increase in the Internal control system variable. The influence of the Budget Evaluation variable on the internal control system has a P-Values value of 0.010 <0.05, so it can be stated that the influence between the Budget Evaluation on the internal control system is significant.

The direct effect of variable Z (Internal control system) on variable Y (Performance Accountability) has a path coefficient of 0.140 (positive), so an increase in the value of the Internal control system variable will be followed by an increase in the Performance Accountability variable. The influence of the internal control system variable on performance accountability has a P-value of 0.025 <0.05, so it can be stated that the influence between the internal control system on performance accountability is significant.

**Hypothesis testing of indirect effects**

Testing the hypothesis of indirect influence aims to prove the hypotheses of the effect of a variable on other variables indirectly (through intermediaries). If the indirect effect coefficient value> direct effect coefficient, then the intervening variable mediates the relationship between one variable and another. Conversely, if the indirect effect coefficient value < direct effect coefficient, then the intervening variable does not mediate the relationship between one variable and another (Hair Jr, et.al, 2017).

**Indirect Effect Hypothesis**

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| **Budget evaluation -> Internal Control System -> Performance Accountability** | 0.011 | 0.011 | 0.028 | 3.384 | **0.001** |
| **Budget participation -> Internal Control System -> Performance Accountability** | 0.122 | 0.118 | 0.103 | 3.186 | **0.006** |

**Source: Data Processing (2023)**

Based on the table above, the P value of the indirect effect of variable X1 on Y is 0.006 <0.05, thus it can be stated that the internal control system mediates the influence between Budget Participation on Performance Accountability.

The P value of the indirect effect of variable X2 on Y is 0.001 <0.05, thus it can be stated that the internal control system mediates the influence between Budget Evaluation on Performance Accountability.


WMIT GROUP SDN BHD
(Co. Reg. 1136118-A)

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**Coefficient of Determination**

| | R Square | R Square Adjusted |
|---|---|---|
| **Performance Accountability** | 0.909 | 0.903 |
| **Internal Control System** | 0.879 | 0.874 |

In the table above, the results of the effect of Budget Participation and Budget Evaluation on Performance Accountability are 0.909, meaning that the amount of influence is 90.9%, this means that it shows a strong PLS. Then, Budget Participation and Budget Evaluation on the internal control system is 0.879, meaning that the amount of influence of Budget Participation and Budget Evaluation on the internal control system is 87.9%, this means that it shows a strong PLS.

## DISCUSSION

### The Effect of Budget Participation on Performance Accountability

Participation is an important part of working in an organization or company, where a good budgeting process is to involve many parties to participate in it. According to (Utami, 2017) "public sector budget participation shows the extent of participation of local government officials in understanding the budgets proposed and made by their work units and the influence of the accountability center on their budgets.

The direct effect of variable X1 (Budget Participation) on variable Y (Performance Accountability) has a path coefficient of 0.600 (positive), so an increase in the value of the Budget Participation variable will be followed by an increase in the Performance Accountability variable. The influence of the Budget Participation variable on Performance Accountability has a P-Values value of 0.000 <0.05, so it can be stated that the influence between Budget Participation on Performance Accountability is significant.

The budget participation process will affect the performance accountability of the financial statements of a corporate agency, because if the budget process has good coordination and supervision, it will have a positive impact on performance accountability (Mauliza & Astuti, 2022). Previous research conducted by (Amrin, 2018), (Zatira, 2019) and (Cantika, 2021) states that budget participation has an effect on performance accountability.

### The Effect of Budget Evaluation on Performance Accountability

Budget evaluation is an action taken to trace deviations from the budget to the department concerned and is used as a basis for assessing departmental accountability (Syah et al., 2023). This will affect the behavior, attitudes and accountability of managers. Punitive approach can lead to low motivation and negative attitude, while supportive approach can lead to positive attitude and behavior. Punitive evaluations can lead to low motivation, while supportive evaluations can produce positive attitudes and behaviors. (Aira, 2012)

The direct effect of variable X2 (Budget Evaluation) on variable Y (Performance Accountability) has a path coefficient of 0.237 (positive), so an increase in the value of the Budget Evaluation variable will be followed by an increase in the Performance Accountability variable. The influence of the Budget Evaluation variable on Performance Accountability has a P-Values value of 0.041 <0.05, so it can be stated that the influence between Budget Evaluation on Performance Accountability is significant.

The budget evaluation process will affect the performance accountability of the financial statements of a corporate agency, because if the budget evaluation process produces results for future improvement and the information can be used for preparation and future planning, it will have a positive impact on performance accountability (Aziz et al., 2016). Previous


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(Co. Reg. 1156118-A)

research conducted by (Zatira, 2019) states that budget evaluation affects performance accountability.

**Effect of Budget Participation on Internal Control System**

Budget participation is a formal and systematic approach to the implementation of management responsibilities in planning, coordination and supervision. Based on the description above, it can be concluded that Budget participation is a plan that is systematically prepared in the form of numbers and expressed in monetary units covering all company activities for a certain period (period) in the future. (Mauliza & Astuti, 2022).

The direct effect of variable X1 (Budget Participation) on variable Z (Internal control system) has a path coefficient of 0.866 (positive), so an increase in the value of the Budget Participation variable will be followed by an increase in the Internal control system variable. The influence of the Budget Participation variable on the internal control system has a P-Values value of 0.000 <0.05, so it can be stated that the influence between Budget Participation on the internal control system is significant.

**The Effect of Budget Evaluation on Performance Accountability**

According to (D. L. Sari & Susliyanti, 2020), budget evaluation refers to the extent of budget differences that are reused by individual department leaders and used in evaluating their accountability. (Aziz et al., 2016) found that budget evaluation affects the behavior of Kupang local government officials. This shows that in preparing the budget they always evaluate the activities that have been programmed, but at the time of implementation they do not evaluate the activities that have been carried out, thus making their accountability low.

The direct effect of variable X2 (Budget Evaluation) on variable Z (Internal control system) has a path coefficient of 0.078 (positive), so an increase in the value of the Budget Evaluation variable will be followed by an increase in the Internal control system variable. The influence of the Budget Evaluation variable on the internal control system has a P-Values value of 0.010 <0.05, so it can be stated that the influence between Budget Evaluation on the internal control system is significant.

**Effect of Internal Control System on Performance Accountability**

The internal control system is a system that can assist leaders in carrying out their duties and functions and has a very important role for the company so that leaders can assess and see the existing organizational structure in the activities they carry out. If the planned system runs well, it will certainly increase the accountability of a company's performance (Purnomo, 2014).

The direct effect of variable Z (internal control system) on variable Y (performance accountability) has a path coefficient of 0.140 (positive), so an increase in the value of the internal control system variable will be followed by an increase in the performance accountability variable. The influence of the internal control system variable on performance accountability has a P-value of 0.025 <0.05, so it can be stated that the influence between the internal control system on performance accountability is significant.

**Effect of Budget Participation on Performance Accountability with Internal Control System as intervening variable**

Participation is an important part of working in an organization or company, where a good budgeting process is to involve many parties to participate in it. According to (Utami, 2017) "public sector budget participation shows the breadth of participation of local government officials in understanding the budgets proposed and made by their work units and the influence of the accountability center on their budgets, especially if the budget participation process is based on a good and correct internal control system.

The P value of the indirect effect of variable X1 on Y is 0.006 <0.05, thus it can be stated that the internal control system does not mediate the influence between Budget Participation on Performance Accountability.

**The Effect of Budget Evaluation on Performance Accountability with the Internal Control System as an intervening variable**

The budget evaluation process will affect the performance accountability of the financial statements of a company agency, because if the budget evaluation process produces results for future improvement and the information can be used for future preparation and planning, it will have a positive impact on performance accountability, especially if the budget evaluation process is based on a good and correct internal control system (Aziz et al., 2016).

The P value of the indirect effect of variable X2 on Y is 0.001 <0.05, thus it can be stated that the internal control system mediates the influence between Budget Evaluation on Performance Accountability. The results of this study are in line with research conducted by Amrin, 2018), (Zatira, 2019) which states that the internal control system mediates the effect of budget evaluation on performance accountability.

## CONCLUSIONS

Based on the results of the research that has been carried out in this study, the following conclusions are obtained: Budget Participation has a positive and significant effect on Performance Accountability for employees at BAPPEDA Medan City. Budget Evaluation has a positive and significant effect on Performance Accountability on employees at BAPPEDA Medan City. Budget Participation has a positive and significant effect on the internal control system on employees at BAPPEDA Medan City. Budget Evaluation has a positive and significant effect on the internal control system on employees at BAPPEDA Medan City. The internal control system has a positive and significant effect on performance accountability on employees at the BAPPEDA of Medan City. The internal control system mediates the effect of Budget Participation on Performance Accountability on employees at BAPPEDA Medan City. The internal control system mediates the effect of Budget Evaluation on Performance Accountability on employees at the BAPPEDA of Medan City.

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**065-053**

# PROFIT PERFORMANCE OF PLANTATION COMPANIES, EVIDENCE FROM INDONESIA

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## ABSTRAK

Business survival is the goal that a business wants to achieve to achieve optimal profit performance. Business Entities need supporting elements such as sufficient capital to run their operations, skilled labor, and other production factors that a business needs to achieve its goals. This research aims to analyze the Profit Performance of plantation companies in Indonesia. Performance will be analyzed using indicators of total asset turnover and inventory turnover. The results of this research state that total asset turnover has a positive and significant effect on the net profit performance of Plantation Companies in Indonesia. Inventory turnover has a positive and significant effect on the profit performance of Plantation Companies in Indonesia. Total asset turnover and inventory turnover together have a positive and significant effect. on profit performance in plantation companies in Indonesia.

Keywords: Total Asset Turnover, Inventory Turnover, Profit Performance

## INTRODUCTION

Every both private companies nor the state must dynamic development life business, both in the sector industrial, service, commercial and sectors economy others. This is to ensure that these companies can maintain profitability and sustainability in their own businesses. In order to face the changes that occur in the business cycle, companies must be able to increase their business adaptation so that they are able to survive (Salsabila & Rossieta, 2023) .

Business competition is increasingly fierce and companies must run their businesses effectively and efficiently to remain competitive. Production factors is part tool to view the production process company. One production process tools is assets. Holding assets role important in supporting operational company. Company management must can manage asset the company is good with policies, especially for assets fixed and inventory. For example, the principle of providing and remembering asset tangible or inventory so you can used in a way effective and achieving optimal results.

The company is trying to make it happen the goal is to defend continuity company, so company required Keep going can operate smoothly and combine resources available to obtain profit maximum. Profitability or profit can influence continuity from company. Profitability is indicator important to measure company is the company's bottom line good or bad. Besides that, it's always business engaged in company for development good business must increase sales properly to increase profit (Fanani & Merbaka, 2020) .

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According to Hantono et al., (2019) profit or profitability is influenced by asset turnover and inventory turnover. Sales volume can be one way to improve amount profits obtained later. To achieve the desired sales volume, the company also needs several business assets to be used effectively (Gunawan & Wahyuni, 2013) . To measure the utilization of company assets in generating income, it can be estimated using the total asset turnover rate or *Total Asset Turnover* (TATO) (Priatna et al., 2021) .

*Total Asset Turnover* is a ratio for measuring all company assets and how much rupiah turnover is generated (Priatna et al., 2021) . If total assets have a high value, the company can be said to be efficient in managing its assets. In other words, companies that are able to increase their sales are assumed to be the best companies because they are able to generate profits that exceed targets. On sales certain, expected can happen enhancement turnover, which is ultimately can leads to acceleration *Total Asset Turnover* (TATO). If low TATO calculation so can said company the Not yet produce sufficient profit.

According to (Irawan & Si, 2019) , if turnover The company's inventory is high, so the opportunity to make a profit is also greater. And conversely, when the inventory turnover rate is low, smaller companies generate profits. Good inventory turnover is necessary to increase cash returns from sales. Basically, inventory turnover will speed up or facilitate business operations that must be carried out sequentially to produce and distribute goods to customers (Hastuti et al., 2023) .

Based on the explanation above, it can be concluded that total asset turnover and inventory turnover levels are important factors for maximizing profits. PT Perkebunan Nusantara (Persero) is the largest state-owned company in Indonesia. Every year companies need to maximize their profits. Companies should be able to maximize all available resources and instruments, including total investment turnover and inventory turnover, to achieve the net profit target each year.

Based on known data that mark rotation supply experience decline. Where, PTPN II turnover supply experience decrease in 2020 amounted to 14.16 to 5.22 in 2021. At PTPN III turnover supply amounting to 9.57 in 2020 then decline occurred in 2021 to 9.20 and decreased followed by several other PTPNs. Viewed from mark total asset turnover, total assets company plantation Still too low, which means company Still use his assets inefficiently.

A number of study related profit clean company has done, like (Petra et al., 2021) in their research state size business, ratio smooth, and turnaround share influential significant to growth profit. (Mansur et al., 2017) in his research state Findings study show that working capital turnover does not have visible impact on profits net, Net profit is not significantly influenced by fixed asset turnover. Besides that, (Surya et al., 2017) in his research state profitability is not affected in a way significantly by cash and inventory turnover in a way simultaneous or partial.

Based on description above about importance total asset turnover and turnover inventory in increasing profit clean. However, in research previously Not yet someone is discussing it in a way Specific related Rotation supply company. Therefore, in this research the author is interested in conducting study title " Influence Total Asset Turnover and Inventory Turnover Against Company Net Profit at PT. Nusantara Plantation"

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## LITERATURE REVIEW

### Profit

Profit or profit is the difference between income and expenses. According to Nainggolan & Febriansyah (2021) Profit is important indicators in the company to analyze performance management. According to Gunawan (2023) Profit is a company's cumulative income over a certain period of time, which may reflect changes in company assets. A good company can keep part the profits as dividends cash, which is distributed in a way proportional to accumulation profit (Nainggolan & Ahmad, 2019)

### Asset Turnover

Entire Asset Turnover (TATO), also known as Total Asset Turnover (TATO), is ratio management riches final judge all over rotation asset company. It is obtained by dividing turnover with total and determining amounts amount turnover made for each rupiah assets, according to Kasmir (2018). Total Assets Turnover, on the other hand, is level efficiency when all asset company used to increase sales volume certain, according to Siregar & Bahar (2020). The more effective all asset used to produce income, increasingly big ratio total asset turnover (Rambe & Swara, 2021) . With knowledge that, you can said that Total Assets Turn Over (TATO ) is one the Activity Ratio component that assesses how good a company use all over its assets to increase generated income from every assets by comparing total assets with total assets. Income

### Inventory Turnover

Dwi Martini in (Mardhatillah & Astuti, 2022) stated that inventory is a very important asset for a company. Based on this definition, inventory can be interpreted as the provision of assets for sale and in the production process, transportation and in the form of materials or equipment used in the production process. Businesses need storage facilities so that operations run smoothly and manage the company's production schedule.

According to the concept presented above, inventory turnover is one of the main performance indicators used to assess how well a company manages its current inventory (Siregar, 2016). The danger of losses from storage and maintenance costs, price reductions, or changes in customer tastes that increase a company's sales is reduced with higher inventory turnover. This ratio is very important for company management because it functions as a tool for evaluating and estimating warehouse effectiveness and efficiency.

## METHOD

Methodology The research used in this research is approach associative. According to Sugiyono (2019), research associative aims to identify connection between two variables or more. Researcher aims to investigate How rotation inventory and total asset turnover impact on income business in this research. Information used is quantitative data or numeric. This research focuses on observing Total Asset Turnover, Inventory Turnover and Net Profit Ratio at PT Perkebunan Nusantara in Indonesia. Data analysis using technique quantitative which means " numerical data analysis certain or numerical data ” ( Sugiyono, 2019) . Analysis

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techniques used that is Multiple Linear Regression. The purpose of this analysis is to find out whether each independent variable has a positive or negative relationship with the dependent variable, as well as predicting the value of the dependent variable when the value of the independent variable increases or decreases (Sugiyono, 2019).

## RESULTS AND DISCUSSION

### Partial Test (t Test)

The t test aims to show how much Far influence One variable independent individually in explaining variable dependent. Based on numbers with conditions = 0.05 and dk (n-2) or (40-2) = 38 so obtained t table value is 2.02439. Following is results multiple linear regression in research This :

Table 1. Multiple Linear Regression

**Coefficients [a]**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 18,872 | 2,644 | | 7,137 | ,000 |
| | Ln X1 | 1,732 | ,765 | ,518 | 2,265 | .031 |
| | Ln X2 | 1,684 | ,798 | ,483 | 2,111 | ,044 |

a. Dependent Variable: Ln Y

Source: SPSS Data Processing Results (2023 )

Based on table 1 above so can is known the influence of each variable i.e., Total Asset Turnover has mark significant equal to 0.031<0.05 with t count equal to 2,265 > 2.02439, meaning Total asset turnover in a way Partial own influence to profit net and Inventory Turnover has mark significant equal to 0.044 < 0.05 with t count equal to 2.111 > 2.02439, meaning Rotation supply in a way Partial own influence to profit clean.

### Simultaneous Test (F Test)

f test is used to assist in hypothesis testing, namely by comparing the calculated f values with those in the f table. Next, the title of each row is the degree *of freedom* (df) for the denominator, or known as df2. How to determine Df2 using the formula: Df2= nk-1.

Table 2. Simultaneous Test (f)

ANOVA [a]

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 10,276 | 2 | 5,138 | 2,904 | .043 [b] |
| | Residual | 49,544 | 28 | 1,769 | | |
| | Total | 59,819 | 30 | | | |

a. Dependent Variable: Ln Y
b. Predictors: (Constant), Ln X2, Ln X1
Source: SPSS Data Processing Results (202 3 )

Based on numbers with condition = 0.05, df 1 = (k – 1 = 3 – 1 = 2) Df 2 (nk-1) or (40-3-1) = 36 so obtained value 2.87, From the table above can is known that F table = 2.87 and the calculated F value amounting to 2,904. Because F count > F table namely 2.904 > 2.87

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then base taking the decision in the F test can be concluded that Total asset turnover and turnover supply influential in a way simultaneous ( together ) against profit clean.

**Coefficient Determination**

The coefficient of determination (R2 ) essentially measures how far the model's ability is to explain variations in the dependent variable. The coefficient of determination value is between zero and 1 or (0 < x < 1). A small $^{R2}$ value means that the ability of the independent variables to explain the dependent variables is very limited. A value close to 1 means that the independent variables provide almost all the information needed to predict variations in the dependent variable.

Table 3. Coefficient Determination

**Model Summary** [b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .414 [a] | ,172 | .113 | 1.33020 |

a. Predictors: (Constant), Ln X2, Ln X1
b. Dependent Variable: Ln Y

Source: SPSS Data Processing Results (202 3 )

Based on the results of the regression calculations in table 3, it shows that the coefficient of determination ( *R square* ) obtained is 0.127. This means 12.7% of total asset turnover, and turnover supply influence profit net, while the remainder is 87.3 % profit clean influenced by other variables not examined in this research.

**Discussion**

Based on discussion that has been done can seen that Total Asset Turnover and Inventory Turnover have a good effect simultaneous or partial. Increasing total asset turnover can indicated efficiency use asset company. When the company capable utilise assets with more efficient, this can be cause enhancement income and reduce cost operational. The result will impact on improvement profit clean Because company can reach more Lots income from assets owned. This is in line with (Budiang, et al, 2017) state exists influence positive and significant total asset turnover to profitability, and Total asset turnover show smoothness something company in production sale from all assets / assets owned by the company. This is also reinforced by research conducted by (Utami & Nuraini, 2020) Rotation increased assets the show that company capable use its assets well to produce high sales.

Research conducted by ( Nurafika, 2018) rotation supply influential positive significant to profitability in cement companies listed on the Indonesia Stock Exchange for the period 2012 to 2016. However This research is not in line with research conducted by (Simangunsong et al., 2019) rotation supply in a way partial has no effect and is not significant to profit clean on the company Manufacturing registered on the IDX for the 2013-2016 period.

Inventory turnover serves to measure journey supply until return into cash. Rotation supply is ratio used measure how many times the funds invested in this stock rotate in one period certain usually within a period of time time one year. If the ratio obtained high, it shows company Work in a way efficient and liquid supply getting better. Likewise if rotation supply low means company Work inefficiently or unproductive and numerous goods piled up inventory. errors in management will result component other assets become suboptimal, even Can result loss. Management supply is something difficult work and management rotation This inventory is very decisive in management continuation activity company (Sianggaran & Sianggaran, 2021) .

**Conclusion**

Based on the results of tests carried out, the elite concluded that rotation supply effect on profits clean company at PT. Nusantara Plantation. Rotation high inventory at PT. Perkebunan Nusantara indicated that company can sell The stock is quickly reducing cost storage and risk storage others. This means that the item will take longer saved so necessary costs issued the company will too high. Thus, turnover high inventory at PT. Perkebunan Nusantara will impact on smooth running rotation sale company so that impact on profits clean company. Based on the results of tests carried out, the researchers concluded that total asset turnover and turnover supply in a way together effect on profits clean company at PT. Nusantara Plantation. High Total Asset Turnover and Inventory Turnover reflect that company capable use assets with more efficient so these two variables will impact directly on level sale influencing companies profit will be produced.

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**067-055**

# STUDY OF THE CAPITAL STRUCTURE OF PHARMACEUTICAL COMPANIES IN INDONESIA

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## ABSTRACT

This research aims to determine the influence of asset structure and profitability on the capital structure of pharmaceutical companies listed on the Indonesian Stock Exchange. This research is a type of associative research. The sampling technique was carried out using a purposive sampling technique. So the sample obtained was 8 pharmaceutical companies listed on the Indonesia Stock Exchange in 2017 - 2021 with a total of 40 observation data over 5 years of observation. The data collection technique used is documentation with data sources using secondary data taken through the official website of the Indonesian Stock Exchange. The data analysis technique used in this research is multiple linear regression analysis using SPSS software. The results of this study indicate that asset structure does not have a significant effect on capital structure. Profitability has a significant effect on capital structure. Then asset structure and profitability have a significant effect on capital structure simultaneously.

Keywords: Asset Structure, Profitability, Capital Structure

## INTRODUCTION

In a company in the form of a business, management's task is to determine the capital structure, namely funding originating from debt and equity, which can increase the value of the company. Capital structure is an important thing in a company. Capital structure is the company's long-term permanent funding which is represented by debt, preferred shares, common equity, so that whether the capital structure is good or bad will have a direct effect on the company's financial position (Nur & Siahan, 2017). Capital structure is an important issue for companies because good or bad capital structure will have a direct effect on the company's financial position, especially with very large debt which will put a burden on the company.

The aim of capital structure management is to combine the sources of funds used to finance company operations. Capital structure explains how a company funds all of its operational activities from several funding sources. Managers must be able to balance the use of debt and equity to achieve an optimal capital structure. The right comparison of funding sources will produce an optimal capital structure. The capital structure reaches optimal value if the composition of debt and capital is able to increase the value of the company. The optimal capital structure is a combination of debt and equity that maximizes the company's share price (Febriyani & Srimindarti (2018).

There are several factors that can influence capital structure, one of which is asset structure. Companies that have large amounts of fixed assets can use large amounts of debt because the scale of the company makes it easier to get funding sources. Companies whose capital is mostly invested in fixed assets will prioritize meeting their capital from permanent capital, namely their own capital, while debt is only complementary. In Insiroh's (2014) research, asset structure can be viewed from operational objects which basically classify assets in certain comparisons for the company's main operational needs. The asset structure can be viewed from 2 sides, namely assets that must be available for company operations during the accounting period and those that must be provided for company operations permanently (Putri, 2018).

Then the factor that can influence capital structure is profitability. Profitability is the level of net profit that a company is able to generate in carrying out its operations. Profitability is one measurement of a company's performance. This is because a company's profitability shows a company's ability to generate profits during a certain period at the level of sales, assets and share capital (Balqis, 2022).

According to Harahap (2020) Profitability is a company's ability to make a profit in a period. The ability to generate profits in its operational activities is very important in assessing a company's achievements. Because profitability can be used as an indicator of a company fulfilling its obligations to investors and is an important element in creating company value in the future.

This ratio also provides a measure of the level of effectiveness of a company's management. The profitability ratio can be measured by comparing the various components in the profit and loss report and balance sheet. The measurement can be done for several operating periods. The aim is to monitor and evaluate the level of development of the company's profitability from from time to time (Hafsah, 2017).

The following are phenomena that can support this research regarding the influence of asset structure and profitability on the capital structure of pharmaceutical companies listed on the Indonesia Stock Exchange:

**Table 1 Data on Asset Structure, Profitability and Capital Structure in Pharmaceutical Companies Listed on the Indonesian Stock Exchange**

| Company Code | Year | Asset Structure | Profitability (ROA) | Capital Structure (DER) |
|---|---|---|---|---|
| DVLA | 2017 | 0.241 | 0.099 | 0.470 |
| | 2018 | 0.255 | 0.107 | 0.402 |
| | 2019 | 0.300 | 0.121 | 0.401 |
| | 2020 | 0.295 | 0.082 | 0.498 |
| | 2021 | 0.268 | 0.700 | 0.510 |
| INAF | 2017 | 0.319 | -0.030 | 1,906 |
| | 2018 | 0.399 | -0.023 | 1,904 |
| | 2019 | 0.401 | 0.006 | 1,000 |
| | 2020 | 0.338 | 0.018 | 0.749 |
| | 2021 | 0.298 | -1,870 | 2,958 |
| KAEF | 2017 | 0.277 | 0.054 | 1,370 |
| | 2018 | 0.437 | 0.047 | 1,732 |
| | 2019 | 0.600 | 0.001 | 1,476 |
| | 2020 | 0.653 | 0.001 | 1,472 |
| | 2021 | 0.645 | 0.017 | 1,456 |
| KLBF | 2017 | 0.322 | 0.148 | 0.196 |
| | 2018 | 0.413 | 0.138 | 0.186 |
| | 2019 | 0.446 | 0.125 | 0.213 |

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| | | | | |
|---|---|---|---|---|
| | 2020 | 0.421 | 0.124 | 0.235 |
| | 2021 | 0.388 | 0.124 | 0.294 |
| BRAND | 2017 | 0.210 | 0.174 | 0.375 |
| | 2018 | 0.229 | 0.921 | 1,437 |
| | 2019 | 0.251 | 0.087 | 0.517 |
| | 2020 | 0.270 | 0.077 | 0.518 |
| | 2021 | 0.252 | 0.128 | 0.560 |
| PYFA. | 2017 | 0.509 | 0.447 | 0.466 |
| | 2018 | 0.511 | 0.452 | 0.573 |
| | 2019 | 0.497 | 0.490 | 0.530 |
| | 2020 | 0.434 | 0.970 | 0.450 |
| | 2021 | 0.595 | 0.068 | 3,825 |
| SIDO | 2017 | 0.385 | 0.169 | 0.091 |
| | 2018 | 1,162 | 0.430 | 0.150 |
| | 2019 | 1,061 | 0.471 | 0.154 |
| | 2020 | 0.467 | 0.243 | 0.195 |
| | 2021 | 0.448 | 0.310 | 0.170 |
| TSPC | 2017 | 0.267 | 0.075 | 0.463 |
| | 2018 | 0.348 | 0.069 | 0.449 |
| | 2019 | 0.351 | 0.071 | 0.446 |
| | 2020 | 0.347 | 0.093 | 0.428 |
| | 2021 | 0.353 | 0.085 | 0.427 |

Source: Indonesian Stock Exchange

Based on the table above, it can be seen that the average capital structure of pharmaceutical companies listed on the Indonesia Stock Exchange in 2017-2021 has a greater proportion of debt than their own capital. With a larger proportion of debt, companies that have a capital structure value of more than one will experience higher business risks compared to companies that have a capital structure value of less than one.

Based on the table above, a phenomenon was found, namely that in DVLA companies in 2017 the asset structure decreased by 0.023, but the capital structure showed an increase of 0.052. Meanwhile, what happened to the INAF company in 2018 was that the asset structure increased and was followed by a decrease in the capital structure. This is not in accordance with Putri's (2018) research. The assets owned by the company will have an influence on the company's relationship with other parties. Companies whose assets match credit collateral will use more debt, because creditors will be more interested in lending funds.

The next phenomenon occurred at the TSPC company in 2020, profitability increased by 0.022, followed by a decrease in capital structure that year by 0.018. Meanwhile, what happened to the KLBF company in 2019 was that profitability decreased, followed by an increase in capital structure. This is also not in accordance with Kurniawan's (2017) research. High profitability is a positive signal for creditors to provide loans with cheaper interest. This is because creditors assess that the company's risk of bankruptcy is still low. Companies certainly like funding with low fixed costs and a high expected rate of return.

## Literatur Review

### Capital Structure

The capital structure itself is one of the most important things in a company's operations and is also part of the financial structure that can directly influence the company's financial position. Because of the good and bad of the company's capital structure will have an impact on the company's financial position.

According to Nugrahani & Sampurno (2017) capital structure can also be interpreted as a comparison between the amount of own capital and capital originating from external parties or debt. Capital structure shows a ratio that describes the amount of debt the company has. The capital structure ratio means that the company's debt or liabilities are greater than the total assets or capital owned by the company. Capital structure calculations can use the debt to equity ratio.

**Profitability**

The company's main goal is to obtain maximum profits. Profitability ratios can see the company's financial performance. The profitability ratio is a ratio to measure a company's ability to generate profits using the company's resources such as assets, capital or sales

According to Fahmi (2018) profitability is "a ratio that measures the overall effectiveness of management which is aimed at the size of the level of profit obtained in relation to sales and investment. The better the profitability ratio, the better it describes the company's ability to generate high profits. Profitability is a ratio that shows a company's ability to earn profits (profits) in a certain period. The profitability of a company will influence investors' policies regarding the investments made (Nainggolan & Abdullah, 2019)

According to Saragih (2013), profitability ratios are intended to be used to measure overall management effectiveness, which is determined by the size of the level of profit obtained in relation to sales and investment. The better the profitability ratio, the better it describes the company's ability to generate high profits.

According to Nainggolan & Febriansyah (2021) stated that the operational goal of a company is to optimize profits, both short-term profits and long-term profits, a company that has a large profitability ratio shows that the company has good performance in generating profits, but the higher the profit The amount produced by the company, the greater the income tax that must be paid by the company.

**Influence Asset Structure Against Capital Structure**

Companies that have large amounts of fixed assets can use large amounts of debt because the scale of the company makes it easier to get funding sources. The greater the fixed assets a company owns, the greater the opportunity to obtain external funding sources which will affect the company's capital structure. Companies that have large assets can use assets as collateral to obtain debt from outside parties. Companies with large asset values are more likely to be trusted to obtain loans from outside parties because they have easier access to sources of funds compared to companies that are still small in scale. Based on this description, the asset structure influences the capital structure.

**The Effect of Profitability on Capital Structure**

Profitability is the ability of a company to be able to make a profit in relation to sales, total assets, and own capital. The ability to generate profits in its operational activities is very important in assessing a company's achievements. Profitability can be used as an indicator of a company fulfilling its obligations to investors and is an important element in creating company value in the future.

High profitability is a positive signal for creditors to provide loans with cheaper interest. This is because creditors assess that the company's risk of bankruptcy is still low. Companies certainly like funding with low fixed costs and a high expected rate of return. The higher the company's ability to generate profits, the easier it is for the company to obtain external funds because creditors provide low interest due to the low risk of default, while investors are attracted by the high rate of return.

## RESEARCH METHODS

This research uses associative research. Associative research is research that wants to see whether a variable that acts as an independent variable has an effect on other variables that are dependent variables. By using this research the author can find several theories that can provide explanations, estimates, and control of symptoms. By using associative research methods, the influence of the independent variable on the dependent variable will be known (Sugiyono, 2018). The population used in this research were all pharmaceutical companies listed on the Indonesia Stock Exchange, totaling 10 companies. In research, the sample is determined using a *purposive sampling technique,*

## Results

### Descriptive statistics

Descriptive statistics in this research are used to provide a general description of the data obtained from a study. These descriptive statistics include *minimum, maximum, mean,* and standard deviation values. Based on data that has been processed using *Statistical Product and*

*Service Solutions* (SPSS) Version 26, the following descriptive statistics are obtained:

**Table 1 Descriptive Statistics Test Results Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| *Fixed Asset Ratio* (X1) | 40 | ,210 | 1,162 | .41658 | .198429 |
| *Return On Assets* (X2) | 40 | -1,870 | ,970 | .14547 | .405014 |
| *Debt to Equity Ratio* (Y) | 40 | ,091 | 3,825 | .79130 | .800516 |
| Valid N (listwise) | 40 | | | | |

Source: Spss Data Processing Results, 2023 Based on table 4.1 above, it can be described as follows:

1. Asset Structure (X1)

From Table 1 it can be seen that the minimum value of *The Fixed Asset Ratio* is 0.210 and the maximum value is 1.162. This shows that the size of *the Fixed Asset Ratio* companies in the panel research sample ranged from 0.210 to 1.162. MERK had the lowest *Fixed Asset Ratio* value in 2017 and the highest *Fixed Asset Ratio value* owned by SIDO in 2018. The mean (average) value is 0.4168 and the standard deviation is 0.198429.

2. Profitability (X2)

From table 4.1 it can be seen that the minimum value *of Return On Assets* (ROA) is -1.870 and the maximum value is 0.970. This shows that *the Return On Assets* (ROA) of the companies in the panel research sample ranges from -1.870 to 0.970. The lowest *Return On Asset (ROA)* value was owned by INAF in 2021 and the highest *Return On Asset* (ROA) value was owned by PYFA in 2020. The mean (average) value was 0.14547 and the standard deviation was 0.405014.

3. Capital Structure (Y)

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From Table 4.1 it can be seen that the minimum value *of the Debt to the debt-to-equity ratio* (DER) is 0.091 and the maximum value is 3.825. This shows that *the Debt to debt-equity ratio* (DER) of the companies in the panel research sample ranges from 0.091 to 3.825. The lowest *Debt to debt-equity ratio (DER)* value was owned by SIDO in 2017 and the highest *Debt to debt-equity ratio* (DER) value was owned by PYFA in 2021. The mean (average) value was 0.79130 and the standard deviation was 0.800516.

**Normality test**

The normality test aims to test whether, in the regression model, the confounding or residual variables have a normal distribution (Ghozali, 2016). The normality test is tested using the Kolmogorow-Smirnov test, namely if the resulting sig value is > 0.05, it can be concluded that the regression model in this study has a normal distribution. Following are the results of the normality test in the table below:

**Table 2 Normality Test Results**
**One-Sample Kolmogorov-Smirnov Test**

| | | Unstandardized Residuals |
|---|---|---|
| N | | 40 |
| Normal Parameters [a, b] | Mean | .0000000 |
| | Std. Deviation | .70202380 |
| Most Extreme Differences | Absolute | ,198 |
| | Positive | ,198 |
| | Negative | -.172 |
| Kolmogorov-Smirnov Z | | 1,251 |
| Asymp. Sig. (2-tailed) | | ,087 |

a. Test distribution is Normal.
b. Calculated from data.

Source: Spss Data Processing Results, 2023

Based on Table 2 above, it can be seen that the value of Asymp. Sig. (-2tailed) is more than 0.05, namely 0.087, which means that the data is normally distributed. So it can be concluded that the regression model has passed the normality test.

**Multicollinearity Test**

This test aims to test whether the regression model found a correlation between the independent variables. A good regression model should be free of multicollinearity or no correlation between independent variables. The multicollinearity test can be seen from: the Tolerance value and its opposite, and the Variance Inflation Factor (VIF). If the Tolerance value is > 0.1 or the VIF value is < 10, then it can be concluded that there is no multicollinearity in the data to be processed. The following are the results of the multicollinearity test in the table below:

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**Table 3 Multicollinearity Test Results Coefficients [a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | *Fixed Asset Ratio* (X1) | ,969 | 1,032 |
| | *Return On Assets* (X2) | ,969 | 1,032 |

a. Dependent Variable: *Debt to Equity Ratio* (Y)
Source: Spss Data Processing Results, 2023

Based on table 3, it shows that *the Fixed Asset Ratio* has a Tolerance value of 0.969 and a VIF value of 1.032. Likewise, *the Return On Asset* (ROA) Tolerance value is 0.969 and the VIF value is 1.032. So it can be concluded that there is no multicollinearity in all variables because each variable has a Tolerance value > 0.1 and a VIF value < 10.00.

**Heteroscedasticity Test**

The heteroscedasticity test aims to test whether in the regression model there is an inequality *of variance* from the residuals of one observation to another. If *the variance* from the residual from one observation to another is constant, it is called homoscedasticity and if it is different it is called heteroscedasticity. A good regression model is one with homoscedasticity or no heteroscedasticity because this data collects data that represents several measures.

Heteroscedasticity testing can also be carried out using the Glejser test, where the Glejser test is carried out by regressing the independent variables on their absolute residual values. The basis for decision-making in the Geljser test is:

1. If the significant value is greater than 0.05 then the conclusion is that heteroscedasticity does not occur.
2. If the significant value is smaller than 0.05 then the conclusion is that heteroscedasticity occurs.

**Table 4 Heteroscedasticity Test Results**
**Coefficients [a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients |
|---|---|---|---|---|
| | | B | Std. Error | Beta |
| 1 | (Constant) | ,349 | ,178 | |
| | *Fixed Asset Ratio* (X1) | ,373 | ,392 | ,156 |
| | *Return On Assets* (X2) | ,053 | ,192 | ,045 |

a. Dependent Variable: ABRESID
Source: Spss Data Processing Results, 2023

Based on table 4 above, it can be seen that the sig value of the *Fixed Asset Ratio variable* is 0.348 and the sig value of the *Return On Asset* (ROA) variable is 0.786. So this means that the two independent variables are greater than 0.05, so that in this regression model there is no heteroscedasticity. Thus, this regression model has fulfilled the heteroscedasticity test.

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**Autocorrelation Test**

The autocorrelation test is used to determine whether there is a correlation between confounding errors in period t and errors in period t-1 (previous). A good regression model is a regression that is free from autocorrelation. For detecting autocorrelation can be done by testing the Durbin-Watson test value (DW Test). The basis for making the decision is as follows:

1. If the DW value is below -2, it means there is positive autocorrelation.
2. If the DW value is between -2 to +2, it means there is no autocorrelation.
3. If the DW value is above +2, it means there is positive or negative autocorrelation The following are the results of the autocorrelation test in the table below:

**Table 5 Autocorrelation Test Results Model Summary [b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .481 [a] | ,231 | ,189 | .720748 | 1,466 |

a. Predictors: (Constant), *Return On Assets* (X2), *Fixed Asset Ratio* (X1)
b. Dependent Variable: *Debt to Equity Ratio* (Y) Source: Spss Data Processing Results, 2023

Based on Table 5 above, it can be seen that the DW value is 1.466. This means that the DW value is between -2 to +2. So it can be stated that the regression model in this study does not contain autocorrelation.

**Multiple Linear Regression Analysis**

This research uses the multiple linear regression analysis method. Multiple linear regression analysis is carried out to determine the relationship of the independent variable to the dependent variable. The following are the results of multiple linear regression analysis in the table below:

**Table 6 Results of Multiple Linear Regression Analysis Coefficients [a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | ,770 | ,268 | | 2,874 | ,007 |
| | *Fixed Asset Ratio* (X1) | ,389 | ,591 | ,096 | ,658 | ,515 |
| | *Return On Assets* (X2) | -.965 | ,289 | -.488 | -3,332 | ,002 |

a. Dependent Variable: *Debt to Equity Ratio* (Y) Source: Spss Data Processing Results, 2023

Based on table 4.6 above, it can be concluded as follows: Y = 0.770 + 0.389X1 – 0.9652X2 + e

This equation it can be interpreted as follows:

1. The constant value (α) is positive, namely 0.770. This means that if *the Fixed Asset Ratio*
2. and *the Return On Asset* (ROA) value is 0, then *the Debt to Equity Ratio* (DER) is 0.770.
3. *Fixed Asset Ratio* regression coefficient of 0.389. This means that if the other independent variables remain constant and *the Fixed Asset Ratio* increases, *the Debt to the debt-to-equity ratio* (DER) will increase by 0.389.
4. *The Return On Assets* (ROA) regression coefficient is -0.965. This means that if the other

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independent variables remain constant and the *Return On Assets* (ROA) increases, then *the Debt to Equity Ratio* (DER) will decrease by 0.965.

**Hypothesis testing t-test**

The t test was carried out to determine the effect of each independent variable individually on the dependent variable. If the probability value of t is smaller or equal to the probability value of 0.05 or (sig < 0.05) then there is an influence of the independent variable on the dependent or is significant (there is a real influence). Meanwhile, if the ip robability value t is greater than the probability value of 0.05 or (sig > 0.05) then there is no influence of the independent variable on the dependent variable. Following are the results of the t test in the table below:

**Table 7 t Test Results**

**Coefficients [a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | ,770 | ,268 | | 2,874 | ,007 |
| | *Fixed Asset Ratio* (X1) | ,389 | ,591 | ,096 | ,658 | ,515 |
| | *Return On Assets* (X2) | -.965 | ,289 | -.488 | -3,332 | ,002 |

a. Dependent Variable: *Debt to Equity Ratio* (Y) Source: Spss Data Processing Results, 2023

Based on table 7 the test results can be seen as follows:

1. *Fixed Asset Ratio* variable has a positive sign with a $_{\text{calculated t}}$ of 0.658. Meanwhile, the t $_{\text{table}}$ for the 5% significance level is 2.024, so the $_{\text{calculated t value}}$ < t $_{\text{table.}}$ The significant value of the *Fixed Asset Ratio variable* is 0.515. This means that the significance value is greater than 0.05. Because the $_{\text{calculated t value}}$ < t $_{\text{table}}$ and the significance value is greater than 0.05, the *Fixed Asset Ratio* has no and significant effect on capital structure. Thus the first hypothesis in this research is rejected, namely *the Fixed Asset Ratio* has no effect on *the Debt to Equity Ratio* (DER).
2. *Return On Assets (ROA)* variable has a negative sign with a $_{\text{calculated -t}}$ of -3.332. Meanwhile, the -t $_{\text{table}}$ for the 5% significance level is -2.024, so the $_{\text{calculated -t value}}$ < -t $_{\text{table.}}$ The significant value of the *Return On Assets* (ROA) variable is 0.002. This means that the significance value is smaller than 0.05. Because the $_{\text{calculated -t value}}$ < -t $_{\text{table}}$ and the significance value is smaller than 0.05, *Return On Assets* (ROA) has a significant effect on *the Debt to Equity Ratio* (DER). Thus, the second hypothesis in this research is accepted, namely *Return On Assets* (ROA) influences *the Debt to Equity Ratio* (DER).

**F test**

The F test is carried out to see the influence of the independent variables together on the dependent variable. The SPSS output F test results can be seen in the ANOVA table. If the significance probability value is less than or equal to the probability value 0.05 or (sig<0.5). So the regression model can be used to predict the dependent variable or in other words it is significant (there is a real influence). If the significance probability value is greater than the probability value 0.05 or (sig>0.05) then it is not significant (there is no real influence). Following are the results of the F test in the table below:

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**Table 8 F Test Results ANOVA [b]**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 5,772 | 2 | 2,886 | 5,555 | .008 [a] |
| | Residual | 19,221 | 37 | ,519 | | |
| | Total | 24,992 | 39 | | | |

a. Predictors: (Constant), *Return On Assets* (X2), *Fixed Asset Ratio* (X1)
b. Dependent Variable: *Debt to Equity Ratio* (Y) Source: Spss Data Processing Results, 2023

Based on table 4.8, it can be seen that the significance level is 5% and the number of df (n1) = 2, and df (n2) = 37 (nk-1) or 40-2-1. So we get an F Table of 3.25. From the test results, the $_{\text{calculated F}}$ is 5.555, which means that the $_{\text{calculated F}}$ > F Table and the sig value is 0.008 < 0.05. So it can be concluded that *the Fixed Asset Ratio* and *Return On Assets* (ROA) together (simultaneously) influence *the Debt to Equity Ratio* (DER).

**Coefficient of Determination Test**

Coefficient of determination analysis is used to see how the contribution of the dependent variable value is influenced by the value of the independent variable. The following are the results of the coefficient of determination test in the table below:

**Table 9 Coefficient of Determination Test Results Model Summary [b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .481 [a] | ,231 | ,189 | .720748 |

a. Predictors: (Constant), *Return on Assets* (X2), Debt to Equity Ratio (X1)
Source: Spss Data Processing Results, 2023

Based on the results of table 4.9 above, it can be seen that the value of R Square is 0.231 or 23.1%. This means that the contribution of the independent variable value is able to explain the dependent variable by 23.1%. Meanwhile, the remaining 76.9% is explained by other factors outside the research.

## DISCUSSION

**The Influence of Asset Structure on Capital Structure**

The first hypothesis in this research states *the Fixed Asset Ratio* influences *the Debt to debt-to-equity ratio* (DER). The research results show that *the Fixed Asset Ratio* has no effect on *the Debt to Equity Ratio* (DER), so it can be concluded that the first hypothesis in this research is rejected.

Based on the results of the data analysis that has been carried out, it can be stated that *the Fixed Asset Ratio* has no effect on *the Debt to Equity Ratio* (DER). This can be seen from the test results which show that the $_{\text{calculated t value}}$ < t $_{\text{table}}$ is 0.658 < 2.024. Then the significance value of the *Fixed Asset Ratio variable* of 0.515 is greater than 0.05. Thus it is concluded that *the Fixed Asset Ratio* has no effect on *the Debt to Equity Ratio* (DER).

**The Effect of Profitability on Capital Structure**

The second hypothesis states that *Return On Assets* (ROA) influences *the Debt to debt-*

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*to-equity ratio* (DER). The research results show that *Return On Assets* (ROA) influences *the Debt to debt-to-equity ratio* (DER), so it can be concluded that the second hypothesis in this research is accepted.

Based on the results of the data analysis that has been carried out, it can be stated that the $_{\text{calculated -t value}}$ < -t $_{\text{table}}$ is -3.332 < -2.024. Then the significance value of the *Return On Assets* (ROA) variable is 0.002, which is smaller than 0.05. So it can be concluded *that Return On Assets* (ROA) influences *the Debt to Equity Ratio* (DER).

Based on the results of the regression analysis, the direction of the *Return On Asset* (ROA) variable coefficient shows a negative value, namely -3.332. This shows that if *the Return On Asset* (ROA) variable increases, *the Debt to Equity Ratio* (DER) will decrease by 332. Because increasing *Return On Assets (ROA) has an effect on decreasing Debt to Equity Ratio* (DER), then *Return On Assets* (ROA) has a negative influence on *Debt to Equity Ratio* (DER).

**The Influence of Asset Structure and Profitability on Capital Structure**

The results of this research show that *Fixed Asset Ratio* and *Return On Assets* (ROA) influential in a way together to *Debt to Equity Ratio* (DER). This can be done seen from the F test which shows mark significance of more than 0.008 small of 0.05 and F count > F table that is 5.555 > 3.25. So it can be concluded that *the Fixed Asset Ratio* and *Return On Assets* (ROA) influential in a way together to *Debt to Equity Ratio* (DER).

Research results state that structure assets and profitability in a way together can influence company capital structure. Companies that have large amounts of fixed assets can use large amounts of debt because the company's scale makes it easier to obtain funding sources. Meanwhile profitability is experiencing _ enhancement then the capital structure will experience a decline, and vice versa. This condition means that the level of profitability in a company influences its capital structure (Dewi, 2014).

The results of this study also show that the value R *Square* in this regression is 0.231 or 23.1 %. This means contribution i *Fixed Asset Ratio* and *Return On Assets* (ROA) to *Debt to Equity Ratio* (DER) was 23.1 %. Meanwhile, the remaining 76.9 % was influenced by other variables not used in this research.

**Conclusion**

Based on the results testing data that has been done using _ method regression double, then can obtained something conclusion as follows :

1. *Fixed Asset Ratio* does not have a significant effect on *the Debt to Equity Ratio* (DER) in pharmaceutical companies listed on the Indonesia Stock Exchange in 2017-2021.
2. *Return on Assets* (ROA) has a significant effect on *the Debt to debt-to-equity ratio* (DER) in pharmaceutical companies listed on the Indonesia Stock Exchange in 2017-2021.
3. Simultaneous test results show that all independent variables *Fixed Asset Ratio* and *Return On Assets* (ROA) together (simultaneously) have a significant effect on *the Debt to Equity Ratio* (DER).

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**084-072**

# THE EFFECT OF PARENT INCOME, ALLOWANCE, FINANCIAL ATTITUDES, SOCIAL CLASS AND PEER ENVIRONMENT ON CONSUMPTIVE BEHAVIOR IN STUDENTS UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA

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## ABSTRACT

The study aims to identify and analyze the effect of parent income on consumptive behavior, identify and analyze the effect of allowance on consumptive behavior, identify and analyze the effect of financial attitudes on consumptive behavior, identify and analyze the effect of social class on consumptive behavior, identify and analyze the effect of the environment peers on consumptive behavior, identify and analyzing the simultaneous influence of parental income, allowance, financial attitudes, social class and peer environment on consumptive behavior. The population in this study were students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara, class of 2020. The samples used was 100 respondents using proportional random sampling. The data collection technique uses an instrument in the form of a questionnaire. The data analysis technique uses the multiple linear regression method using the SPSS 16 application. Based on the results of study, it was found that parental income, allowance, financial attitudes and peer environment had a positive effect on consumptive behavior, while social class had a negative effect on consumptive behavior. Simultaneously, parental income, allowance, financial attitudes, social class and peer environment influence consumer behavior.

Keywords: Parent Income, Allowance, Financial Attitudes, Social Class, Peer Environment, and Consumptive Behavior

## INTRODUCTION

Globalization has become global and does not understand regional or generational boundaries, giving rise to a life that is completely digitized and automated. In the current era of the fourth industrial revolution (4.0), there are many shopping centers, popular hangouts, online shopping, e-banking and others. This has consequences in various aspects of human life at all ages.

The age of young people, which refers to students in financial management, has received serious attention from various organizations, one of which is universities. There are still students who do not have responsibility for careful financial management. Not only that, they always seek satisfaction by consuming goods that are not their needs but to fulfill their desires. This phenomenon is generally known as consumerism.

The age of young people, which refers to students in financial management, has received serious attention from various organizations, universities being one of them. There are still students who do not have responsibility for careful financial management. Not only that, they always seek satisfaction by consuming goods that are not their needs but to fulfill their desires. This phenomenon is generally known as consumerism.

Consumptive behavior is excessive buying activity that is not based on rational thoughts with the aim of getting pleasure solely to fulfill desires without prioritizing needs (Wardani & Anggadita, 2021). The consumer attitude is no longer based on need, but is driven by desire and desire, which is based more on motivation to obtain challenges, sensations, excitement, socialization, getting rid of mental stress, sharing new knowledge about the growth of new trends and new models, and to create objects that are useful. good and valuable. Moreover, there are young people who make every effort to fulfill their consumption. Young people make excessive purchases in order to be accepted in their environment, increase their prestige and prestige and to appear different in their environment.

Factors that influence consumer behavior are internal and external factors. Internal factors include motivation, self-esteem, observation, learning process, personality and self-concept. Meanwhile, external factors are culture, social class, reference group and family (Wardani & Anggadita, 2021). Several of these factors require each student to manage their finances by investing, saving in electronic savings and also through the investment gallery located on the Muhammadiyah University of North Sumatra campus. Addressing this problem, researchers conducted a random survey of students at the Muhammadiyah University of North Sumatra Management Study Program. The problems found were that students who bought products based on desire were still very high, namely 69.2%, followed by students who bought products based on maintaining their personal appearance and prestige at 78%. 56% of students buy products because they follow current trends. 80% of students bought products because they needed it and the highest percentage of students bought products because of discounts/promos, namely 83.7%. This shows that students have consumerist behavior.

North Sumatra Muhammadiyah University (UMSU) is a higher education institution in the city of Medan which is located not far from malls, cafes, supermarkets and restaurants. These places are very tempting for students to spend their time and money. Considering that students do not have income, they will fulfill their needs and desires by asking their parents. The nominal amount of money they get from their parents depends on their parents' income. The ability of parents to educate children is determined by the social and economic background of the parents. Because parents' income level also determines students' consumptive behavior. In the family environment, parents play a very important role in the development of their children, one of the roles of parents is to fulfill both primary, secondary and tertiary needs. Moreover, children's educational needs are usually the second most important thing after primary needs, namely food, clothing and shelter. The greater the parents' income, the higher the student's expenses, because they will not think much about how much money they spend for their enjoyment without thinking about their family's economy. Addressing this problem, researchers conducted a random survey of students at the Muhammadiyah University of North Sumatra Management Study Program regarding their parents' income, which resulted in students having parents with very low incomes, namely under IDR 1,000,000, only 2%. Followed by an income of IDR 1,100,000 – IDR 1,400,000 by 3%. Meanwhile, parents with IDR 1,500,000 - IDR 3,000,000 are also classified as moderate, namely 27%. Parents' income is IDR 3,100,000 - IDR 4,000,000 as much as 48%. And parents' income of more than IDR 4,000,000 is 20%. This means that the average income level of parents of UMSU students is at most IDR 3,100,000 - IDR 4,000,000 which is in the high category.

Students receive pocket money from their parents which must be managed optimally. It can be understood that there are many things that parents must do in carrying out their duties and roles, namely parents as coaches and as mentors for their children (Faiza, 2018). Parents are the most important source in managing personal finances, which means parents must set an example for children in managing their personal finances. Parents need to realize that their role in learning to manage finances is one of the determinants for children to become independent individuals.

Several problems were found among students in managing pocket money from their parents, they felt it was lacking so that in one month they could ask for pocket money more than once. So you need knowledge in managing the amount of pocket money in order to be frugal and save. They must be independent and will start managing finances without full parental supervision. They will learn how to survive away from their parents with the money they have, because the reserves they have are limited each month. This indicates that the amount of pocket money that students have will influence consumer behavior. Based on a survey conducted on random students, it is known that the amount of pocket money received by students is classified as moderate. Students who have very low pocket money, namely under IDR 500,000, are only 2%. Followed by an allowance of IDR 500,000 – IDR 1,000,000 at 13%. Meanwhile, students with pocket money of IDR 1,100,000 – IDR 2,000,000 are also classified as medium, namely 52%. There are 24% of students with pocket money of IDR 2,100,000 – IDR 3,000,000. And pocket money that is more than IDR 4,000,000 is 9%. This means that UMSU student pocket money is in the medium category with 52 students, namely IDR 1,100,000 – IDR 2,000,000. This indicates that the amount of pocket money UMSU students receive each month is quite large. A total of 52 students stated that apart from using it for food, they also often used their pocket money for snacks outside after college with friends. This is an indication that students behave consumptive.

Consumptive behavior is also influenced by financial attitudes by shaping the way people spend, save and waste money. Financial attitudes are psychological tendencies expressed when evaluating recommended financial management practices with some degree of agreement and disagreement. Financial attitudes play an important role in determining a person's financial management behavior. Students with better financial attitudes tend to be wiser in their financial management behavior when compared to students who have poor financial attitudes. Students are a fairly large component of society and will have a big influence on the economy because in the future students will enter the world of work and begin to be independent, including in managing their finances. Based on a survey conducted on 100 students regarding the financial attitudes of UMSU students, there were results that 40% of students were able to manage their finances well and 60% were unable to manage their finances. This is because there is no responsibility regarding the pocket money given and they are still very dependent on their parents. Students who feel they have enough money to meet their needs are 56%, meaning that there are a greater number of students who feel they have enough pocket money than those who don't feel enough, at 44%. Meanwhile, only 39% of students can save from their remaining pocket money and the remaining 61% of their pocket money is used to fulfill their secondary and even tertiary needs. This is what causes students to have high consumerist behavior.

Another factor that influences consumer behavior is social class which is the division of society into different classes or different strata which also describes differences in education, income, property owners and the values they adhere to. Social class influences consumer behavior, supported by facilities and infrastructure that are easy to access as well as financial support from parents, so that teenagers can easily get the goods and services they want. Social class depends on individual social aspects involving aspects of family values, lifestyle, pleasure and behavior. The social stratification of parents will influence the socialization of their children so that students born to parents who have high socio-economic status will behave more consumptively.

The different economic conditions of each individual can influence them to consume excessive goods as a way for teenagers to keep up with current developments. Based on a survey conducted on 100 students regarding the social class of UMSU students, 59% of students chose to make friends based on the same economic group and 41% were friends with anyone. Students who choose a lifestyle according to their abilities are 63%. This means that there are still 37% of students with inappropriate lifestyles. Meanwhile, 56% of students prioritize needs and the remaining 44% still prioritize desires. This is what causes students to have high consumerist behavior.

Peers are thought to be the final factor influencing consumer behavior in this study. Peers include an individual's friendship with other individuals who live side by side and are around the individual, such as friends and friends of the same age. The peer environment is a highly connected and interactive group of people of the same age. Interaction relationships between peers can have an impact on a person's consumer behavior. This is because a peer is someone who is close, so sometimes there is pressure (both real and not) that occurs within the peer environment which causes students to be willing to spend money to buy things they don't need.

Peers are people of roughly the same age and maturity level. So they think that to be accepted by their peers, they have to adapt to their peers' environment. For example, when using a smartphone. According to (Firman, 2019), they use cellphones with the aim of being accepted by their peers, apart from that they use pocket money from their parents to get the things they want. They spend a lot of their time hanging out with their peers. This is because the intensity of peer interactions also has a good or bad influence. In addition, they are outside the home more with their peers as a group, so it is understandable that the influence of peers on attitudes, conversations, interests, appearance and behavior is greater.

## METHODS

This research uses an explanatory approach, which aims to explain the causal relationship between research variables and testing hypotheses (Sugiyono, 2018). This type of research is survey research, where this research takes from a population. This research uses an associative and quantitative approach. So, it can be concluded that associative research aims to determine the relationship between variables. Then the data is collected in quantitative form (Juliandi et al., 2015). Quantitative methods are research methods that are based on positive philosophy, used for researchers of certain populations or samples, collecting data and through research instruments, analyzing quantitative or statistical data with the aim of testing predetermined hypotheses (Sugiyono, 2018). The location of the research was carried out at Universitas Muhammadiyah Sumatera Utara which is located at Jl. Captain Mukhtar Basri No. 3, Glugur Darat, Medan City, North Sumatra. The population in this study were students from Universitas Muhammadiyah Sumatera Utara, Department of Management, Class of 2020. The sample of research uses a proportional random sampling method where each class will be taken randomly with the same percentage, so that the data obtained will represent the characteristics of the population.

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## RESULTS

### 1. Classic assumption test

Before the researcher determines whether the test instrument can be used or not, the researcher must test each instrument using the classical assumption test to ensure that all instruments meet the requirements for multiple linear regression. If the classical assumption test meets the requirements, researchers can proceed to multiple linear regression testing.

### 2. Normality Test

Normality testing is to see whether in the regression model, the dependent and independent variables have a normal distribution or not. The normality test was carried out using Kolmogorov-Smirnov. If the value of asymp. Sig. (2-tailed) is greater than 0.05, then the residual data is normally distributed. And if the value of asymp. Sig. (2-tailed) is smaller than 0.05, then the residual data is not normally distributed.

**Tabel 1. Kolmogorov-Smirnov**

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| | | Unstandardized Residual |
| N | | 100 |
| Normal Parameters[a,b] | Mean | 0,0000000 |
| | Std. Deviation | 5,17093092 |
| Most Extreme DIfferences | Absolute | 0,191 |
| | Positive | 0,189 |
| | Negative | -0,991 |
| Test Statistic | | 0,919 |
| Asymp. Sig. (2-tailed) | | ,141[c] |
| a. Test distribution is Normal | | |
| b. Calculated from data | | |
| c. Lilliefors Significance Correction | | |

*Source: 2023 processing data*

Based on the results of data processing in table 1, the Kolmogorov Smirnov test value is 0.191 and the Asymp value is significant. The Sig in this study is 0.141, which means the significant value is greater than 0.05, so the residual data is normally distributed. For more details, you can see the histogram and normal P-P of regression standardized residual images below:

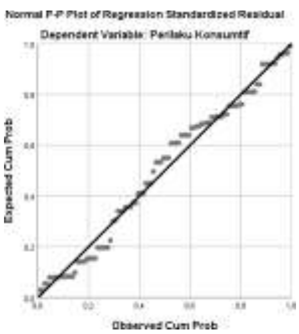


**Figure 1 P Plot Graph Normality Test**

### 3. Heteroscedasticity Test

This test has the aim of finding out whether in the regression model there is an inequality in the variance of the residuals of one observation and other observations remain constant, so it

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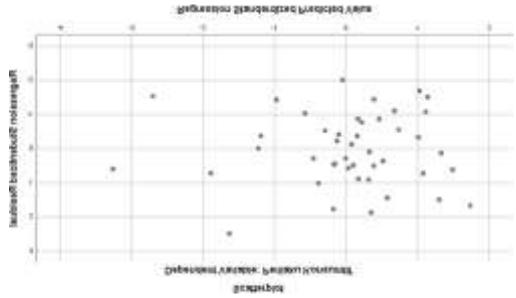
is called homoscedasticity, whereas if the variances are different it is called heteroscedasticity.



**Fifure 2 Scatterplot Test**

The image above shows that the points are spread randomly, do not form a clear pattern even though they appear to be close together at certain points and are scattered at the top and slightly gathered on the Y axis, thus "heteroscedasticity does not occur" in this regression model.

### 4. Multicollinearity Test

Multicollinearity testing was carried out by looking at the VIF between independent variables. If the VIF shows a number <10, it indicates that there are no symptoms of multicollinearity. Besides that, a model is said to have symptoms of multicollinearity if the VIF value between the independent variables is >10.

**Table 2. Multicollinearity Test**

| Coefficients[a] | | | |
|---|---|---|---|
| | | Collinearity Statistics | |
| Model | | Tolerance | VIF |
| 1 | (Constant) | | |
| | Parent Income | 0,573 | 1,745 |
| | Allowance | 0,839 | 1,192 |
| | Financial Attitudes | 0,460 | 2,174 |
| | Social Class | 0,387 | 2,585 |
| | Peer Environment | 0,555 | 1,801 |
| a. Dependent Variable: Consumptive Behavior | | | |

*Source: 2023 processing data*

The three independent variables have VIF values within the specified tolerance limits (not exceeding 10), so that multicollinearity does not occur in these independent variables.

### 5. Multiple Linear Regression Analysis

After the classical assumption test was carried out and the data was concluded to meet the prerequisites for each test, it was continued with the multiple linear regression model. Multiple linear regression analysis aims to determine the direction and influence of more than one independent variable on the independent variable. In this study the independent variables are parental income, allowance, financial attitudes, social class and peer environment with the independent variable being Consumptive Behavior.

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**Table 3. Multiple Linear Regression Results**

| Coefficients[a] | | | |
|---|---|---|---|
| Model | | Unstandardized Coefficient B | Std. Error |
| 1 | (Constant) | -8,740 | 4,999 |
| | Parent Income | 0,136 | 0,104 |
| | Allowance | 0,138 | 0,101 |
| | Financial Attitudes | 0,732 | 0,152 |
| | Social Class | -0,155 | 0,194 |
| | Peer Environment | 0,411 | 0,136 |
| a. Dependent Variable: Consumptive Behavior | | | |

*Source: 2023 processing data*

From table 3, the results of multiple linear regression analysis show the coefficients for each independent variable. So we get the multiple linear regression equation shown in equation as follows:

$Y = -8{,}740 + 0{,}136\ X1 + 0{,}138X2 + 0{,}732\ X3 – 0{,}155\ X4 + 0{,}411\ X5 + e$

Where :

Y = Consumptive Behavior
X1 = Parent Income
X2 = Allowance
X3 = Financial Attitudes
X4 = Social Class
X5 = Peer Environment
e = error

Constant (a) is -8.740, indicating a constant price, if the value of the independent variable is 0, then Consumptive Behavior (Y) will be -8.740. Variable X1 of 0.136 indicates that the variable Parental Income has a positive effect on Consumptive Behavior (Y). In other words, if the Parent Income variable is increased by one unit, Consumptive Behavior will increase by 0.136. Variable X2 of 0.138 indicates that the Allowance variable has a positive effect on Consumptive Behavior (Y). In other words, if the Allowance variable is increased by one unit, Consumptive Behavior will increase by 0.138. Variable X3 of 0.732 indicates that the financial attitude variable has a positive effect on Consumptive Behavior (Y). In other words, if the Financial Attitude variable is increased by one unit, Consumptive Behavior will increase by 0.732. Variable X4 of -0.155 indicates that the Social Class variable has a negative effect on Consumptive Behavior (Y). In other words, if the Social Class variable is increased by one unit, Consumptive Behavior will decrease by 0.155. Variable X5 of 0.411 indicates that the Peer Environment variable has a positive effect on Consumptive Behavior (Y). In other words, if the Peer Environment variable is increased by one unit, Consumptive Behavior will increase by 0.411.

## 6. Hypothesis test

After knowing the value and direction of the coefficient on each variable, the influence of each independent variable on the dependent variable is then tested by testing the research hypothesis. Hypothesis testing is a method of research decision making that is assumed at the beginning of the research. Hypothesis testing is carried out in two ways, namely partially (t

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test) on each independent variable on the dependent variable, and simultaneously (F test) by testing all independent variables together on the dependent variable.

**7. Partial influence test (t test)**

The t statistical test basically aims to show how much influence an independent variable individually has in explaining the dependent variable. With the help of the computer program Statistical Package for Social Sciences (SPSS 23). Testing was carried out using a Significant Level with a real level of 0.05 (α = 5%).

**Table 4. t-Test Results**

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficient | | Standardized Coefficient | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | -8,740 | 4,999 | | -1,748 | 0,084 |
| | Parent Income | 0,136 | 0,104 | 0,120 | 1,306 | 0,195 |
| | Allowance | 0,138 | 0,101 | 0,104 | 1,365 | 0,176 |
| | Financial Attitudes | 0,732 | 0,152 | 0,497 | 4,825 | 0,000 |
| | Social Class | -0,155 | 0,194 | -0,090 | -0,799 | 0,426 |
| | Peer Environment | 0,411 | 0,136 | 0,283 | 3,015 | 0,003 |
| a. Dependent Variable: Consumptive Behavior | | | | | | |

*Source: 2023 processing data*

The basis for decision making in the t test is as follows:

H0 is accepted if: -tcount < ttable < tcount, meaning there is no influence of the independent variable on the dependent variable. H0 is rejected if: tcount > ttable or –tcount <-ttable, meaning there is an influence of the independent variable on the dependent variable.

The basis for decision making can also be seen from the probability value with a value of α=5%, where if the probability value is <0.05 then the independent variable partially has a significant effect on the dependent variable. However, if the prob value is > 0.05 then the independent variable does not have a significant influence on the dependent variable.

1) There is an influence of Parent Income on Consumptive Behavior

   From the t test table above, it can be understood that the influence of parental income (X1) on consumer behavior is obtained by a t value of 1.306 while t table is 1.984 and has a significant number of 0.195 > 0.05 or -1.984 < 1.306 < 1.984. Based on the decision making criteria, it can be concluded that H0 is accepted (Ha is rejected), this shows that there is no significant influence of the Parental Income variable on Consumptive Behavior in students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

2) There is an influence of Allowance on Consumptive Behavior

   From the t-test table above, it can be understood that the effect of Allowance (X2) on Consumptive Behavior (Y) is obtained by a t value of 1.365 while t table is 1.984 and has a significant number of 0.176 > 0.05 or -1.984 < 1.365 < 1.984. Based on the decision making criteria, it can be concluded that H0 is accepted (Ha is rejected), this shows that there is no significant influence of the Pocket Money variable on consumer behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

3) There is an influence of Financial Attitudes on Consumptive Behavior

   From the t-test table above, it can be understood that the influence of Financial Attitude (X3) on Consumptive Behavior (Y) is obtained by a tcount of 4.825 while ttable is 1.984

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and has a significant number of 0.000 < 0.05 or tcount is 4.825 > ttable 1.984. Based on the decision making criteria, it can be concluded that H0 is rejected (Ha is accepted), this shows that there is a significant influence of the Financial Attitude variable on consumer behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

4) There is an influence of Social Class on Consumptive Behavior
From the t-test table above, it can be understood that the influence of Social Class (X4) on Consumptive Behavior (Y) obtained a t value of -0.799 while t table is 1.984 and has a significant number of 0.426 > 0.05 or -1.984 < -0.799 < 1.984. Based on the decision making criteria, it can be concluded that Ho is accepted (Ha is rejected). This shows that there is no significant influence of the Social Class variable on consumer behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

5) There is an influence of Peer Environment on Consumptive Behavior
From the t-test table above, it can be understood that the influence of Peer Environment (X5) on Consumptive Behavior (Y) obtained a t value of 3.015 while t table 1.984 and has a significant number of 0.003 < 0.05 or t count 3.015 > t table 1.984. Based on the decision making criteria, it can be concluded that Ho is rejected (Ha is accepted), this shows that the peer environment influences consumer behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

**8. Simultaneous influence test (F test)**

The F statistical test (simultaneous) is carried out to determine whether the independent variables together have a significant effect on the dependent variable and at the same time also to test second hypothetical. This test was carried out using a significant level of significance level of 0.05 (α = 5%).

**Table 5. F Test Results**

**ANOVA[a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 4449,042 | 5 | 889,808 | 22,186 | ,000[b] |
| | Residual | 3769,958 | 94 | 40,106 | | |
| | Total | 8219,000 | 99 | | | |

a. Dependent Variable: Consumptive Behavior
b. Predictors: (Constant), *Parent Income, Allowance, Financial Attitudes, Social Class, Peer Environment*

*Source: 2023 processing data*

The test criteria:

a. Reject Ho if Fcount> Ftable or -Fcount< -Ftable

b. Accept Ho if Fcount< Ftable or -Fcount> -Ftable

Based on the table data in the F test above, it can be understood that the Fcount value was found to be 22.186 > Ftable 2.31 with a significant probability of 0.000 < 0.05, so it can be concluded that there is a significant influence simultaneously on Parental Income, Allowance, Financial Attitudes, Social Class and Peer Environment on Consumptive Behavior in students

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of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

**9. Analysis of the coefficient of determination (R2)**

The Coefficient of Determination (R2) is a quantity that shows the amount of variation in the dependent variable that can be explained by the independent variable. In other words, the coefficient of determination is used to measure how far the independent variables explain the dependent variable. The coefficient of determination value is determined by the R square value as can be seen in the following table:

**Table 6. Coefficient of Determination (R2)**

| Model Summary[b] | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | ,736[a] | 0,541 | 0,571 | 6,333 |
| a. Predictors: (Constant), *Parent Income, Allowance, Financial Attitudes, Social Class, Peer Environment* | | | | |
| b. Dependent Variable: Consumptive Behavior | | | | |

*Source: 2023 processing data*

From the results of the regression calculations, it can be seen that the coefficient of determination (R square) obtained is 0.541, this result means that 54.1% of the Consumer Behavior variable can be explained by the variables Parental Income, Pocket Money, Financial Attitudes, Social Class and Peer Environment, whereas the remaining 45.9% is explained by other variables not studied.

## DISCUSSION

**1. The Influence of Parent Income on Consumptive Behavior**

From the t-test table above, it can be understood that the influence of parental income on consumer behavior is obtained by a t value of 1.306 while t table is 1.984 and has a significant number of 0.195 > 0.05 or -1.984 < 1.306 < 1.984. Based on the decision making criteria, it can be concluded that H0 is accepted (Ha is rejected), this shows that parental income does not have a significant effect on consumer behavior. This means that high or low income of students' parents does not influence students' consumptive behavior. This is because parental income is not always the dominant factor in consumptive behavior. Factors such as education, family values and culture can also play a significant role in shaping a person's consumptive behavior.

Parental income is the total income in the form of money owned by both parents from the results of their work, whether from their own business or working for someone else. The greater the income the parents have, the higher their socio-economic status. Parental income is of course obtained based on the parent's job. Where parents work, everyone certainly has a job in their life to earn an income that will be used to fulfill their life's needs. Everyone's job is of course different, some have simple jobs, some have medium jobs and some have jobs in the high or even very high category with varying incomes (Syahailatua et al., 2022).

The family's economic situation is closely related to student learning outcomes (Slameto, 2015). Students who are studying, apart from having their basic needs met, for example food, clothing, health protection, also need study facilities. Therefore, like the parents of Umusu students who have different income levels, the forms of meeting their needs are also different.

The results of the research that the author has conducted are inversely proportional to the results of the research above, namely that the influence of parental income has a positive and insignificant effect on student consumption behavior. This happened because the majority of

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questionnaire answers from respondents were in the category of disagreeing and disagreeing with the independent variable (Parental Income) and the dependent variable (Consumptive Behavior).

**2. The Influence of Allowance on Consumptive Behavior**

From the t-test table above, it can be understood that the influence of pocket money on consumptive behavior is obtained by a t value of 1.365 while t table is 1.984 and has a significant number of 0.176 > 0.05 or -1.984 < 1.365 < 1.984. Based on the decision making criteria, it can be concluded that Ho is accepted (Ha is rejected), this shows that there is no significant influence of the allowance variable on consumptive behavior. This means that whether a student's allowance is large or small does not influence consumptive behavior. This is because allowance is not always the dominant factor in consumer behavior. Factors such as financial education and media influence can also influence consumptive behavior.

As teenagers you cannot be separated from allowance. Teenagers' allowance is not only used to buy snacks, but they also use it good at collecting allowance to buy things they like or are influenced by their peers (Gifari, 2021).

These parents' shopping patterns are also ultimately passed on to their children. The pattern of giving money to children is more often done daily (spontaneous) than weekly or monthly (planned). When these children grow up and become parents (regeneration), they are unconsciously patterned to become like their previous parents. Due to this lack of planning. Consumption patterns become irregular and ultimately it is easy to fall into spending that prioritizes desires rather than needs. Providing planned pocket money for children is a necessity. With a planned pattern of giving pocket money, children finally learn to plan, learn to restrain themselves, be disciplined, be consistent and be independent. They themselves carry out expenditure planning and they themselves will independently make decisions about the products they will choose. Three things that must be adhered to when implementing a planned pocket money pattern are first, consistency. Second, consistency. And third, consistency. Inconsistency will actually destroy plans that have been implemented and actually make it easier for children to make inconsistencies in the future (Bukhari, 2015).

The results of the research that the author has conducted are inversely proportional to the results of the research above, namely that the influence of allowance has a positive and insignificant effect on student consumptive behavior. This happened because the majority of questionnaire answers from respondents were in the category of disagreeing and disagreeing with the independent variable (Allowance) and the dependent variable (Consumptive Behavior).

**3. The Influence of Financial Attitudes on Consumptive Behavior**

From the t-test table above, it can be understood that the influence of financial attitudes on consumer behavior is obtained by a t-count of 4.825 while t-table is 1.984 and has a significant number of 0.000 < 0.05 or t-count of 4.825> ttable1,984. Based on the decision making criteria, it can be concluded that Ho is rejected (Ha is accepted), this shows that there is a significant influence of the Financial Attitude variable on Consumptive Behavior.

Financial attitude is a person's state of mind, opinion and assessment of their personal finances, which is then applied to their attitude. A person's thoughts, opinions and assessment of their personal financial situation will determine what actions they will take. For example, savings, if someone has thoughts, judgments and opinions that saving is not important. Then the person will not save. If these thoughts, opinions and judgments (attitudes) continue, they will become habits/behavior (behavior) that will be very difficult to change (Amanah et al., 2016). So someone who has a high financial attitude means that they think that the money they have is sufficient or a lot will increase their consumptive behavior.

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Financial attitudes direct a person to manage various financial behaviors. Someone who has a good financial attitude will also be better at making decisions related to financial management. On the other hand, people who have a bad financial attitude will also be bad at managing their finances (Mirza, et al, 2019).

From the explanation above, the results of the research that the author has conducted are the same as the research conducted by (Sari & Anam, 2021) and (Yusufina et al., 2022), namely that financial attitudes have a positive and significant effect on consumer behavior. This happened because the majority of questionnaire answers from respondents were in the strongly agree and agree category of the independent variable (Financial Attitude) and the dependent variable (Consumptive Behavior).

**4. The Influence of Social Class on Consumptive Behavior**

From the t-test table above, it can be understood that the influence of social class on consumer behavior is obtained by a t value of -0.799 while t table is 1.984 and has a significant number of 0.426 > 0.05 or -1.984 < -0.799 < 1.984. Based on the decision making criteria, it can be concluded that Ho is accepted (Ha is rejected). This shows that there is no significant influence of the Social Class variable on Consumptive Behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

Social classes are relatively homogeneous and fixed sections in a society. which is structured hierarchically and its members have similar values, interests and behavior (Sunyoto, 2016).

The existence of values, attitudes and behavioral patterns that tend to be the same or homogeneous within a social class but differ between social classes gives rise to the view that social stratification in a society has limited the behavior of its members. This means that interactions between individuals from different social classes tend to be limited because those individuals will feel more comfortable interacting with other people who are like themselves, who have the same values, attitudes and behavior patterns, namely those who are in the same social class (Damiati, 2021)

The results of the research that the author has conducted are inversely proportional to the results of the research above, namely that the influence of Social Class has a negative and insignificant effect on Student Consumptive Behavior. This happened because the majority of questionnaire answers from respondents were in the category of disagreeing and disagreeing with the independent variable (Social Class) and the dependent variable (Consumptive Behavior).

**5. The Influence of Peer Environment on Consumptive Behavior**

From the t-test table above, it can be understood that the influence of Peer Environment (X5) on Consumptive Behavior (Y) obtained a tcount of 3.015 while ttable was 1.984 and had a significant number of 0.003 < 0.05 or tcount 3.015 > ttable 1.984. Based on the decision making criteria, it can be concluded that Ho is rejected (Ha is accepted), this shows that there is a significant influence of the peer environment variable on Consumptive Behavior.

Social Environment The environment is one of the important factors that determines a person's ability to manage their finances. The current millennial generation always wants to look better than the people around them, so they are willing to spend quite a lot of money to look cooler and more stunning than others. You feel jealous when you see other people using products that have more value than the product you are using. This is a trigger to spend more

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money to buy more products to look better than other people. Current challenges of the millennial generation this is changing the lifestyle more simply (Mirza, et al, 2019).

The finances of the millennial generation cannot be separated from the influence of their lifestyle. It cannot be denied that most of the millennial generation only care about and pride themselves on a lifestyle of freedom and hedonism. The YOLO (You Only Live Once) lifestyle makes them live in Consumptive Behavior without thinking about the future. Many people associate a happy life with Consumptive Behavior as if the wealth we own shows their identity. A luxurious lifestyle and a lack of knowledge about managing finances will only make financial expenses very unpredictable and will always make you feel like you are lacking.

From the explanation above, the results of the research that the author has conducted are the same as the research conducted (Murtianingsih, 2017), namely that the peer environment has a positive and significant effect on consumer behavior. This happened because the majority of questionnaire answers from respondents were in the strongly agree and agree category of the independent variable (Peer Environment) and the dependent variable (Consumptive Behavior).

**6. The Influence of Parental Income, Allowance, Financial Attitudes, Social Class and Peer Environment on Consumptive Behavior**

Based on the table data in the F test above, it can be understood that the value found Fcount 22.186 > Ftable 2.31 with a significant probability of 0.000 < 0.05, so it can be concluded that there is a significant influence simultaneously on Parental Income, Allowance, Financial Attitudes, Social Class and Environment Peers on Consumptive Behavior in students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara.

From the previous explanations, it is known that there are several factors that influence a person's financial behavior, including parental income, allowance, financial attitudes, social class and peer environment.

Students' good economic literacy, supported by fairly good economic learning outcomes, and the high role of peers have a significant and positive influence on students' good consumption behavior (Siboro & ., 2021).

Based on the results of the data analysis that has been carried out, it is known that there is a significant relationship between lifestyle and social class and Consumptive Behavior. This means that lifestyle and social class variables can be used as predictors of Consumptive Behavior (Fitriani, 2020).

Research results (Chairiah & Siregar, 2022) Allowance has a significant effect on Consumptive Behavio mediated by Self Control among students at Universitas Muhammadiyah Sumatera Utara. (Primadini & Budiana, 2014) also found that there was a significant relationship between lifestyle variables and social class together with Consumptive Behavior variables.

## CONCLUSION

Based on the research results above, the following conclusions can be drawn:

1) The results of this study conclude that partially parental income does not have a significant effect on consumptive behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara, meaning that high or low parental income will not increase or decrease student consumptive behavior.
2) The results of this research conclude that allowance does not have a significant effect on consumptive behavior among students of the Study Program of Management, Faculty of

Economics and Business, Universitas Muhammadiyah Sumatera Utara. This means that whether a student has a lot or a little allowance will not increase or decrease the student's consumptive behavior.

3) The results of this study conclude that partially financial attitudes have a significant effect on consumptive behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara. This means that the better the financial attitude, the greater the student's consumptive behavior.
4) The results of this research conclude that partially Social Class has no effect on Consumptive Behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara. This means that high or low social class of a student will not increase or decrease student consumptive behavior.
5) The results of this research conclude that partially the peer environment has a significant effect on consumptive behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara. This means that the more or more diverse the peer environment, the more student consumer behavior will increase.
6) The results of this research conclude that there is a simultaneous and significant influence of parental income, allowance, financial attitudes, social class and peer environment on consumptive behavior among students of the Study Program of Management, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara. This means that if a student's parent's income is high, the student has a lot of allowance, low financial attitudes and the student is in a high social class and the student's peer environment is close, then the student's consumptive behavior will increase. On the other hand, if the student's parent's income is low, the student has little allowance, the student's financial attitude is high and the student is in a low social class and the student's peer environment is not very close, then the student's consumptive behavior will decrease.
7)

**IMPLICATION**

This research has been attempted and carried out in accordance with scientific procedures, however it still has limitations, namely that the factors that influence consumer behavior in this study only consist of 5 variables, namely parental income, pocket money, financial attitudes, social class and environment. Students' peers, while there are still many other factors that influence financial behavior. Apart from that, there are limitations to research using questionnaire data because it is feared that respondents will not really answer the statements seriously according to the actual situation.

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**081-074**

# NEEDS ANALYSIS OF FINTECH APPLICATION DESIGN FOR MICRO ENTERPRISES

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## ABSTRACT

The ability of micro enterprises to prepare financial statements is still always an interesting topic in various studies on the financial performance of micro enterprises. The measure of business success is synonymous with high profits and increased assets owned. Fintech is one of the tools that is expected to be a solution in making it easier for micro enterprises to compile financial reports. The findings of this study revealed that 71% who already have a business license have not prepared proper financial statements. This can be seen from the respondents' answers regarding financial recording activities, there are only 59.4% who claim to make records and keep proof of sales and 39.4% who make expense records. Other records such as accounts payable or receivable notes are also not well documented, because indeed sales or purchases made are still in cash. The ease of paying with banking applications or online payment applications such as gopay, dana, ovo, Qris and others is very helpful for micro enterprises in ease of payment.

Keyword: statement of financial position, Income statement, Requirement Planning

## Introduction

The ease of access to technology has changed people's patterns and behaviors in various aspects, including financial transactions. This is supported by smartphone penetration and internet access that is getting easier and cheaper. In addition, Fintech also provides opportunities for Micro, Small and Medium Enterprises (MSMEs) to improve financial access and business performance (Zahoor et al., 2023) and characterize the company's competitive advantage (Tortora et al., 2021). MSMEs are an important pillar in the Indonesian economy, but still face many obstacles in accessing traditional finance, services with traditional product offerings (Resnick et al., 2016) and a firm that operates a traditional product model (Ahmad et al., 2019), such as banks and other financial institutions(Ahmad et al., 2019). Fintech provides solutions in improving financial access and business performance of MSMEs through more flexible, fast, and affordable services (Nugraha et al., 2022), but the Fintech phenomenon also brings challenges and risks (Rhyne & Brigham, 1979). The challenge faced is the rapid change in consumer and market behavior. The stages of Fintech development are also faced with fierce competition with traditional financial institutions. The risks faced are related to data security and privacy issues (Liu & Sukmariningsih, 2021), legal regulation and compliance, as well as technology risks such as system failures and cyberattacks (Tamvada et al., 2022).

This study used data and information from members of Rumah Kawan Bunda Community (RKB) in Medan City. This RKB community is a community of young mothers of business actors, already has valid legal legality and is very consistent in encouraging the success of its members' businesses. The RKB community focuses on business development in the form of frequent trainings, this community also has several businesses that are

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currently starting in the stage of developing and applying technology. Currently, the implementation of Fintech in MSMEs is always faced with several obstacles, including a lack of understanding of Fintech, limited access to technology, and concerns about data security and privacy. This condition also occurs in members of the RKB community, especially understanding the procedures for using existing financial applications. As an MSME Community that has grown and has more than 250 members, actually the members of RKB Community have received a lot of training and assistance in preparing financial statements, has even received training several times using the Financial Statement application provided by government and private institutions or agencies through CSR programs and MSME Mentoring Programs. But according to them, the application offered cannot be applied for various reasons, among them are due to less flexible applications, and need an accounting understanding of debits and credits, it takes special time to learn the application, it takes special time to input data, and various other reasons that cause existing applications cannot be utilized properly according to their functions.

This condition implies that the existing fintech-based financial report application is not in accordance with the needs of MSME players (Nugraha et al., 2022; Zahoor et al., 2023). Micro business owners need to improve their understanding of Fintech and overcome these obstacles to optimally utilize Fintech's potential. The government and regulators also play an important role in facilitating the implementation of Fintech in micro enterprises. Thus, Fintech innovation is carried out that is friendly and facilitates access to technology for micro businesses. The results of this study will later be useful for the preparation of Fintech applications that are able to provide easy-to-use services and consider data privacy and security issues in the development of their products and services.

**Literatur Review**

Efforts to increase MSME growth are still faced with internal problems such as weak aspects of capital, production, product marketing, and human resources, as well as external factors such as limited public access to financial institutions. Limited access to financial institutions has an impact on MSMEs capital, where MSMEs entrepreneurs find it difficult to get capital from these financial institutions. The use of technology can be a solution for MSMEs in overcoming capital constraints and improving business performance. However, there are still obstacles in the use of technology, the use and utilization of technology is still a major problem for MSMEs (Candraningrat et al., 2021; Zahoor et al., 2023).

Financial technology services can be an alternative for financial institutions and their users to provide and obtain services. Fintech can act as an introduction to services to users that were previously unreachable by existing traditional institutions or services (Amankwah-Amoah et al., 2021). However, the use of technology is a challenge for MSMEs, to be able to survive traditional financial products must innovate. For example, in savings and loans solutions, fintech can provide financing facilities that were previously constrained by bureaucracy in traditional financial institutions such as banks. Fintech can simplify the financing process because it can provide loans without collateral and lenders can come from people who have more money in any amount, and borrowers can come from any circle and any amount. This can eliminate some of the requirements and bureaucracy that existed in previous institutions, but are still supervised by the government (Yacob et al., 2021). In this case, fintech also has a different impact on MSMEs (Radicic & Petkovic, 2023) can have positive and negative impacts that are taken into consideration when starting implementation for MSMEs.

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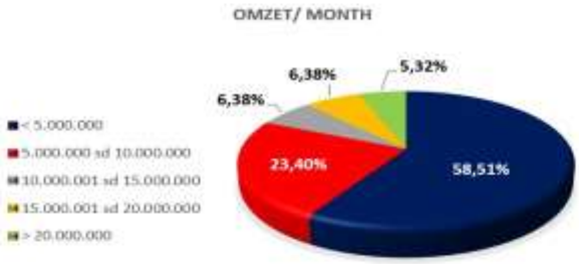
The positive impacts of fintech include 1) increasing financial access, fintech provides easier and affordable financial access for MSMEs; 2) Simplify transactions. Fintech enables online financial transactions, fast and efficient, making it easier for MSMEs to conduct transactions and manage finances (Khalil et al., 2022); 3) Increasing productivity, fintech speeds up administrative processes and transactions, so that wasted time and energy can be saved and used to increase business productivity; 4) expanding market reach, fintech allows MSMEs to expand market reach, because they can sell products online and reach consumers throughout Indonesia and even abroad. While the negative impact relates to security risks, fintech is vulnerable to data leaks and fraud (Tamvada et al., 2022). MSMEs must be careful in choosing a safe and trusted fintech platform. Competition between fintech platforms in MSMEs financing creates confusion in choosing the right platform. Another thing that needs to be considered is the limited knowledge of technology, not all MSME actors understand technology well, So that it can be an obstacle in utilizing fintech to the fullest. MSMEs must continue to hone their technological skills and update their knowledge.

In the use of fintech, MSMEs must be selective and choose a safe and trusted fintech platform. MSMEs must also improve their technological capabilities and pay attention to the risks associated with the use of fintech (Tamvada et al., 2022). By utilizing fintech appropriately, MSMEs can improve their business performance and contribute to economic growth in Indonesia (Muzdalifa et al., 2018). The need to build an information system in improving the effectiveness of decision making, increasing efficiency in information management, improving service quality, and increasing company competitiveness (Khair et al., 2016). In the context of Financial Statement Information Systems in MSMEs, simple financial applications will facilitate the management of financial transactions, store data, and generate financial reports automatically. Financial applications can also help optimize the financial management process and make decision making easier and more effective (Lee et al., 2018; Hani et al., 2018). Laporan keuangan pada dasarnya adalah hasil dari proses akuntansi yang dapat digunakan sebagai alat komunikasi antara data keuangan atau aktivitas suatu perusahaan dengan pihak-pihak yang memiliki kepentingan pada aktivitas perusahaan (Hani & Fauzi, 2017).

## Results of Analysis and Discussion

Requirement *Planning*, the initial stage that brings together users and analysts aimed at identifying system goals and information needs to achieve goals. Second involvement of the parties, namely MSME groups and system makers, makes this initial stage the most important thing. The data collection process with interviews was carried out directly to RKB managers and distributed questionnaires to respondents, namely all MSME actors who are members of the RKB community. The number of respondents filling out the questionnaire was 94 respondents.



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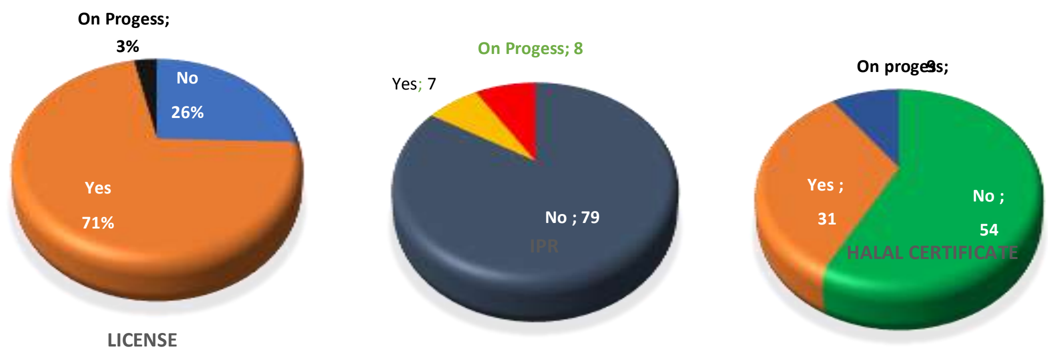
**Graph 1. Type of Bussiness and Omzet of Respondent**

The results of the questionnaire collection obtained information that the type of RKB Community business 63% in the field of culinary producers, Resellers 15% and other businesses such as crafts, tailor, distributor, and so on. The average business income is low, 81.3% have an income of less than 10 million per month, namely 58.51% earn less than 5 million per month, and 23.4% earn between 5 million to 10 million. It is really still a micro business and needs assistance and coaching to develop. Only 5 MSMEs or 5.32% claim to earn above 20 million per month. The commitment of the RKB community management to the protection of members regarding business continuity can be seen from the ownership of business licenses, 71% of RKB members who are respondents already have business licenses, and for the management of IPR certificates and halal certificates, the assistance will only start in 2023. So it is certain that this number will continue to grow because RKB has a business license management assistance program, IPR management assistance and halal certificate management assistance in collaboration with related institutions such as the Cooperative and MSME Office, Industry and Trade Office, Ministry of Law and Human Rights, government and private institutions including banking institutions.




Graph 2. Completeness of Respondent Administration

Marketing and sales of products or services of RKB community members are carried out online through whatsapp, instagram, facebook, market place, tiktok, meaning that the average RKB community member has carried out sales using existing social media. There were only 55 respondents who revealed consumers came directly to the outlet or store where they sell. Information obtained from interviews with RKB community administrators is known that the average community member does not have a special outlet or store. Most of them produce and sell products based on incoming orders and without providing stock of products ready for sale, especially culinary manufacturers. Some culinary manufacturers who prepare food products that can last more than one week will usually provide stock for sale at any time, but for certain foods can only be produced to order.

Sales of products / services to consumers are carried out in cash and credit with payments of less than 1 week. The average payment is made by utilizing banking applications by transferring via ATM, mobile banking, Qris or using funds, gopay, link aja, OVO. This information shows that the mothers of the members of the RKB community are actually very *familiar* with online transactions.

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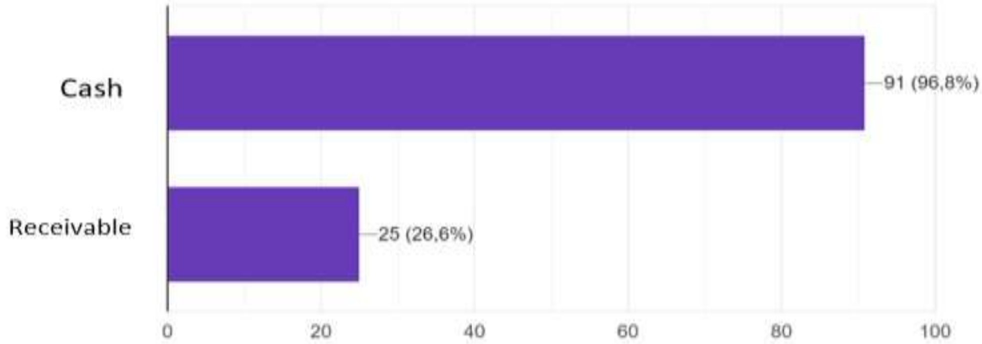
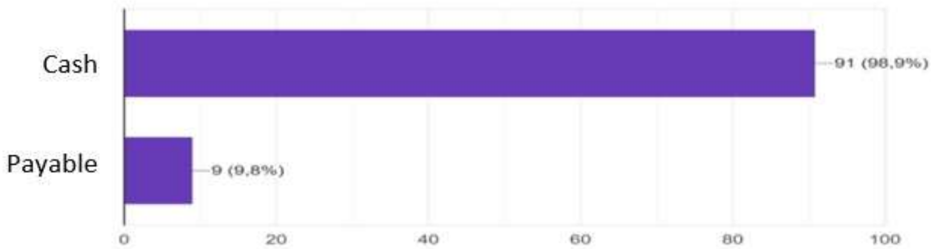


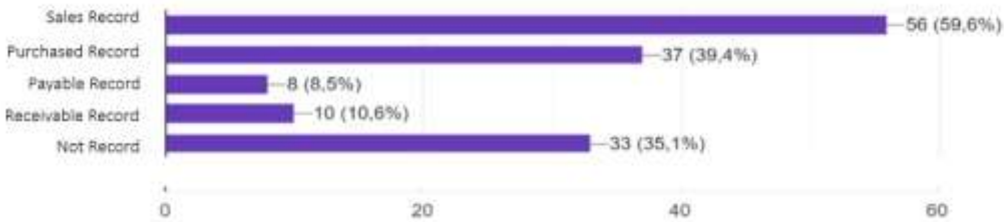

**Graph 3. Product Sales System**

Most respondents carry out production activities or prepare inventory of products to be sold, They will make purchases of raw materials and or buy products for supplies. Most members of the RKB community make purchases or purchases of goods and products done in cash, either come directly to the seller's store or by ordering delivery of goods. Only 9 respondents stated that they purchased raw materials or products for inventory on credit. The payment method in purchasing materials is the same as in sales transactions, namely using ATM transfer banking transactions, Mobile banking, Qris and other financial applications such as funds, OVO, gopay, and others.




**Graph 3. Material/ Inventory Purchasing System**

Specifically, the survey results on the financial activities of RKB Community members on average admit that they do sober financial records. Respondents who made sales records were only 56 people and those who made purchase records there were 37 people. They revealed this recording was only to find out how much money came in from sales not to calculate net income, as some admitted to recording based on memory alone, without calculating the actual amount. This is only natural, because usually when making purchases or shopping for materials carried out at the same time as shopping for basic needs for the family.



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**Graph 4. Transaction Logs**

Respondents make records of sales transactions and purchase records regularly, the aim is to measure how much estimated profit they get from the business activities they carry out. Likewise, with the recording of debts or accounts receivable, they still use memories only, to whom they shop, to whom they owe, who are consumers or customers who buy and have not made payments. In fact, often they forget to collect receivables, only a few make debt records because they usually buy raw materials in cash, So they don't feel the need to make a note of debt to suppliers or stores where they usually shop for materials. The graph above also shows that there were 33 respondents who did not record anything at all, because you feel bothered with notes, and don't have time to make notes because you have a lot to do. Moreover, usually the members of the RKB Community do work alone, shopping for materials, producing, marketing, selling and even delivering their own products to customers. This is understandable, they also take care of the family, children are still toddlers and of kindergarten and elementary school age, still have to be picked up by themselves.

Since the onset of the covid pandemic until now, the Indonesian government and various other government agencies such as SOEs have provided business capital assistance for MSME actors several times. Additional questions related to receiving business assistance from various funding sources, 82.8% of RKB community members stated that they had never received assistance from any party, and the rest received assistance from various sources such as the government, Department of Industry and Trade, Ministry of Cooperatives and MSMEs, assistance during the Covid 19 Pandemic, and Pre-Employment assistance. The question about the use of fintech applications from banking institutions found that 12% of respondents stated that they had created the Qris application to make it easier for consumers to make payments, while other respondents on average use mobile banking by transfer, especially in receiving payments from customers. From the respondents' answers, it was then analyzed and confirmed to the RKB Community management and several members as to what financial application needs are expected to be easy to use and useful for members related to business financial management. Previously there were also several agencies that offered Android-based finance-based applications complete with certain features, but so far there are no applications that have been submitted to the RKB community that suit their needs and are still declared difficult to use and understand their use. In fact, digital instruments contribute to business model innovation, creating new distribution channels and new ways to create and deliver value for customers (Matarazzo et al., 2021)

The findings of this study show that the challenge in making fintech applications is how to prepare applications that will answer their needs which are actually still very simple and simple, namely learning to record buying and selling activities and get basic information about simple but informative financial management to find out business development. Because indeed many MSMEs face difficulties in adopting new technologies due to lack of resources, skills, commitment, and proper understanding of digital finance (Giotopoulos et al., 2017; Tamvada et al., 2022). Digital technology provides support for value creation and customer engagement, but still struggles in using technology (Matarazzo et al., 2021). The use of information technology in improving the quality of financial management is one of the determining success factors for MSMEs. Based on this information on user needs, it should be necessary to design a simple and simple application in accordance with the expectations of potential users. When viewed from the provisions for preparing financial statements such as the EMKM Accounting Standard which only requires the preparation of a statement of

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financial position and income statement, then there are actually still obstacles in the preparation of financial applications, especially in preparing the Statement of Financial Position.

The statement of financial position is a report that presents the position of assets, liabilities and capital. For micro businesses, especially, asset and capital information is information that is still difficult to identify. The main obstacle is caused because indeed in carrying out business operations, in general, micro businesses have not separated family assets from business assets, in some medium-sized businesses that have managed businesses to become larger, they should separate business assets from personal or family assets (Cho & Lee, 2018). However, for the RKB Community, separating business assets from personal assets or family assets cannot be done, because indeed the business activities they do have not really focused on professional business management. This does not mean they are not able to develop their business to be large and managed professionally, but indeed currently the conditions faced are still in the stage of starting a business. Even though business potential and productive age with undergraduate education level, it is very likely to develop a business at a higher level (Cowling et al., 2015)

This condition is certainly a concern for programmers to produce financial applications that are simple and can really be utilized and used by MSME actors so that the resulting fintech applications are not in vain. The fintech application designed should not only be for compliance with accounting policy rules as contained in SAK EMKM, but is indeed able to accommodate the needs of MSMEs in obtaining financial information for their business according to the needs and type of business (Radicic & Petkovic, 2023), as well as their current abilities. Fintech also has an impact on product innovation (Radicic & Petkovic, 2023) Fintech application makers cannot force their applications to be perfect such as meeting the needs of applicable accounting standards. But it needs to be started with designing fintech applications that are in accordance with the needs of very basic financial information such as cash in and out, production volume, product types and product sales or the amount of turnover, as well as simple profit information, without having to be burdened with methods of presenting financial statements that sometimes require time to learn specifically. This is indeed a concern because there are still many MSMEs that have not used their data, even though financial data such as sales documents and purchase documents are important information in financial management (Coleman et al., 2016). But no less important is how existing human resources are able to prepare financial information in order to obtain accurate information about the financial condition of the business (Radicic & Petkovic, 2023; Radicic & Pugh, 2017)

## Conclusion

The need for fintech applications for the RKB community is still very basic, it can be met by preparing a simple application that can make it easier for them to find out cash inflows and cash outflows, production volumes, types of products and product sales or the amount of turnover, as well as simple profit information, without having to be burdened with the method of presenting financial statements. In accordance with the findings revealed that 71% already have a business license and have not prepared proper financial statements. Only 59.4% of respondents kept records and kept sales receipts and 39.4% kept expense records. Other records such as accounts payable or receivable notes are also not well documented, because sales or purchases are made in cash. The ease of paying with banking applications or online payment applications such as gopay, dana, ovo, Qris and others is very helpful for MSMEs. Judging from the desire to progress and develop, RKB community members have great respect for technological advances and they have marketed products using various digital marketing platforms that are developing, and Qris banking services for ease of payment, including other efforts needed to "upgrade" by managing business licenses, halal products, and intellectual property rights and increasing capital, by utilizing the support of the government and other private institutions to obtain aid funds.

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# THE EFFECT OF FINANCIAL LITERACY ON SME FINANCIAL

Management In Indonesia

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## ABSTRACT

This study aims to determine the effect of financial literacy on SMEfinancial management in Indonesia. Financial literacy is a person's understanding or ability to measure related financial concepts and have the ability to manage finances well. This type of research uses an Associative approach. The sampling technique used in this study is the solving sample method which uses 50 samples. The data used in this study are primary data. Data collection techniques in this study are interviews and questionnaires. Data analysis in this study uses outer model analysis, inner model analysis and hypothesis testing using Partial Least Square (PLS) software version3.3. The results showed that financial literacy had a positive and significant effect on financial management.

Keywords: Financial Literacy, Financial Management, SME

## INTRODUCTION

Small and Medium Enterprises or abbreviated as SMEs are a form of business in Indonesia. SMEs have an important role in the regional economy, especially in driving regional economic activity. The high influence of SMEs in Indonesia is due to the continuously increasing growth of business entities supported by large trading business potential (Jam'iyatuzzulfiyyah, 2021). SMEs in Indonesia have become an important part of the economic system in Indonesia, this is because SMEs are business units that are more numerous than large-scale industrial businesses and have the advantage of absorbing more workers and are also able to speed up the equalization process as part of development. (Yuli Rahmini Suci, 2008). The development of SMEs also requires SMEs to be ready to compete with other SMEs. This is so that SMEs can create new and different businesses. Apart from that, SMEs are also expected to have good performance, even though SMEs have a potential role, but in reality there are still many problems faced in their development.

One of the problems faced by SMEs today is the failure that SMEs often experience in developing their businesses related to financial management. Financial management can be done through accounting (Hanum, 2019). Accounting is the process of identifying, measuring and reporting economic information to enable clear and firm judgments and decisions for those who use the information. Financial management is an important aspect for business progress. Financial management carried out based on accounting is very important for the smooth running of SMEs (Satria & Fatmawati, 2021). If finances are managed well then the effectiveness of achieving business goals can be realized well and also the use of business capital in order to achieve profits can be used efficiently. (Wardi, Putri, & Liviawati, 2020).

SMEs have weaknesses, namely weak management, limited capital, lack of use of information and technology, and weak financial literacy in managing business finances. Therefore, there needs to be strategic efforts to improve the performance of SMEs (Aribawa, 2016) so that SMEs can survive and continue to improve. Understanding and knowledge regarding good and correct financial literacy and performance is also needed which is a measure of the success of a business entity in achieve its goal. Financial literacy is closely related to financial management where the higher a person's level of financial literacy, the better the person's financial management (Gunawan, Pirari, & Sari, 2020). Based on the results of the National Financial Literacy survey in 2022, the Indonesian people's financial literacy index was 49.68%, an increase compared to 2019 which was only 38.03%. Understanding financial literacy is very important and is most needed by SME players to support economic sustainability functions.

Financial literacy has a very important and strategic role so it is hoped that it can be the right solution to accelerate national economic recovery. According to the Financial Services Authority, financial literacy is knowledge, beliefs and skills that influence attitudes and behavior to improve the quality of decision making and financial management in order to achieve prosperity. With this understanding, it creates hope for financial services businesses, product consumers and the wider community to not only know and understand financial services, but also to improve their ability to make financial decisions and change attitudes and behavior in managing finances so as to improve welfare. Many SMEs are unable to manage their finances and cause losses in the businesses they run. Financial literacy in financial management is also one of the problems in SMEs that SMEs or prospective SMEs must have in managing their business finances, especially implementing correct accounting in financial management. This was also conveyed by the OJK (SNLKI Revisit 2017) which stated that financial literacy is a life skill for individuals to be able to plan and manage finances well to seek prosperity. Therefore, OJK continues to increase financial literacy, with efforts to increase financial literacy which includes increasing the knowledge, skills and confidence of consumers and the public, it is hoped that they can manage their business finances well. Having an understanding of financial literacy possessed by MSME players will certainly really help MSMEs in using financial service products such as making deposits in banks, loans or credit, making investments and related financial management from managing business funding sources, making budget plans, and procedures for preparing reports. finances for the business he owns.

In order to increase financial literacy, the Financial Accounting Standards Board of the Indonesian Accountants Association has ratified the Financial Accounting Standards for Micro, Small and Medium Entities at a meeting on 18 May 2016 and became effective on 1 January 2018 as regulated in SAK ETAP and the characteristics in the Law No. 20 of 2008. SAK EMKM explicitly describes the concept of a business entity as one of its basic assumptions and therefore to be able to prepare financial reports based on SAK EMKM, an entity must be able to separate the owner's personal wealth from the assets and business results of the entity, and between a business /entity with other businesses/entities. Therefore, the government hopes that with this SAK EMKM, SMEs can prepare financial reports based on better and simpler accounting standards to facilitate business processes (Rosyidah, Ariningsih, & Wijayanti, 2022). The existence of SAK EMKM can make it easier for SMEs to prepare their financial reports, but quite a few SMEs also find it difficult to prepare financial reports according to Financial Accounting Standards (SAK). This is supported by several factors, including low education and lack of knowledge about SAK. According to Satyo (2005) in (Lestari, 2014) this can also happen because there are no regulations that require actors to prepare financial reports. Until now, many finances in SMEs have experienced uncertainty due to chaotic bookkeeping conditions. There are also many SMEs who have not implemented accounting in managing their business finances which results in failure in managing their business finances. As long as SMEs still use money as a medium of exchange, accounting is really needed by SMEs.

Financial management is very important and is expected by SMEs because if finances are managed well then the effectiveness of achieving business goals can be realized well and also the use of business capital in order to achieve profits can be efficiently used. (Wardi, Putri, & Liviawati, 2020). Many SMEs are unable to manage their finances and cause losses in the businesses they run. Financial literacy in financial management is also one of the problems in SMEs that SMEs or prospective SMEs must have in managing their business finances, especially implementing correct accounting in financial management. This was also conveyed by the Financial Services Authority which stated that financial literacy is a life skill for individuals to be able to plan and manage finances well to seek prosperity. Therefore, increasing financial literacy continues to be carried out by the Financial Services Authority.

Financial literacy is very necessary, especially for SME owners so they can manage business finances properly and correctly. With good financial management and supported by good basic financial knowledge, it is hoped that the level of community welfare can increase. It is hoped that the importance of financial literacy in all aspects can lead people towards financial prosperity by being able to use their financial resources well. with efforts to increase financial literacy which includes increasing the knowledge, skills and confidence of consumers and the public, it is hoped that they can manage their business finances well. One of the reasons for the low income/turnover of SMEs is low financial literacy or financial understanding as well as awareness of SMEs about the importance of carrying out recording activities in managing their business finances. Currently, SMEs still have many limitations and various problems. However, basically the problem lies in the limitations of Human Resources, namely the SMEs themselves.

In Indonesia, it was found that financial literacy had a positive and significant effect on financial management. By increasing financial literacy, it is hoped that SMEs can manage their business finances better and more effectively. (Andriani, S. and Sari, D. A. 2019). The results of research conducted by (Wahyu Rumbianingrum and Candra Wijayangka, 2018) state that there is a significant influence of financial literacy on SME financial management.

## RESEARCH RESULT

Data processing techniques using the PLS-based SEM method. Discriminant Validity can be determined by looking at the Average Variant Extracted (AVE) value for each indicator, the required value must be >0.5 for a good model (Ghozali 2015)

**Table 1 : Average Variance Extracted (AVE)**

| Variabel | Average Variance Extracted (AVE) | Description |
|---|---|---|
| Financial Literacy (X1) | 0.762 | Valid |

| | | |
|---|---|---|
| Financial Management (Y2) | 0.759 | Valid |

Source : Data Processed by Researchers, 2023

Based on Table 1, it is known that the AVE value of the Financial Literacy variable is 0.762, the Financial Management variable is 0.759. Each variable has a value > 0.5, so it is stated that each variable has good discriminant validity.

Composite Reliability is the part used to test the reliability value of indicators on a variable. The use of Composite Reliability is carried out to test the reliability of a construct (Ghozali and Latan, 2012: 75). A variable can be declared to meet composite reliability if it has a composite reliability value > 0.6. The following are the composite reliability values for each variable used in the research:

**Table 2 : Composite Reliability**

| Variabel | Composite Reliability | Description |
|---|---|---|
| Financial Literacy (X1) | 0.972 | Valid |
| Financial Management (Y2) | 0.969 | Valid |

Source : Data Processed by Researchers, 2023

Based on Table 2, it is known that the composite reliability value for all research variables is >0.60. So all constructs meet the requirements in the Composite Reliability test, so they are suitable to be continued in the next analysis.

The previous reliability test with composite reliability can be strengthened by using Cronbach's alpha value. A variable can be declared reliable if the Cronbach alpha value is > 0.7. The following are the Cronbach's Alpha values for each variable:

**Table 3 : Cronbach's Alpha**

| Variabel | Average Variance Extracted (AVE) | Description |
|---|---|---|
| Financial Literacy (X1) | 0.969 | Valid |
| Financial Management (Y2) | 0.964 | Valid |

Source : Data Processed by Researchers, 2023

Based on table 3, it can be explained that all constructs in each variable have a Cronbach's Alpha value > 0.70. So all constructs meet the requirements in the Cronbach's Alpha test, so they are suitable to be continued in further analysis.

The R-Squeare test is used to measure model quality criteria which shows the magnitude of the influence of the independent latent variable on the dependent latent variable. The R2 criterion of 0.75 can be said to be a strong model, and if the R2 value is 0.50 then the model is said to be quite moderate, and if the R2 is 0.25 then it is said to be a weak model (Ghozali & Latan, 2015: 79). Based on data processing carried out with Smart PLS 3, the R-Square values are obtained as follows:

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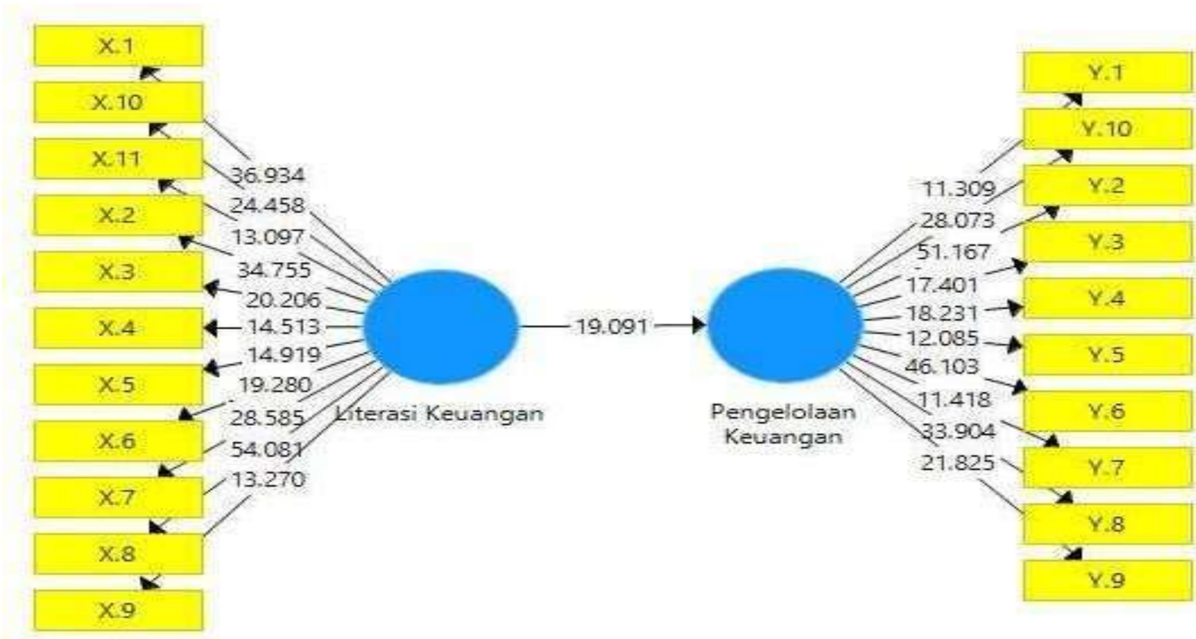
**Table 4 : R-Square**

| Variabel | R-Square |
|---|---|
| Financial Management | 0.793 |

Source : Data Processed by Researchers, 2023

In table 4 the R-Square value obtained is 0.793 for the Financial Management variable. So it can be explained that the Financial Literacy variable has an influence on Financial Management of 79.3% and the rest is influenced by other variables not examined in this research. The result of this value is > 0.75, which means that the financial literacy variable has a strong influence on SME financial management.

In carrying out the analysis, it can be expressed through a path diagram, using bootstrapping analysis. So you get the image below:




**Picture 1 : Output Booststrapping**

Based on the data processing carried out, the results can be used to answer the hypothesis in this research. Hypothesis testing aims to see the significant influence between variables. Hypothesis testing in this research was carried out by looking at the t-statistic and p-value. The independent variable is declared to have an effect on the dependent variable if the t-statistic is >1.99 and the pvalue is <0.05 (Dahrani et al, 2022). The following are the results of data processing in this research using SmartPLS version 3.3:

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**Table 5 : T-Statistic dan P-Values**

| | Original Sample (O) | Sample Mean (M) | Standart Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| X1 > Y | 0.891 | 0.893 | 0.047 | 19.091 | 0.000 |

Source : SmartPLS 3.3,2023

Based on table 5 above, it is stated that the hypothesis testing is as follows: The influence of financial literacy on financial management has a path coefficient value of 0.891. This influence has a t-statistic probability value of 19,091 > 1.99 and has a p-value of 0.000 < 0.05, meaning that Financial Literacy has a significant effect on SME Financial Management.

**DISCUSSION**

From the results of hypothesis testing, it is known that Financial Literacy has a significant effect on Financial Management, meaning that the better the level of financial literacy of SMEs, the better the financial management carried out and vice versa, thus the hypothesis is proven. The results of this research are in accordance with research by Andrew (2015) which states that there is a significant relationship between financial literacy and financial management, where the higher a person's financial knowledge, the wiser they tend to be in managing their finances.

Financial knowledge possessed can be a strong capital to help individuals overcome any risks that may occur in the process of managing and making financial decisions related to their business. The majority of UKM owners have graduated from high school/vocational school, even only 20% have graduated from college. A person's level of education will influence a person's way of thinking and behavior (Sulistyowanti, 2014). Usually someone who has a high educational background and a high level of basic financial knowledge can be more careful and wise in managing their finances. Every decision taken will take into account the risk and level of profit that will be obtained. This makes it easier for SME owners to determine appropriate, effective and efficient financial strategies so as to improve SME financial management.

The results of this research also show that the respondents' literacy level regarding basic finance is in the low category with an average percentage of 3.85%, namely <60% (Chen and Volpe, 1998). Even though basic financial knowledge is very important for every individual to have to help facilitate the financial decisions they want to make. Basic financial knowledge itself is a person's understanding of personal financial planning, understanding and knowing the sources of income and profits, differences in financial income. If SME owners have good basic financial literacy, they will tend to be more effective in managing their finances and will tend to make better financial decisions. Financial literacy is one of the basic needs that SMEs must have in running a business. Business failures that are often experienced by SMEs can occur due to mistakes made in business management and poor financial literacy. Financial literacy is a person's knowledge or understanding of basic financial concepts in managing finances obtained from income to make decisions. This influences financial literacy on SME financial management. Financial Services Authority, (2013) which states that financial literacy is a series of processes or activities to increase the knowledge, skills of consumers and the wider community so that they are able to manage their finances better, according to what they need and provide benefits.

From the research results of Ida & Dwinta, (2010) which states that Financial Literacy influences Financial Management. This has the implication that with good financial literacy it is hoped that SMEs will be able to make appropriate management and financial decisions to improve business performance and sustainability. Business owners must have knowledge in managing finances in order to be able to carry out activities to seek funds, allocate funds to maximize business activities and minimize risks in financial problems (Hartati, 2013). This is also in line with research results from Baiq Fitri & Khoirunnisa, (2020) which states that Financial Literacy also has a positive and significant effect on Financial Management. With the results of this research and previous research, this needs to be of concern and support from various parties to help SMEs increase financial literacy so that it will make it easier for SMEs to manage business finances.

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