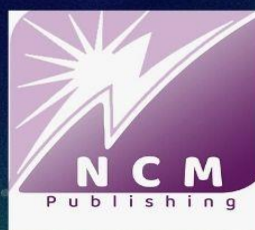

SOCIAL GREEN
BEHAVIOUR, ARTIFICIAL
INTELLIGENCE AND
BUSINESS STRATEGIES &
PERSPECTIVES IN GLOBAL
DIGITAL SOCIETY

Editors

Assoc. Prof. Dr. Muhammad Ali Tarar

Dr. Muhammad Saghir Ahmad

Lawrence Walambuka



Social Green Behaviour, Artificial Intelligence and Business Strategies & Perspectives in Global Digital Society



Editors

**Assoc. Prof. Dr. Muhammad Ali Tarar
Dr. Muhammad Saghir Ahmad
Lawrence Walambuka**

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PREFACE

How well people work together is a crucial factor in the success of any business & organization. Social behavior and good leadership play important role in adoption of new innovations, technologies, and skills that ultimate change the pattern of communication to promote business, enhance sales and strengthen organization and industry in present era. The development of the Industrial Revolution brought changes to the adjustment of work in humans, machines, technology and processes in various professional fields, including the accounting profession. The Industrial Revolution requires the accounting profession to adapt to the development of information technology and big data. Facing today's latest industrial era, the development of the digital economy has opened new possibilities while simultaneously increasing risk. These changes have a significant impact on the development of accounting. In this era, technological developments and innovations seem to keep pace with time. New innovations encourage the creation of new markets and shift the existence of old markets. Smart machines and robots are now taking on many roles and seem to rule the world. In the Industrial Revolution 4.0 there was an extraordinary shift in various fields of science and profession, therefore the way accountants work, and practice needs to be changed to improve service quality and global expansion through online communication and the use of cloud computing and artificial intelligence.

Thank you for the hard work of the Steering Committee who has assessed the articles to be published in Social Behaviour, Leadership, Sales, Communication, Organization, Branding, Feasibility Analysis for Business Management: Inquiries with New Approaches in the Post-Pandemic Era.

This publication is dedicated to the world of science in the field of Accounting which is currently growing so rapidly. The development of Cloud Computing and Artificial Intelligence has played a role in changing the work order of Accountants.

Assoc. Prof. Dr. Muhammad Ali Tarar;
Bursa – January 2024

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CHAPTER 1

Antecedents and Consequences of Emotional Exhaustion' Call Center Employees

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ABSTRACT

The purpose of this study was to analyze the effect of obsessive passion, distributive injustice on turnover intention mediated by emotional exhaustion. Data were collected from 120 call center employees in South Jakarta. The data collection technique was non-probability sampling with purposive sampling method. While for testing the hypothesis used an analytical tool in the form of Structural Equation Model (SEM). The results of hypothesis testing in this study indicated that obsessive passion has a positive effect on emotional exhaustion, distributive injustice has a positive effect on emotional exhaustion, obsessive passion has a positive effect on turnover intention, distributive injustice has a positive effect on turnover intention, emotional exhaustion has a positive effect on turnover intention, obsessive passion has a positive effect on turnover intention mediated by emotional exhaustion and distributive injustice has a positive effect on turnover intention mediated by emotional exhaustion. The managerial implication is managers must increase harmonious passion by upgrading work motivation and positive performance and reduce obsessive passion, in the salary distribution system, promotion and workload must be treated fairly so that employees do not experience distributive injustice, employees need to implement healthy sports programs and also gathering events so that employees' feeling, employees' minds and energy can return to work refreshed thereby reducing perceived emotional exhaustion, then creating a harmonious work atmosphere, reducing employee work pressure, and a fair pay system is expected to reduce the level of turnover Intentions in the company.

Key Words: Obsessive Passion, Distributive Injustice, Emotional Exhaustion, Turnover Intention

1. INTRODUCTION

People have adapted technology to their daily use in the new normal era and Industrial Revolution 4.0. There are drastic changes in technology implementation in the service industry, starting from modifying the overall business landscape and workforce structure. Technology has opened the door to automation and efficiency in serving customers. On the basis of this development, the fact that companies still need a role from the call center as the frontline in distributing company information to customers. Before the new normal era and industrial revolution 4.0, call centers were used to collect as much information as possible about customers and collect all incoming request. Improvement and the ability to manage the necessity of maintaining the relationship with customers inevitably requires dealing with the ability of call centers to address the issues of recognizing opportunities and retaining customers (Telexindo, 2020). Call center employees have a crucial role in providing company information to customers, responding to complaints, and maintaining positive relationships with consumers. At this time, the need for call center positions is increasingly being shifted by technology. This leads to an increase in turnover intention. The condition of turnover intention in call center positions is influenced by several variables, namely obsessive passion, distributive injustice, and emotional exhaustion. This is also influenced by several aspects, namely the increasing number of competitors and interaction on social media, which has resulted in call center services still needing to be eliminated (Jasnita, 2021).

Call centers are often pressured to provide superior service and face high-performance standards. This pressure can trigger obsessive passion. Increasing job demands and work standards can cause employees to feel bored with their work and trigger turnover intention in employees (Lee & Cho, 2021). Additionally, when call centers interact with customers, ranging from responding to customer complaints to instant problem-solving but ignoring the resources distribution could directly impact employee motivation and engagement. On this point, it can be said that this condition causes distributive injustice, which can cause employee unrest and encourage them to resign from the company (Alyahya et al., 2022). On the other hand, it is seen that a lot of research has been conducted particularly in the field of obsessive passion and distributive injustice which could lead employees to experience emotional exhaustion (Shapoval, 2019). It is therefore, emotional Exhaustion can also mediate and strengthen the relationship between obsessive passion, distributive injustice which can cause employees to resign or turnover intention. However, the research brings in the different perspective apart from each other and hence a lack of implicit agreement.

2. LITERATURE REVIEW

2.1 Theoretical Background

2.1.1 Obsessive Passion

Obsessive passion is an employee who cannot adapt his work to other aspects of life, so the employee loses control over activities and feels interpersonal or intrapersonal pressure in carrying out his work (Nurjannah, 2018). Obsessive passion can occur due to the process of internalizing an activity that is controlled by oneself into an individual's identity. The condition comes from pressure from oneself or outside (Emilisa, 2022). Increasing work demands can cause employees to feel bored with their work and have maximum energy in completing job demands, allowing employees to have passion in the form of obsession with their work (Bouffard, 2017). Employees with obsessive passion will experience a lack of control over their

roles in their activities and feel internal pressure to be involved in work (Burke et al., 2015). Employees with obsessive passion are dedicated, focused, and committed and find it difficult to put themselves out into their work. Because of this process, high job demands can produce fatigue and health exhaustion related to the drive for work (Lestari & Zamralita, 2018).

According to Prasetya (2015), there are five dimensions of passion as follows: (a). Meaningful connection: employees feel a close relationship between themselves and their work, where people cannot work optimally when their work identity conflicts with theirs; (b). Internal drives: strong encouragement from within employees so they can work in urgent times and have the urge to do many things; (c). work absorption: it is a cognitive condition where a person is so immersed in their work that they do not realize they are "working." Employees work with complete focus and energy, so they pay less attention to things outside of work; (d). Joy: employees who feel cheerful and happy will be more enthusiastic about working. Employees do their work without seeing it as an obligation but rather enjoy the process of working and (e). Subjective vitality: it is a condition where employees have enthusiasm, which becomes a source of energy within themselves, giving rise to enthusiasm and a source of sufficient energy to perform activities and improve abilities.

2.1.2 Distributive Injustice

Distributive injustice is experienced by employees who believe that they do not receive fair treatment in the distribution of work; they tend to experience high levels of stress and feel dissatisfied with their work from the company where they work (Anang Kistyanto, 2016). Distributive injustice is something that employees experience when they compare their efforts to the wages they receive from their work (Piccoli & de Witte, 2015). When employees believe they have exerted a high effort but have received little reward, this perceived inappropriate reciprocity will result in Emotional Exhaustion, where the measuring tool for distributive injustice is related to explicit work conditions and results. The research results of Piccoli & de Witte (2015) also confirmed this difference; in particular, distributive injustice emerged as the most essential factor in explaining the impact of work discomfort on Emotional Exhaustion.

According to Aslan & Ucar (2015), employees always match their capital, such as educational background, work experience, and work performance, and then their income, such as wages and promotions, with employees with the same position. Employees make comparisons, and this is based on their respective standards of fairness. Perceptions of distributive injustice can arise from distributive justice. Perceptions of justice differ from individual to individual. Therefore, different perceptions can result in positive or harmful behavior. Positive perceptions of organizational justice increase organizational commitment and work productivity. On the other hand, negative perceptions of organizational justice harm the organization and increase employee turnover.

2.1.3 Emotional Exhaustion

Emotional exhaustion is a form of stress related to work that refers to a condition where employees feel burdened by work and thus experience fatigue (Parayitam et al., 2020). Emotional exhaustion is fatigue in employees, which is related to personal feelings characterized by feelings of helplessness and depression (Septyaningsih & Palupiningdyah, 2017). Emotional exhaustion is physical fatigue, and its symptoms include lack of energy, lack of sleep, and problems in the family. When an employee is emotionally exhausted, he is no longer in a professional position (Khan, Yusoff et al., 2014). Significant antecedent conditions of emotional exhaustion in various work settings include workload, performance urgency, and work pressure (Baeriswyl et al., 2016). Due to significant emotional exhaustion such as heavy workload, lack of supportive relationships, personal commitment, inadequate employee size,

professional growth, and understanding of burnout, more than half of the workforce suffers from high levels of Emotional Exhaustion (Khan, Rasli et al., 2014).

2.1.4 Turnover Intention

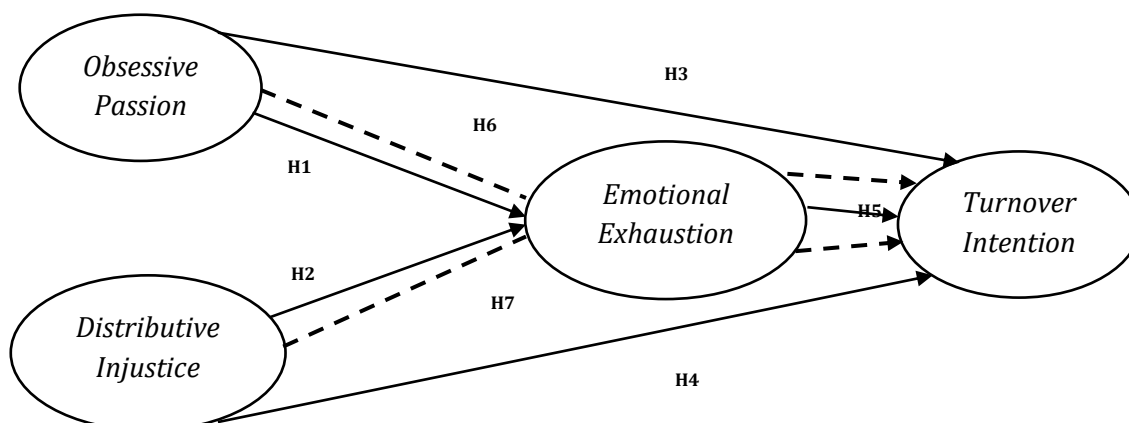
Turnover intention is when workers have a conscious plan to look for another job as an option in a different organization, and turnover is something that workers do to leave their place of work (Abdillah, 2012). Turnover Intention is also defined as the desire for workers to leave the company without coercion immediately. The condition is driven by the desire to earn more wages, continue education, have opportunities from other companies, and deal with personal matters such as family problems (Syahronica et al., 2015). When a company enters the workforce recruitment process, the long-term risk is that the company must be prepared when the workforce desires to leave the company (Hakim et al., 2018). Turnover Intention is also an employee's desire to leave the company. Turnover Intention must be handled as a phenomenon and human behavior critical to organizational life, both personally and socially. The employee's intention to leave will significantly impact both the company and the individual (Ingsih et al., 2022).

2.2. Conceptual Framework

Various descriptions show that every company has factors that influence employee performance, from the mental aspect to the physical aspect that employees feel and can be a factor that every company needs to pay attention to regarding the role of employees in the company. In other words, this results in fiercer competition and ever-changing working conditions; a company's ability to change course and provide new evolution is critical to success.

Based on the description above, it is known that in ensuring the company's success in achieving the desired goals, obsessive passion and distributive injustice are present in employees where *employee interest* in the workplace can be defined as a form of solid inclination toward work, namely really liking, appreciating, and investing a considerable amount of time and energy in the company. Until employees think about comparing their efforts to the rewards they get from their work. It means time pressure at work and the role demands of an employee who feels that the results or reciprocity they receive are appropriate. In the following situation, there is a sense of loss of employees' resources caused by these factors. Increasing obsessive passion, distributive injustice, and emotional exhaustion can reduce their sense of well-being at work, thus hurting their work-related mindset for turnover intention.

From the description above, emotional exhaustion is mediating between the influence of obsessive passion and distributive injustice on turnover intention. The conceptual framework is illustrated in Figure 2.1 as follows:



2.3 Hypotheses Development

Obsessive passion tends to conflict with various aspects of life and results from the persistence of excessive activity. This condition shows how increasing work demands will make employees obsessed with passion and excessive persistence in a job, making them dependent on their work (Chen et al., 2019). Employees with obsessive passion are likelier to be busy with work and cannot relinquish their tasks, ultimately making them vulnerable to tiredness (Y. H. Lee & Cho, 2021). According to Zito et al. (2022), this also explains a positive relationship between obsessive passion and emotional exhaustion. Based on the explanation above, the following hypothesis can be concluded:

H1: Obsessive passion has a positive effect on emotional exhaustion.

Distributive injustice is a lack of inappropriate reciprocity in the relationship between employees and the company. When employees reciprocally evaluate their conditions, they consider whether each has met their expectations. In this case, the comparison between company and employee can relate to any outcome, process, event, or interaction in the workplace. This lack of inappropriate reciprocity explains part of the relationship between distributive injustice, which can influence emotional exhaustion in employees. For example, employees feel a lack of control and stress in psychological needs (Laila & Khan, 2020). Piccoli and de Witte (2015) explain that there is a positive influence between distributive injustice and emotional exhaustion. Shapoval (2019) also proves that Distributive Injustice positively influences emotional exhaustion. Based on the explanation above, the following hypothesis can be concluded:

H2: Distributive injustice has a positive effect on emotional exhaustion.

Employees with obsessive passion tend to think they work in an environment controlled by external drives. Due to external push factors, employees may feel pressure to work. This condition can trigger turnover intention in employees. So, it can be predicted that obsessive passion is positively related to turnover intention (Y. H. Lee & Cho, 2021), leading employees to produce more conflict and fatigue at work. According to Gong et al. (2020), there is a positive influence between obsessive passion and turnover intention. According to Agustina et al. (2022), there is a positive influence between obsessive passion and turnover intention. Based on the explanation above, the following hypothesis can be concluded:

H3: Obsessive passion has a positive effect on turnover intention.

Distributive injustice causes employees to show low work performance and decrease their cooperation with co-workers. Increasing the amount of workload without proper compensation can increase the possibility of social loafing. Distributive Injustice causes employee unrest and work stress, which can also encourage employees to think about Turnover Intention from their work (Alyahya et al., 2022). Aliedan et al. (2022) explain that there is a positive influence between distributive injustice and turnover intention. Kee & Chung (2021) also prove that there is a positive influence between distributive injustice and turnover intention. Based on the explanation above, the following hypothesis can be concluded:

H4: Distributive injustice has a positive effect on turnover intention.

Employees who experience high levels of emotional exhaustion are characterized by their weakened performance and lack of responsiveness to work demands, thus encouraging higher

levels of emotional exhaustion, resulting in decreased work performance. With this, employees who experience emotional exhaustion can generate thoughts for turnover intention from the company. Employees tend to have turnover intentions to stop the drain on cognitive resources when they experience emotional exhaustion (S. B. Lee & Suh, 2020). According to Cole et al. (2010), there is a positive influence between emotional exhaustion and turnover intention. Y. H. Lee & Cho (2021) explained that there is a positive influence between emotional exhaustion and turnover intention. Based on the explanation above, the following hypothesis can be concluded:

H5: Emotional exhaustion has a positive effect on turnover intention.

Turnover Intention is where employees intend to move from one job to another. If there is an intention to move or leave work, the work will not be done well (Waskito & Putri, 2021). One of the causes is job demands, which positively influence obsessive passion, so the higher the job demands, the higher the presence of obsessive passion in employees (Trépanier et al., 2014). Obsessive passion is characterized by really liking activities they like and considering them essential so employees will spend their time and energy, which triggers emotional exhaustion. According to Y. H. Lee & Cho (2021), emotional exhaustion mediates between obsessive passion and turnover intention. Where obsessive passion influences turnover intention indirectly through Emotional Exhaustion, based on the explanation above, the following hypothesis can be concluded:

H6: Obsessive passion positively affects turnover intention, which is mediated by emotional exhaustion.

Turnover intention is said to be a form of an employee's desire to leave the company consistently; this may occur voluntarily by the employee or the company, which can make human resource management costs high. Usually, this decision is the final decision after the employee measures what the employee has got after working all this time. Because various circumstances may have an impact on employees. One of them is distributive injustice at work, such as lower salaries for employees, promotions, and rewards, which will reduce employees' achievements, can prevent workers from achieving their professional goals and make them often feel emotionally exhausted (Alyahya et al., 2022; Piccoli & De Witte, 2015). Tayfur et al. (2013) explained that emotional exhaustion mediates between distributive injustice and turnover intention. According to Cole et al. (2010), emotional exhaustion mediates between distributive injustice and turnover intention. Distributive injustice influences turnover intention indirectly through emotional exhaustion. Based on the explanation above, the following hypothesis can be concluded:

H7: Distributive injustice positively affects turnover intention, which is mediated by emotional exhaustion.

3. RESEARCH METHOD

3.1 Research Design

This type of research uses hypothesis testing. In this study, data collection was cross-sectional because the data taken resulted from a single deployment at a specified time. The unit of analysis studied was the call center's employees.

3.2 Variable and Measurement

The variable used in this study are obsessive passion and emotional exhaustion, where the statement items are developed by Y. H. Lee & Cho, (2021), distributive passion and turnover intention adapted from Alyahya *et al.*, (2022).

3.3 Population and Sample

The population in this study were call center’s employees. The determination of the sample was carried out using a non-probability method, namely purposive sampling with 120 samples filled out the questionnaires. According to Hair et. al (2018) maximum samples size is number of statement multiplied by ten.

3.4 Research Instrument Testing

From the results of the research instrument testing, all constructs are valid because have a factor loading of more than 0.5. All variables are also reliable because they have a Cronbach alpha of more than 0.6

3.5 Analysis Method

The analysis using descriptive statistics in the form of mean and for hypothesis testing using the Structural Equation Model with AMOS software.

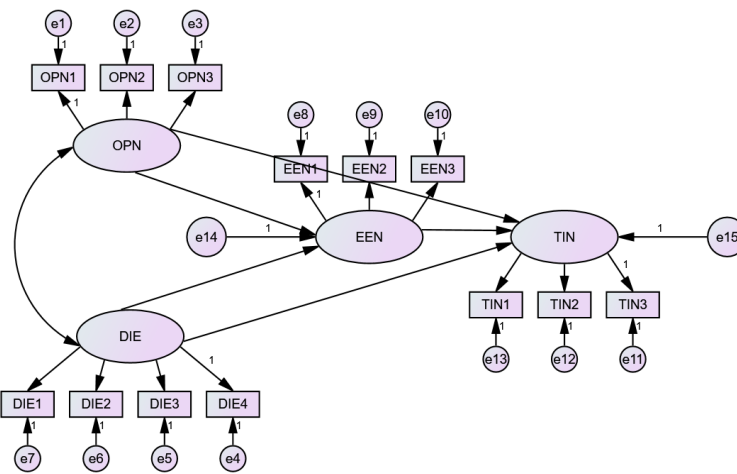


Figure 1: Structural Equation Model

4. RESULT AND DISCUSSION

4.1 Respondent Demographic Characteristics

Most of the respondents were male (52.5%), many of them were 18-25 years old (56.7%) with a length of work 1-3 years (83.3%) and the last education was Diploma Degree (50%).

4.2 Descriptive Statistics Analysis

Table 1: Descriptive Statistic Obsessive Passion

No	Indicator	Mean
1	I have an obsessive feeling about my work	3.76
2	If I could, I would just work	3.85
3	I have a feeling, that my work controls me	3.77
Total mean		3.79

Source : Data processed (2023)

From the table 1 above, it can be concluded that total mean for the obsessive passion variable is 3.79. This result shows that call center employees feel entirely bound by their work and are forced to do it, so there is pressure on employees to carry out their work.

Table 2: Descriptive Statistic Distributive Injustice

No	Indicator	Mean
----	-----------	------

1	The results do not reflect the efforts I have put into my work	3.62
2	The results obtained do not match the work I have completed	3.54
3	The results do not reflect anything I have contributed to the company	3.58
4	The results obtained cannot be justified, considering my performance accordingly	3.56
Total mean		3.57

Source : Data processed (2023)

It can be concluded that the total mean of the distributive injustice variable is 3.57. This shows that employees feel mistreated regarding the rewards and workload they receive because it is not under what they have invested in the company.

Table 3: Descriptive Statistic Emotional Exhaustion

No	Indicator	Mean
1	I feel emotionally drained from my work	3.87
2	I feel tired when I wake up in the morning	4.06
3	Working with lots of people is tiring for me	3.93
Total mean		3.95

Source : Data processed (2023)

From Table 3 above, it can be concluded that the total mean for the emotional exhaustion variable is 3.95. It means that call center employees feel exhausted because they have to show emotions that their employees do not feel.

Table 4: Descriptive Statistic Turnover Intention

No	Indicator	Mean
1	I often thought about leaving my job	3.64
2	There is no need for any other factors, so I leave this job	3.60
3	I will probably look for another job soon	3.75
Total mean		3.66

Source : Data processed (2023)

Total mean of turnover intention variable is 3.66. It shows that call center employees reasonably feel like leaving their jobs.

4.3 Hypotheses Testing Result and Discussion

Table 4: Hypotheses Testing Result

Hyphoteses	Estimation (β)	ρ value	Decision
Obsessive Passion → Emotional Exhaustion	0.403	0.000	Supported
Distributive Injustice → Emotional Exhaustion	0.178	0.009	Supported
Obsessive Passion → Emotional Exhaustion	0.464	0.000	Supported
Distributive Injustice → Turnover Intention	0.338	0.012	Supported
Emotional Exhaustion → Turnover Intention	0.594	0.000	Supported
Obsessive Passion → Emotional Exhaustion → Turnover Intention	0.240	0.007	Supported
Distributive Injustice → Emotional Exhaustion → Turnover Intention	0.106	0.009	Supported

Source : Data processed (2023)

Table 4 shows a significance value of $0.000 < 0.05$ with an estimated value (β) of 0.403, so it can be concluded that obsessive passion positively affects emotional exhaustion. It illustrates that call center employees feel bound by their work and are forced to do it, so there is pressure on the employee to carry out the work, feeling stressed and tired. The workload felt by call center employees is heavy, especially for those working the third shift, from midnight to morning. The results of this research are supported by previous research conducted by Y. H. Lee & Cho (2021); Zito et al. (2022); Amarnani et al. (2020). This condition can also be linked to the obsessive passion variable, where employees have obsessive feelings about their work. Furthermore, the emotional exhaustion variable, namely, employees feel tired when they wake up. It means that call center employees feel an obsessive passion for their work, which causes the employees' energy to feel drained to face the next day, so employees feel they have reached a high level of fatigue. As explained in the theory in Prasetya's research (2015), one of the dimensions of passion is work absorption, where a person is immensely engrossed in their work, such as call center employees who have to immediately complete work due to disturbances in the field at uncertain times when carrying out their work.

The results of testing the second hypothesis show a significance value of $0.009 < 0.05$ with an estimated value (β) of 0.178, so it can be concluded that Distributive Injustice positively affects emotional exhaustion. It illustrates that call center employees feel they are mistreated regarding rewards and workload, which, of course, will have a negative impact on the employees' emotional exhaustion. One of the employee's job duties is to resolve all customer complaints. It is felt that the rewards received are not appropriate. This condition can increase negative feelings, and employees have to manipulate true feelings when receiving rewards that do not match what is invested in the company. The results of this research are supported by previous research conducted by Piccoli & de Witte (2015); Laila & Khan (2020), Shapoval (2019). The result can also be related to the variable in distributive injustice, namely if the results obtained do not reflect the employee's efforts in their work, and the item in emotional exhaustion, where the employee feels his energy drained emotionally. This means that call center employees feel that they are not paid commensurately for the work they complete, so they only feel excessively tired and no longer have the motivation to work.

Testing the third hypothesis produces a significance value of $0.000 < 0.05$ with an estimated value (β) of 0.464, so it can be concluded that obsessive passion positively affects turnover intention. Employees feel bound by their work and forced to do it because there is pressure on them to carry out the work, which can increase turnover intention. With the increase in customer complaints received by call center employees, employees have more job demands than before. Employees being tied to their work causes conflict at work and decreases work performance, so employees tend to think about leaving the company. The results of this research are supported by previous research conducted by (Y. H. Lee & Cho, 2021), Gong et al. (2020), and Agustina et al. (2022). If associated with the variable obsessive passion, the employee feels that work controls the employee's self, and the item on turnover intention is where the employee may immediately look for another job. It means that employees feel that work targeted by applicable regulations causes them to feel very tied to achieving targets and feel controlled by the job; this impacts employees who will choose to look for another job.

The fourth result shows a significance value of $0.012 < 0.05$ with an estimated value (β) of 0.338, meaning that distributive injustice positively affects turnover intention. Call center employees feel that they are mistreated; they feel that the compensation, rewards, and workload given to employees are not commensurate with what they expect; this can, of course, increase turnover intention. Call center employees always serve customers every day, so this shows the

large number of work demands that must be completed. This triggers employees to turnover intention from the company for inappropriate workloads. The results of this research are supported by previous research conducted by Alyahya et al. (2022), Aliedan et al. (2022), Kee & Chung (2021). This can also be related to the statement on the distributive injustice variable, namely that the results obtained do not reflect the efforts made at work, and on the turnover intention variable, namely that employees will probably immediately look for another job. This means that employees feel that the compensation given is not commensurate with what they invested; they will be less motivated and look for another job to provide better compensation. The theory in Houkes et al.'s (2003) research explains that workload is the work obligations resulting from a person's work.

The significance value for testing the fifth hypothesis is $0.000 < 0.05$ with an estimated value (β) of 0.594, so it can be concluded that Emotional Exhaustion positively affects Turnover Intention. Call center employees feel excessive fatigue caused by increasing work demands and working too hard, which has an impact on Turnover Intention. Call center employees who have direct contact with customers, such as receiving telephone calls and various complaints, tend to drain the employees' emotional exhaustion. This condition will cause discomfort, so employees intend to leave the job. The results of this research are supported by previous research conducted by Y. H. Lee & Cho (2021), S. B. Lee & Suh (2020), and Cole et al. (2010). It can also be related to the statement on the Emotional Exhaustion variable, namely, working with lots of people is really tiring, and the Turnover Intention variable, namely that employees will probably immediately look for another job, which means the drain of positive energy, so employees will tend to think that in a short time, they might look for another job.

The table of hypothesis testing results above shows a significance value of $0.007 < 0.05$ with an estimated value (β) of 0.240, so it can be concluded that obsessive passion has a positive effect on turnover intention, which is mediated by emotional exhaustion. Employees feel bound by their work, so there is pressure on them to carry out their work, so they will experience emotional exhaustion, which makes them feel excessively tired and stressed about their work. The impact is that employees intend to leave their jobs. This research is supported by previous research conducted by Y. H. Lee & Cho (2021), Y. H. Lee & Chelladurai (2016), and then from the results of Donahue et al. (2012). This result can also be linked to the theory in research by Waskito and Putri (2021), where employees intend to resign from the company, characterized by increased absenteeism, reduced performance, and compliance with the rules and regulations carried out by employees, such as employees who are often not present at meetings.

The results of the latest hypothesis testing show a significance value of $0.009 < 0.05$ with an estimated value (β) of 0.106, so it can be concluded that distributive injustice positively affects turnover intention, which is mediated by emotional exhaustion. It illustrates that employees' emotional exhaustion is a mediating variable on the influence of distributive injustice on call center employee turnover intention. When given rewards, appreciation, and workload, employees feel treated unfairly and dissatisfied with their work; employees will experience emotional exhaustion, which makes them feel excessively tired and stressed. This results in the employee intending to leave the job. This research is supported by previous research conducted by Alyahya Piccoli (2022) and Tayfur et al. (2013). Furthermore, Ghosh et al. (2013) research shows organizational factors such as position and remuneration, where employees who have completed tasks do not receive appropriate rewards.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Increased job demands for employees. These triggers call center employees to have a high attachment to their work, where employees cannot regulate their work activities and personal activities; employees also feel the existence of distributive injustice when carrying out their work, where employees feel unfair regarding the provision of compensation, rewards, and workload so that Employees experiencing emotional exhaustion tend to feel often excessively tired, stressed and worried about continuity in work and may think about wanting a turnover intention from the company. All hypotheses tested were supported.

5.2 Recommendations

It is hoped that future researchers will not only research companies operating in the telecommunications sector but can apply it to companies in other fields. In future research, we hope to increase the number of other variables outside the variables used in this research. Such as perceived external prestige and deviant workplace behavior (Emilisa et al., 2018).

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CHAPTER 2

Perceived Organizational Support & Authentic Leadership Effect on Organizational Commitment: Mediating Role of Job Satisfaction

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ABSTRACT

The purpose of this study was to analyse the impact of Perceived Organizational Support, Authentic Leadership on Organizational Commitment mediated by Job Satisfaction. This research was conducted using 150 FMCG employees in South Jakarta. Hypothesis testing uses the Structural Equation Model analysis tool and the sampling method uses purposive sampling.

The results of hypothesis testing in this study show that there is an influence of Perceived Organizational Support on Job Satisfaction, there is an effect of Authentic Leadership on Job Satisfaction, there is an effect of Job Satisfaction on Organizational Commitment, there is no effect of Perceived Organizational Support on Organizational Commitment, there is an effect of Authentic Leadership on Organizational Commitment, there is an influence of Perceived Organizational Support on Organizational Commitment mediated by Job Satisfaction and there is an effect of Authentic Leadership on Organizational Commitment mediated by Job Satisfaction. The implication for managers are that they can provide attention to their employees by providing good support and authentic leadership as well as motivating and guiding employees to feel satisfied at work which will improve employees performance so that they are more committed to the company.

Keywords: *Perceived Organizational Support, Authentic Leadership, Job Satisfaction, Organizational Commitment*

1. INTRODUCTION

The COVID-19 pandemic is a global health issue that has impacted various fields, including the economy and business, which are the foundation of people's lives. During the COVID-19 pandemic, companies experienced significant changes following business dynamics and market developments (Mas' udi and Winanti, 2020). With the COVID-19 pandemic currently hitting the world, especially in Indonesia, companies must pay attention to their human resources to maintain business continuity. Without human resources, a company cannot carry out all its organizational functions and achieve the expected targets or objectives (Jehanzeb and Mohanty, 2020).

One indicator of a company's superiority over others is having committed human resources (Chai et al., 2020). Committed forces such as Organizational Commitment provide the basis for the Company's growth. Organizational Commitment reflects the employee's positive relationship with the company. For this reason, employees with high Organizational Commitment will do their best and be responsible for the company's development. Committed employees will work optimally, devoting their attention, thoughts, energy, and time to their work, ensuring they do what the company expects (Hadian, 2017).

Employee Organizational Commitment is not only limited to the "organization-employee" relationship but is also influenced by employee Job Satisfaction (Kim et al., 2017). Organizational Commitment is closely related to Job Satisfaction. If employees feel satisfied with their work, this will lead to employee loyalty and company success (Lari Dashtbayaz et al., 2022).

Job Satisfaction is essential not only for employees but also for companies. This is because individuals with high Job Satisfaction will work more enthusiastically and efficiently in achieving their company's goals (Çınar et al., 2022).

Organizational support is significant for employees and a critical factor that increases Job Satisfaction and Organizational Commitment (Pattnaik et al., 2020). The relationship between employees and the company is also the main focus of Perceived Organizational Support, which refers to employees' overall beliefs about how much the company cares about their welfare and values their contributions (Baliartati, 2014). Suppose an employee in a company can feel that there is organizational support that is in accordance with the employee's norms, desires, and expectations. In that case, a strong emotional bond will automatically be formed with the organization, which can directly impact Job Satisfaction and Organizational Commitment (Tjandra et al., 2022). Besides the socio-emotional support provided to employees, companies can also implement an appropriate leadership style. Leadership is a crucial instrument of success in all types of organizational activities. Because of this, companies are trying to test and implement new types of leadership, one of which is Authentic Leadership (L et al., 2018). Many studies prove that leadership also influences Organizational Commitment. Leadership is a crucial instrument of success in all types of organizational activities. Because of this, companies are trying to test and implement new types of leadership, one of which is Authentic Leadership (L et al., 2018). Authentic leadership is suitable for building employee commitment because leaders have strong personal values, beliefs, and the integrity and trust of their subordinates (Williams et al., 2021). The perceived authenticity of a leader influences

subordinates to feel more committed to achieving organizational goals and objectives (Rego et al., 2016).

Research conducted by (L et al., 2018) explains that leaders play an important role in employees' lives because leaders provide direction to employees, helping them achieve goals and objectives. The more authentic the leaders are, the higher the job satisfaction, which results in employees' desire to remain committed to the company.

Indonesia's FMCG (fast-moving consumer goods) companies face an increasingly competitive environment. The increasing number of industries operating in the FMCG sector means that companies must improve their performance. This FMCG company generally sells daily necessities such as food, drinks, body/personal care, and home cleaning products. The FMCG business looks very promising because it has a vast target market, and its products are needed by all levels of society in their daily activities. However, there are many players in this business, and they are MNC companies with firm capital and other resources. For this reason, these companies need employees who have skills and are competent to achieve high company performance. Company managers must ensure employees have high job satisfaction and organizational commitment, resulting in optimal company performance.

The results of previous research conducted by To and Huang, (2022) and (Jang et al., 2022) show that Perceived Organizational Support and Authentic Leadership influence Job Satisfaction. In today's increasingly competitive conditions, researchers want to know whether Job Satisfaction can mediate between Perceived Organizational Support and Authentic Leadership on Organizational Commitment. Thus, this research aims to fill the gap in previous literature by investigating the mediating effect of Job Satisfaction on the relationship between Perceived Organizational Support and Authentic Leadership on Organizational Commitment.

2. LITERATURE REVIEW

2.1 Perceived Organizational Support

Perceived Organizational Support is an employee's perception of the organization's support and assistance and concern for providing socio-emotional assistance and welfare for their employees. Perceived Organizational Support is determined by how the company treats each employee and how employees feel this support. Therefore, Perceived Organizational Support can provide positive results for the company and its employees.

As stated (Ziaaddini, 2013), Perceived Organizational Support is specifically based on three factors:

1. Fairness

Employee perceptions of how much the company values fairness are essential components of perceived organizational support.

2. Supervisor Support

Employees develop a general perception of how much their contributions are valued by the company, just as they develop a general perception of how much their supervisors care about their well-being.

3. Organizational Rewards and Job Conditions

Providing appropriate recognition for extra efforts can help employees feel supported at work.

2.2 Authentic Leadership

Authentic Leadership is a leadership style that requires leaders to be transparent. An authentic leader must be consistent between his behavior and his beliefs in showing his thoughts, attitudes, and actions to his subordinates. Authentic Leadership develops from self-awareness, moral perspective, and balanced cognitive processes.

Delić et al., (2017) stated that Authentic Leadership consists of four components: self-awareness, relational transparency, balanced processing, and internalized moral perspective.

1. Self-awareness relates to how well a leader knows himself, such as values, identification, goals, strengths, and emotions.
2. Relational transparency is related to showing one's identity to other people.
3. Balanced processing involves objective analysis of all relevant data and accepting all options when making decisions.
4. Internalized moral perspective The internalized moral perspective concerns how moral standards and values consistently guide a leader.

2.3 Job Satisfaction

Job satisfaction is defined as employees' positive feelings about their work and various aspects of it. If employees feel satisfied with their work, this will refer to the extent to which employees like and are free from feeling stressed about their work.

According to Lim and Ling (2012), the factors that influence Job Satisfaction are:

1. Satisfaction with career opportunities
Opportunities for employees to develop their potential within an organization.
2. Nature of work
Efforts made by employees in completing work and events faced within the company.
3. Overall working environment
Relating to the psychological, physical, and social environment in an organization.

2.4 Organizational Commitment

Organizational Commitment is an employee's psychological attachment to the organization. Organizational Commitment reflects passive commitment and the employee's positive relationship with the company.

According to (Ayodele et al., 2020), three factors influence an employee's commitment, namely:

1. Personal characteristics, positions, and variations in the different needs and desires of each employee
2. Job characteristics, such as identity and opportunities to interact with coworkers
3. Work experience, such as the reliability of the organization in the past

Organizational Commitment has three components: affective commitment, normative commitment, and continuance commitment (Ananditha et al., 2023)

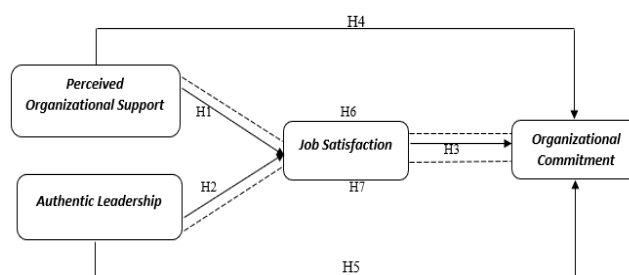
1. Affective commitment is related to emotional ties to the organization.

2. Continuance commitment is when an individual feels they will lose more if they leave their job at the organization.
3. Normative commitment refers to an individual's feelings about remaining in the organization.

2.5 Conceptual Framework

The conceptual framework in this research comes from several theories and previous research. This conceptual framework results from modifications from research conducted by To and Huang (2022) and supported by research conducted by Jang et al., (2022). To and Huang (2022) research examines the influence of Perceived Organizational Support and Job Satisfaction on Organizational Commitment. This research shows that organizational commitment is significantly influenced by perceived organizational support and job satisfaction. This research is also based on previous research conducted by Jang et al., (2022), which examined the influence of Authentic Leadership on Job Satisfaction. The results of this research prove that Authentic Leadership positively influences Job Satisfaction.

From the explanations above, the context framework for this research can be described in Figure 1 as follows:



Source: (To and Huang, 2022) (Jang et al., 2022)

Figure 1
Conceptual Framework

2.6 Hypothesis Development

1. Perceived Organizational Support for Job Satisfaction
(Rhoades & Eisenberger, 2002) examined the relationship between Perceived Organizational Support and Job Satisfaction. The results are that Perceived Organizational Support and Job Satisfaction are related to each other. Bogler dan Nir (2012) explored the influence of Perceived Organizational Support on Job Satisfaction; the results were that Perceived Organizational Support had a direct influence on Job Satisfaction. The direct influence of Perceived Organizational Support on Job Satisfaction is empirically supported by Maan et al. (2020). Thus, this research proposes a hypothesis that:
H1: Perceived Organizational Support influences Job Satisfaction
2. Authentic Leadership towards Job Satisfaction.
Previous research shows that Authentic Leadership increases employee Job Satisfaction (Walumbwa et al., 2011). Authentic leaders foster open and transparent relationships with followers (Černe et al., 2013), which increases employees' feelings of security in their

relationship with the leader (Rahimnia and Sharifirad, 2015). This Authentic Leadership characteristic contributes to increasing Job Satisfaction. Consistent with previous findings, the following hypothesis is proposed:

H2: Authentic Leadership Influences Job Satisfaction

3. Job Satisfaction on Organizational Commitment

Several studies show that Job Satisfaction positively influences Organizational Commitment in non-academic contexts, such as telephone call centers, MSMEs, manufacturing companies, civil aviation, the IT sector, and insurance companies (Ashraf, 2020). In academic institutions, overall performance is determined by a teacher's behavior and attitudes, which must be fostered to increase a teacher's job satisfaction and commitment (Bashir dan Gani, 2019). Ashraf (2020) emphasized that positive Job Satisfaction can increase Organizational Commitment. A positive and productive university environment leads to adequate Job Satisfaction for employees (Anari, 2012), encouraging their Organizational Commitment and increasing university output (Sabir et al., 2011). Thus, the following hypothesis can be formulated:

H3: Job Satisfaction influences Organizational Commitment.

4. Perceived Organizational Support for Organizational Commitment

Organizational support theory describes employees' emotional attachment to their organization. When employees believe that they have good support from the organization, they feel responsible for reciprocating, in some way, to their organization (Claudia, 2018). The findings of (Joiner and Bakalis, 2006) and (Panaccio and Vandenberghe, 2009) reported that Perceived Organizational Support positively affected Organizational Commitment in Western culture. So, the following hypothesis can be formulated:

H4: Perceived Organizational Support influences Organizational Commitment.

5. Authentic Leadership towards Organizational Commitment

Employees develop a solid attachment to the organization through transparent relationships with authentic leaders (Hlongwane and Olivier, 2017). Previous research shows that Authentic leadership positively impacts Organizational Commitment (Roncesvalles and Gaerlan, 2021). Then, the following hypothesis can be proposed:

H5: Authentic Leadership influences Organizational Commitment.

6. Job Satisfaction Mediates the Effect of Perceived Organizational Support and Organizational Commitment

The research conducted (Kara and Yücekaya, 2021) states that the mediating role of Job Satisfaction in the influence of Perceived Organizational Support on Organizational Commitment has a full mediating role in this relationship. Consider studies that examine the relationship between Perceived Organizational Support and Organizational Commitment to determine the mediating role of Job Satisfaction. So, the hypothesis formed is as follows:

H6: The mediating role of Job Satisfaction influences Perceived Organizational Support and Organizational Commitment.

7. Job Satisfaction Mediates the Effect of Authentic Leadership and Organizational Commitment.

As previously stated, Authentic Leadership impacts Job Satisfaction, and Job Satisfaction directly impacts Organizational Commitment (Iqbal et al., 2020). More satisfied employees

are more willing to stay with the organization, positively impacting Organizational Commitment (L et al., 2018). Furthermore, research (Iqbal et al., 2020) found a significant influence of Authentic Leadership on Organizational Commitment, which Job Satisfaction mediated. So, a hypothesis can be formulated that:

H7: The mediating role of Job Satisfaction influences Authentic Leadership and Organizational Commitment.

3. RESEARCH METHOD

The design used in this research uses quantitative descriptive, namely a method for creating an objective picture of a situation using numbers. Next, data analysis uses hypothesis testing, namely testing the relationship between variables, especially whether there are differences between two or more groups in the summary of variables (Sekaran and Bougie, 2017). Then, the research setting in this study uses non-contrived, namely direct field studies.

Data collection in this research used primary data with survey research by distributing questionnaires via a Google form link as a data collection tool. The time horizon of this study uses cross-sectional data. The unit of analysis used is the individual, where the object studied is Fast Moving Consumer Goods (FMCG) employees.

This research uses independent, intervening, and attachment variables: Perceived Organizational Support and Authentic Leadership as independent variables, Job Satisfaction as a moderating variable, and Organizational Commitment as a dependent variable.

The Perceived Organizational Support variable was measured using a questionnaire adapted from (Wayne et al., 1997) containing 5 statement items. These items are:

1. Management cares about my general satisfaction at work.
2. Management takes my goals and values very seriously
3. Management cares about my opinion.
4. Management is proud of my achievements at work.
5. Help is available from management when I have problems.

Authentic Leadership is measured by a questionnaire using 16 statement items developed by Neider dan Schriesheim (2011). These items are:

1. My leader asks for feedback to improve his relationships with others.
2. My leader describes his abilities to others accurately.
3. My leader shows that he understands his strengths and weaknesses.
4. My leader is aware of his influence on others.
5. My leader clearly states what he means.
6. My leader admits mistakes when they make them.
7. My leader openly shares information with others.
8. My leader expresses his ideas and thoughts clearly to others.
9. My leader shows consistency between his beliefs and actions.
10. My leader uses his beliefs to make decisions.
11. My leader resists pressure to do things that are contrary to his beliefs.
12. Moral standards guide my leader's actions.
13. My leader asks for challenging ideas.

14. My leader carefully listens to other perspectives before concluding.
15. My leader objectively analyzes before making decisions.
16. My leader encourages others to voice different points of view.

The Job Satisfaction variable was measured by a questionnaire using 3 statement items developed by (Peterson et al., 2011). These items are:

1. Overall, I am satisfied with my job.
2. Overall, I do not like my job.
3. Overall, I like working here.

Organizational Commitment as the dependent variable in this study was measured using a questionnaire adapted from (Allen and Meyer, 1996) using 6 statement items. These items are:

1. I feel that organizational problems are my problems.
2. For me, the organization has much personal meaning.
3. I have a strong sense of belonging to my organization.
4. I feel like a 'part of the family' in my organization.
5. I believe that a person should be loyal to his organization.
6. I feel indebted to the organization because of what it has done for me.

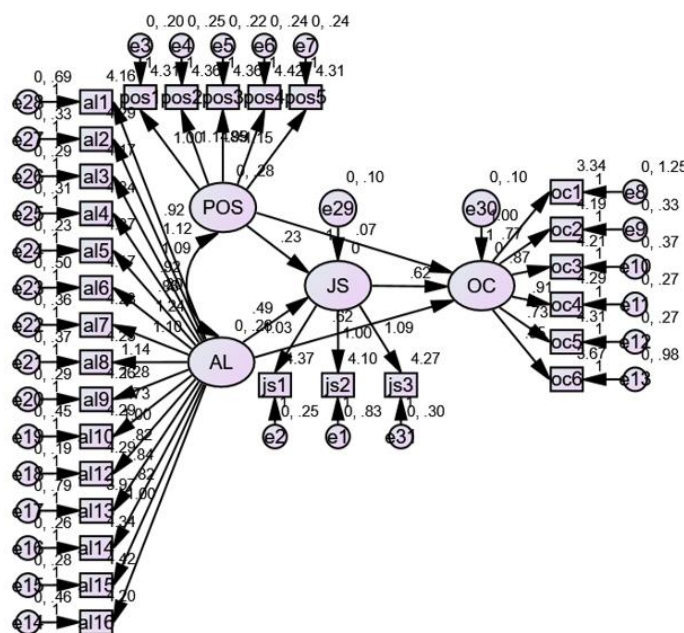
The variables measured are based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree)

Data related to the problem to be studied is needed to carry out research. Data sources were also obtained from questionnaires and literature studies. The sample collection technique used is Nonprobability Sampling, a purposive sampling procedure. The sample studied was 150 employees at Fast Moving Consumer Goods (FMCG) with the minimum criteria of working for the last year. Instrument Tests ensure that the measuring tools used in this research are consistent and accurate.

In this research, the analysis method used is Structural Equation Modeling (SEM) with the help of AMOS 22 software.

4. RESULT AND DISCUSSION

The results of the hypothesis analysis from this research can be seen in the image below which is the result of analysis using Amos processing.



Source: AMOS 22 Output Result

Figure 2
Structural Equation Mode

The first hypothesis tests the influence of Perceived Organizational Support on Job Satisfaction. The results of the hypothesis are as follows:

Table 1. Hypothesis Testing Results 1

Hypothesis	Estimate	p-value	Decision
Perceived Organizational Support has a positive effect on Job Satisfaction	0.231	0.048	H1 Supported

Based on the hypothesis test results in the table above, this hypothesis has an estimated value of 0.231 with a p-value of $0.048 < 0.05$, which means the hypothesis is supported (H_a is accepted). The results of testing the first hypothesis support the previous research by Wai Ming To dan Guihai Huang (2022). This research explains that there is a positive and significant influence between Perceived Organizational Support and Job Satisfaction. This shows that FMCG employees have good welfare and job satisfaction because the company has met the socioemotional needs of employees and implemented support to appreciate the contribution and performance of its employees.

The second hypothesis tests the effect of Authentic Leadership on Job Satisfaction. The results of the hypothesis are as follows:

Table 2. Hypothesis Testing Results 2

Hypothesis	Estimate	p-value	Decision
Authentic Leadership has a positive effect on Job Satisfaction	0.485	0.002	H2 Supported

Based on the hypothesis test results in the table above, this hypothesis has an estimated value of 0.485 with a p-value of $0.002 < 0.05$, which means the hypothesis is supported (H_a is accepted). The results of testing the second hypothesis support previous research conducted by (Jang et al., 2022) and (Iqbal et al., 2020), which stated that there is a positive and significant influence between Authentic Leadership and Job Satisfaction. This shows that the company has authentic leaders in line with their beliefs, thoughts, and behavior, which are based on ethics and morals and lead with honesty. Employee job satisfaction will increase because authentic leaders foster a positive organizational climate that is moral and communicative and supports employees from the lowest level.

The third hypothesis tests the effect of Job Satisfaction on Organizational Commitment. The results of the hypothesis are as follows:

Table 3. Hypothesis Testing Results 3

Hypothesis	Estimate	p-value	Decision
Job Satisfaction has a positive effect on Organizational Commitment	0.622	0.004	H3 Supported

Based on the hypothesis test results in the table above, this hypothesis has an estimated value of 0.622 with a p-value of $0.004 < 0.05$, which means the hypothesis is supported (H_a is accepted). The results of testing the third hypothesis support the results of previous research conducted in 2020) (Bashir and Gani, 2020), (Anari, 2012), and (Sami and Sabri, 2011), which stated that there is a positive and significant influence between Job Satisfaction on Organizational Commitment. This shows that a positive and productive company environment leads to adequate job satisfaction (Job Satisfaction) for employees, encouraging their Organizational Commitment.

The fourth hypothesis tests the influence of Perceived Organizational Support on Organizational Commitment. The results of the hypothesis are as follows:

Table 4. Hypothesis Testing Results 4

Hypothesis	Estimate	p-value	Decision
There is a positive influence of Perceived Organizational Support on Organizational Commitment	0.069	0.321	H4 Not supported

Based on the hypothesis test results in the table above, this hypothesis has an estimated value of 0.069 with a p-value of $0.321 > 0.05$, which means the hypothesis is not supported (H_a is rejected). Thus, the results of this study do not support several previous studies conducted by Kara and Yücekaya, (2021), Claudia, (2018), and To and Huang, (2022), which concluded that Perceived Organizational Support has a positive and significant influence on Organizational Commitment. This shows that other factors influence employee commitment. This can be in the form of less cooperative co-workers, lack of compensation provided by the company, or company policies that can negatively affect employees physically and emotionally so that employees are less motivated, which impacts their commitment to the company.

The fifth hypothesis tests the influence of Authentic Leadership on Organizational Commitment. The results of the hypothesis are as follows:

Table 5. Hypothesis Testing Results 5

Hypothesis	Estimate	p-value	Decision
There is a positive influence of Authentic Leadership on Organizational Commitment	0.616	0.001	H5 Supported

Based on the hypothesis test results in the table above, this hypothesis has an estimated value of 0.616 with a p-value of $0.001 < 0.05$, which means the hypothesis is supported (H_a is accepted). Thus, the results of testing the fifth hypothesis support the results of previous research conducted by (Rego et al., 2016), (Gatling et al., 2016), (Roncesvalles and Gaerlan, 2021), and (Joo and Jo, 2017), which state that there is a positive and significant influence between Authentic Leadership on Organizational Commitment. This is because authentic leaders display openness in accepting other people's views. Therefore, employees develop a solid attachment to the company through transparent relationships with their leaders. This relationship will maintain employee Organizational Commitment.

The sixth hypothesis tests the influence of Perceived Organizational Support on Organizational Commitment, which Job Satisfaction mediates. The results of the hypothesis are as follows:

Table 6. Hypothesis Testing Results 6

Model	Estimate	p-value	Decision
Model1			
There is an influence of Perceived Organizational Support on Organizational Commitment	0.797	0.000	Condition (c) is met (Sig.)
Model 2			
There is an influence of Perceived Organizational Support on Job Satisfaction	0.526	0.000	Condition (a) is met (Sig.)

There is an influence of Job Satisfaction on Organizational Commitment	0.857	0.000	Condition (b) is met (Sig.)
There is an influence of Perceived Organizational Support on Organizational Commitment	0.328	0.013	Condition (c) is met (becomes Sig/not Sig)

From this table, it can be seen that in model one, there is an influence of Perceived Organizational Support on Organizational Commitment (p-value = 0.000), and it remains significant in model two (p-value = 0.013; fulfills condition c (meaning there is mediation)). Then, the condition is that Perceived Organizational Support influences Job Satisfaction (p-value = 0.000; condition a is met). Meanwhile, the last condition that there is an influence of Job Satisfaction on Organizational Commitment (p-value = 0.000; condition b is met) is fulfilled in model two. Thus, the results of testing the sixth hypothesis support the results of previous research conducted by (Galletta et al., 2016) and (Kara and Yücekaya, 2021), which stated that Perceived Organizational Support has a positive and significant effect on Organizational Commitment, which Job Satisfaction mediates. This shows that support from the company is critical to increase employee job satisfaction and commitment. If the company pays attention to working conditions and fairness and cares about the welfare of employees, then employees will naturally have a strong emotional bond with the company, which can directly impact Job Satisfaction and Organizational Commitment. These results also indicate the role of Job Satisfaction as a mediating variable and show that Perceived Organizational Support indirectly affects Organizational Commitment.

The seventh hypothesis tests the effect of Authentic Leadership on Organizational Commitment, which Job Satisfaction mediates. The results of the hypothesis are as follows:

Table 7. Hypothesis Testing Results 7

Model	Estimate	p-value	Decision
Model1			
There is an influence of Authentic Leadership on Organizational Commitment	1.096	0.000	Condition (c) is met (Sig.)
Model 2			
There is an influence of Authentic Leadership on Job Satisfaction	0.666	0.000	Condition (a) is met (Sig.)
There is an influence of Job Satisfaction on Organizational Commitment	0.675	0.001	Condition (b) is met (Sig.)
There is an influence of Authentic Leadership on Organizational Commitment	0.627	0.000	Condition (c) is met (becomes Sig/not Sig)

From this table, it can be seen that in model one, there is an influence of Authentic Leadership on Organizational Commitment (p-value = 0.000), and it remains significant in model two (p-value = 0.000; fulfills condition c (meaning there is mediation)). Then, the condition is that Authentic Leadership influences Job Satisfaction (p-value = 0.000; condition a is met). Meanwhile, the last condition that there is an influence of Job Satisfaction on Organizational Commitment (p-value = 0.001; condition b is met) is fulfilled in model two. Thus, the results of testing the seventh hypothesis support the results of previous research conducted by (L et al., 2018), (Semedo et al., 2017), (Aydogdu and Aşıkil, 2011), and (Iqbal et al., 2020), which states that there is a positive and significant influence between Authentic Leadership on Organizational Commitment which Job Satisfaction mediates. This shows that the influence provided by Authentic Leadership produces positive consequences for employee job satisfaction and organizational commitment. Authentic leaders can shape employees' positive mindset, thereby increasing employees' sense of belonging to the company.

5. CONCLUSION AND RECOMMENDATIONS

This research is to determine the influence of Perceived Organizational Support and Authentic Leadership on Organizational Commitment mediated by Job Satisfaction in Fast Moving Consumer Goods (FMCG) employees.

This research indicates that job satisfaction acts as a moderating variable between perceived organizational support and authentic leadership on organizational commitment. One hypothesis is not supported. Namely, perceived organizational support does not affect organizational commitment. This shows that the role of job satisfaction as a mediating variable between perceived organizational support and organizational commitment is very significant. So, it can be concluded that perceived organizational support indirectly affects organizational commitment.

Future research can add research variables related to employee commitment, such as Job Equity and Pay Equity, as control variables research suggested by Wai Ming To dan Guihai Huang (2022).

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CHAPTER 3

Mastering The World Of Artificial Intelligence: Strategies In The Beauty Industry

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ABSTRACT

In the current beauty industry, global cosmetic brands are not exempt from the implications of modern technology in their business operations. One of the technologies currently favored by the public is the use of the Virtual Try-On application for cosmetic products. The Virtual Try-On application for cosmetic products is a part of an artificial intelligence system that applies Augmented Reality technology by merging the real world with the visual world. Technological innovations, such as the use of artificial intelligence in the beauty industry, can be considered as an added value in facing business competition in the beauty sector and can also be seen as a strategy to win market competition. In this modern era, where all services are conducted digitally, individuals can perform all their activities effectively and efficiently.

Facing the challenges of the world, Augmented Reality technology applied to the Virtual Try-On application for cosmetic products proved to be very helpful during the Covid-19 pandemic a few years ago. With this technology, cosmetic product consumers can easily determine the cosmetic products they want to buy according to their needs and preferences without the need to visit offline stores of the cosmetic products. This research aims to explore the influence of Virtual Try-On (VTO) features on users' perceptions and behaviors towards global cosmetic brands. In this study, adopts the TAM (Technology Acceptance Model) theory, which explains and predicts the acceptance and adoption of new technology by service users. Therefore, the findings from this research are expected to provide a better understanding of how Virtual Try-On features can affect beauty preferences and consumer purchasing behavior, especially in the context of the rapidly growing cosmetic industry.

Keywords: TAM Theory, Artificial Intelligence, Beauty Industry, Augmented Reality

1. INTRODUCTION

Artificial Intelligence (AI) refers to the field of computer science that aims to create systems that can perform tasks that require human intelligence. Although definitions of AI vary, at its core AI is concerned with the development of theories, methods, techniques, and applications to simulate, enhance, and extend human intelligence (Fetzer, 1990). AI includes techniques such as machine learning, neural networks, natural language processing, and computer vision to create systems that can learn, plan, solve problems, and interact with their environment. AI is used in a wide range of applications including speech recognition, image processing, natural language processing, intelligent robots, driverless cars, energy systems, healthcare, and many more. Therefore, AI is an ever-evolving field that has a significant impact on various aspects of human life.

Artificial Intelligence (AI) has become a big trend in the marketing world in recent years. AI allows businesses to collect, analyze, and process data more efficiently and accurately, thereby gaining better insights into consumer behavior and business preferences (Lin and Yu, 2023). Chatbots are an example of the use of AI in marketing. Chatbots help businesses provide better and more efficient customer service and increase engagement with consumers. They can also be used to answer consumer questions, recommend products, and complete transactions.

In addition, AI can also be used to personalize content and consumer experiences. Using the data collected, businesses can create more relevant and engaging content for consumers and provide a more personalized and unique experience. Apart from chatbots and content personalization, AI can also be used to analyze data, predict consumer behavior, and optimize marketing campaigns. Using machine learning technology and intelligent algorithms, companies can recognize consumer behavior patterns and predict future preferences, allowing them to optimize marketing campaigns and increase their effectiveness (Caldarini et al., 2022).

Overall, the development of AI in marketing offers enormous opportunities for companies to improve efficiency, effectiveness, and personalization in their interactions with consumers. However, companies must also pay attention to ethics and data protection when using consumer data, and ensure that AI technologies are used wisely and responsibly (Na et al., 2022; Chenxing, 2023).

This paper provides valuable insights into trends in the use of AI technologies in marketing contexts, particularly in the beauty industry. Key findings include advances in AI technology, consumer perceptions of AI, and the effectiveness of AI in various marketing contexts. In addition, this article also identifies applications of AI in the beauty industry that are currently growing rapidly and trending.

This research therefore provides a deeper understanding of how AI can positively contribute to marketing, particularly in the context of the beauty industry, and informs the evolution of the use of AI in marketing post-COVID-19. Application of case studies and best practices. In addition, this article also highlights the challenges and future of AI in the beauty industry.

Therefore, this research provides valuable insights for marketers and researchers in understanding the role and potential of AI in its application in marketing, particularly in the beauty industry.

2. LITERATURE REVIEW

○ TAM Theory and AI

The Technology Acceptance Model (TAM) was developed by Fred Davis in 1989. TAM is an information systems theory that focuses on the perceptions of potential users and models how they come to accept and use technology. TAM is widely used in various fields, including the implementation of artificial intelligence (AI) technologies.

The Technology Acceptance Model (TAM) is a widely used theoretical framework to study individuals' acceptance of information systems, including artificial intelligence (AI), in various fields such as e-commerce, telecommunications, and construction. The TAM model consists of several main components:

- Perceived Usefulness (PU): The degree to which an individual believes that using a particular system will improve their job performance or help them achieve their goals.
- Perceived Ease of Use (PEU): The degree to which a person believes a particular system is easy to use.
- Subjective Norm (SN): The degree to which an individual feels that most people in his or her work environment believe in the usefulness of the system.
- Attitude towards use (ATU): The degree to which an individual has a positive or negative attitude towards the use of the system.
- Behavioral usage intention (BI): The degree to which a user is actually inclined to use the system.

The TAM model suggests that these structures are interconnected and can influence each other. For example, perceived usefulness positively influences perceived ease of use, which in turn positively influences attitudes toward use and behavioral intentions when using. This model has been applied in various contexts, such as telemedicine services and AI-based technologies in construction companies (Wang et al., 2023).

However, the TAM model cannot be generalized across different sectors, as the relationships between constructs and variables related to PU, PEU, SN, ATU, and BI may differ depending on the specific situation. It is important to note that. Therefore, when considering AI implementation in different industries, it is important to adapt the TAM model to the specific domain.

The development of TAM can be summarized as follows (Davis, 1989; Venkatesh and Davis, 2000; Venkatesh and Bala, 2008; Wang et al., 2023):

TAM 1: The original developed by Fred Davis TAM assumes the following: Two factors determine whether a computer system will be accepted by users: perceived usefulness and perceived ease of use.

TAM 2: An enhanced version of the model was developed to address some of the criticisms and limitations of the original TAM. TAM 2 includes additional factors such as social influence, age, and gender that influence behavioral intentions.

TAM 3: His third version of the model further extends the framework by considering external and social influences. TAM 3 has been applied to different innovations and has demonstrated its applicability in different technological fields.

Despite some methodological issues and limitations in its application, the TAM has been proven to be theoretically robust and to have strong predictive power in assessing technology acceptance. However, this model has been criticized for its simplicity and lack of understanding of the antecedents of technology adoption.

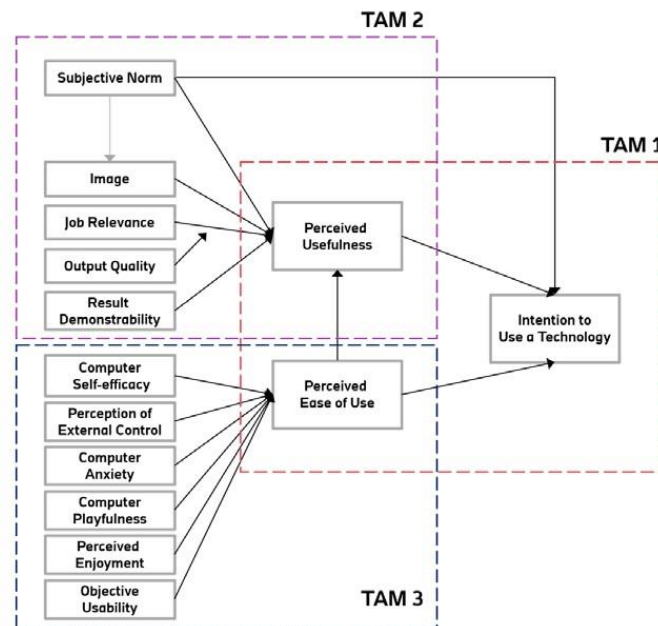


Figure 1: TAM 1, 2 & 3 - Simplified omitting moderators, Davis (1989) Venkatesh and Davis (2000) Venkatesh & Bala (2008)

TAM theory is widely used in the context of technology acceptance and adoption, such as in the beauty industry and the application of artificial intelligence (AI). In the context of AI and the beauty industry, TAM helps you understand how consumers and beauty industry professionals accept and adopt AI technologies for various purposes, including: Product personalization, skin analysis, or a more interactive user experience (Na et al., 2022; Chenxing, 2023).

The main concepts of TAM related to the application of AI in the beauty industry are:

1. **Perceived Benefits:** Consumers and beauty industry professionals are more likely to accept AI technology if they believe it provides significant benefits such as: Better product personalization, more accurate skin analysis, or a better and more satisfying user experience.
2. **Perceived ease of use:** The perceived ease of use of an AI technology also affects its acceptance. If AI technologies in the beauty industry are easy to use and access, they are more likely to be adopted by consumers and professionals. The application of TAM in the context of AI and the beauty industry can help researchers and practitioners understand the factors that influence the adoption of AI technologies in the beauty industry and develop appropriate strategies to increase the adoption of these technologies.

○ **AI and the Beauty Industry**

Artificial intelligence (AI) can be used in various ways in the beauty industry. Examples of AI applications in the beauty industry include:

1. **Product Personalization:** Using AI to analyze consumer data and recommend beauty products that match individual preferences, skin types, and needs.
2. **Virtual trials:** Using AI technology, beauty apps can provide a virtual trial experience for products such as lipsticks, eye shadows and other makeup products, allowing consumers to see how the product looks on their eyes.
3. **Skin analysis:** AI allows you to analyze your skin condition and make appropriate care recommendations based on the analysis.
4. **Chatbots and customer service:** AI can be used to develop chatbots that can automatically provide product information, beauty advice, and customer service. Therefore, AI has great potential to improve consumer experience, product personalization, and operational efficiency in the beauty industry.

The use of AI in marketing through the TAM theory approach involves several elements. Figure 2 proposes a theoretical framework for building relationships between people, technology, and services. These three components are like a triple helix. The synergy concept of trilateral cooperation. The concept aims to promote innovation and development and strengthen the relationship between the three organizations. This concept has been applied in various fields, including the development of AI in marketing, particularly in the beauty industry. The use of AI in technology-based marketing differs from the theoretical framework of Aparicio et al. (2016). This framework consists of several components related to technology-based learning and educational technology. These components include:

1. **Characteristics of Marketing Technology:** Here are aspects such as interactivity, timing, format, and other technical features that affect the marketing process.
2. **Effectiveness Evaluation:** This component focuses on evaluating the impact of marketing technology on marketing performance, including: Customer loyalty, customer complaint rate, and technology adoption.
3. **Role/Function of Marketing Technology:** This component examines the various roles and functions of marketing technology. Such as reducing workload, increasing innovation opportunities, providing automated assessment and feedback, and providing information technology support.
4. **Customer characteristics:** This includes consideration of social, cultural, gender and financial factors that may influence interactions with technology and marketing processes.
5. **Marketing Digital Literacy:** This component emphasizes the importance of marketing digital competencies to use technology effectively.
6. **Technology Advancement by Technology Designers:** This component focuses on the role of technological advancements and designer innovation in shaping marketing technology.

The framework also includes specific content and strategies related to the three main elements of a technology-based marketing system: stakeholders, technology, services, and technology-based marketing.

This expanded theoretical framework provides a comprehensive framework for understanding and evaluating the integration of educational technology into classroom practice, and for application to research and practice in the field of technology-enhanced learning.

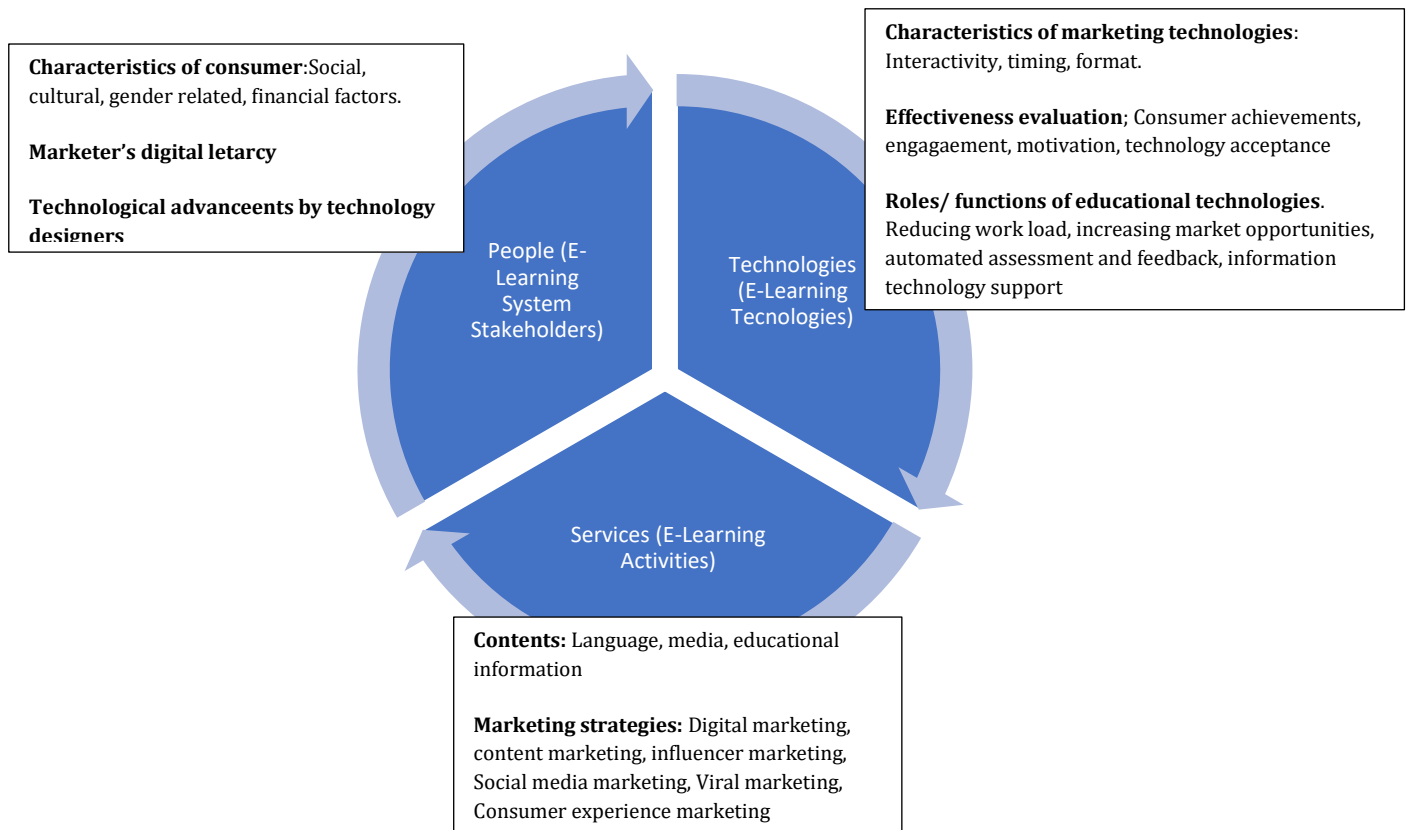


Figure 2: A Proposed Theoretical Framework Of AI in Marketing

3. RESEARCH METHOD

There are several ways to research AI. The most common methods used in market research are:

1. Knowledge-based approach: This approach uses existing knowledge and logical rules to develop AI systems. This method often requires relying on known knowledge to make decisions or perform specific tasks.
2. Data-driven approach: This method uses data as the main basis for developing AI systems. Using techniques such as machine learning (ML) and deep learning (DL), AI systems can learn from existing data to make predictions and decisions.
3. Machine learning (ML) and deep learning (DL) techniques: These techniques use algorithms and mathematical models to learn how to perform specific tasks by learning patterns from existing data. Teach the machine. Deep learning is a field of machine learning that uses neural networks with multiple layers to understand and process data.
4. Application Simulation: This method uses simulations to test and develop AI applications in various contexts, ranging from manufacturing to entertainment.
5. Investigation of AI model characteristics: Includes a detailed analysis of the characteristics of the AI model used, including a sub-block analysis of the deep learning structure.

6. Explainable AI (XAI): The goal of this technique is to make AI systems more understandable to humans, allowing them to better explain and understand the decisions made by AI systems.

All of these methods play an important role in the development and understanding of AI and are often used together to achieve optimal results.

4. Case Studies And Best Practices

- Success stories of beauty companies that have implemented AI.

One company in the beauty sector that has successfully implemented AI technology is cosmetics brand *L'Oreal Paris*. These cosmetics companies successfully implemented virtual try-on technology. We have launched several services related to the application of AI technology. One of the services we offer is Makeup Genius, an application that uses augmented reality (AR) technology to allow you to virtually try on various makeup products. The app allows users to take a photo of their face and virtually try out different *L'Oreal Paris* makeup products, allowing consumers to see how the products look on their face before making a purchase decision. You will be able to see what you see (Putu et al., 2023).

Additionally, *L'Oreal Paris* has also launched the “*Modiface*” app, which allows users to virtually try out *L'Oreal Paris* branded makeup products. The app uses AR and machine learning technology to provide users with a more personalized and interactive experience. “Skin Genius” is also one of the services that *L'Oreal Paris* provides to consumers by applying AI using AR technology. However, what makes Skin Genius' service different from the previous two is that this service focuses on skin care products, such as skin care products, rather than makeup products. Where the service provides the consumer with specific skin care recommendations for his routine (Paris, 2023).

With the virtual try-on feature, users can enjoy a variety of benefits, including a more personalized shopping experience. The virtual try-on feature allows consumers to see how *L'Oreal Paris* beauty products will look on their face before making a purchase decision, and also provides an interactive experience for consumers. An additional benefit is that consumers can easily try out a variety of *L'Oreal Paris* beauty products without having to visit an offline store (HD, 2023). The use of AI technology at *L'Oreal Paris* also allows it to provide the user with recommendations on how to perform specific skin care routines.

On the other hand, the application of AI technology at beauty company *L'Oreal Paris* also has obstacles and challenges in the application of technology. One of the obstacles and challenges they face is application and technology optimization. In some cases, processing or delays in displaying virtual try-on results can be a hindrance if the AI technology used is not optimized. This may reduce consumer interest in using virtual try-on services. Additionally, a challenge for *L'Oreal Paris* is customers' concerns about user privacy, with virtual try-on features necessarily requiring facial scans or collecting personal information from users. For this reason, companies need to be able to ensure the security of their data and provide privacy guarantees to their users. Additionally, an obstacle or challenge that *L'Oreal Paris* is facing is maintaining the AI technology. It has been found that the use of AI technology is not cheap and requires professional operation and maintenance (Paper, 2020).

Using this virtual try-on technology, *L'Oreal Paris* is able to offer its customers an innovative and satisfying shopping experience while maintaining high product and service quality. Additionally, it will help *L'Oreal Paris* strengthen its position in the beauty industry by increasing operational efficiency, improving customer experience, and optimizing marketing and sales strategies. Currently, many beauty company managers and researchers recommend companies in the beauty industry to utilize virtual try-on technology in their business activities (Marinova et al., 2016). Moreover, behind the many benefits and conveniences brought about by the use of AI technology, there are also some disadvantages of using this technology. *L'Oreal Paris* is therefore expected to provide optimal solutions to address any obstacles and challenges posed by the use of AI technology in its products.

- Lessons learned from implementing AI in the beauty industry.

The beauty industry needs new innovations in its services. One example of the latest innovation is the use of AI technology. Virtual try-ons are sought after by consumers around the world in the beauty industry, which seeks to increase sales and boost corporate profits (Esch et al., 2019). This is due to the many benefits and conveniences this technology offers. However, no matter how sophisticated the technology is, it naturally has some drawbacks that can negatively impact businesses and users (De, 2017).

It builds on previous information describing the successful use of AI technology in one of the most famous beauty companies, such as *L'Oreal Paris*. It can be seen that the application of virtual try-on feature can be used by beauty companies as a corporate strategy to attract the attention of consumers. The use of AI technology in the beauty industry can provide new experiences to consumers who want to purchase beauty products (Manis & Choi, 2019). Moreover, the many conveniences and benefits provided by AI technologies are such that consumers can shop effectively and efficiently by making use of his AI technologies, and consumers can utilize these technology services. It can also be used as a reason.

However, when applying AI technology to the beauty business, beauty companies must also pay attention to the challenges and obstacles in applying this technology. One of the biggest challenges is the security of using AI technology or the privacy of user data. (Bonetti, 2018). This depends on how companies can assure consumers that their personal data will not be shared. The reason this challenge is so important is that it affects both company internal stakeholders and external stakeholders, such as consumers themselves. Companies must be able to optimize the use of the AI technology they use so that the technology ensures the security of users' data. If companies cannot provide this safety guarantee, the use of AI technology will certainly be of no interest to consumers and only result in losses for companies.

5. CHALLENGES AND FUTURE OF AI IN THE BEAUTY INDUSTRY

- Barriers faced in adopting AI

The use of AI technology in the beauty industry does not always proceed smoothly. There are several obstacles that can pose challenges for cosmetics companies implementing this technology. According to the study of Thesis (2020), there are several challenges in the application of AI technology. Challenges that may be hindering the application of AI technology include:

1. Introduction to Technology Utilization

This refers to how users react to or accept the application of AI technology. In addition, it is also very important to pay attention to user privacy and security, because if beauty companies do not guarantee privacy and security, it may impede the operation of AI technology and cause consumers to lose trust. In the use of technology. Additionally, acceptance of using technology also relates to the user's self-esteem and user image. This is related to consumer interest in the use of AI technology.

2. Characteristics of technology implementation

When applying AI technology, companies that want to implement this technology must pay attention to industry standards. In this case, companies can focus on standards for AR software used in services in the beauty industry. In addition, beauty companies should also conduct a tool selection process that pays attention to the tool's suitability for the business, licenses and contracts, affordability of the technology, and future opportunities for using AI technology. Additionally, companies need to pay attention not only to software performance, but also to size, software, and tool availability.

3. Lack of skilled labor

Using AI technology in beauty services may require a workforce of experts to operate the technology. This optimizes the technology so that users feel that their needs and wants are met. Therefore, if a company does not have specialized human resources, it will be difficult to implement AI technology into the company's business services. On the one hand, companies can create incentives for employees to receive training and further education related to the use of her AI technology.

4. Digital Infrastructure & Organizational Processes

Beauty companies considering implementing AI technology should pay attention to the structure of their business organization as it relates to internal decision-making processes. Additionally, attention must be paid to creation and compatibility, including the requirements for introducing new technology and the effort required to implement the technology. Additionally, the scalability of the asset creation process must be considered as it relates to cost sources, time priorities, and marketing. Additionally, dependencies on business partners must also be considered. Failure to account for dependencies can lead to cost and copyright issues for businesses.

5. Change in resistance & mindset

This refers to company culture, industry characteristics, and employee mindset. Beauty companies using AI technology need to ensure their employees are forward- thinking and responsive to changing times in order to continue developing technology- based services. Currently, the development of the era is completely modern and all activities are based on digitalization. The hope is that this will enable all aspects of the workforce to keep pace with changing times and help businesses move forward with the use of AI technology.

6. Pressure from the market

This affects the competitors that appear in the market. The emergence of competitors can be a threat to cosmetics companies. The more sophisticated the technology offered and the more

features it offers consumers, the more attractive it may be to consumers to use it. Therefore, beauty companies that utilize AI technology in their services are required to always provide the latest innovations related to AI technology in their services so that consumers can use the service faithfully.

Cosmetic companies that use AI technology for business services may experience the challenges and obstacles listed above. Therefore, companies are expected to have appropriate strategies and solutions in this regard so that the use of AI technology benefits both companies and users.

- Forecasting future trends and the evolution of artificial intelligence in the beauty industry.

In the beauty industry, we are seeing a rapidly increasing trend of using AI in augmented reality systems in the market. This is related to the convenience and efficiency of these technologies. Using AI technology from the beauty industry, such as virtual try-on, we propose products that match the user's needs. For beauty businessmen, this will definitely lead to increased sales. Moreover, this technology allows users to save time and cost and reduce mistakes when purchasing beauty products (Mangtani et al., 2020).

Perfect Corp is one of the technology companies working with leading Indonesian cosmetics brands in leveraging AI technology in the beauty industry. The company explained that the implementation of AI technology in the beauty industry will differ significantly between developing and developed countries due to differences in consumer behavior and culture. Developed countries tend to be proactive in introducing AI technology. This is because the technological infrastructure of developed countries is much superior to that of developing countries. Developing countries tend to be slower to adopt AI technology in the beauty industry (Pramita, 2023).

With easy access to technology and evolving consumer preferences, many beauty companies in developing countries are starting to incorporate AI technology into their business services. This is seen as a form of advancement in technological development in developing countries. Many beauty companies in developing countries that have introduced AI technology say that they can increase the sales performance of their products because AI technology can recommend appropriate products that meet the needs of consumers. Considering that in recent years there has been a coronavirus disease (Covid-19) pandemic and all activities have to be carried out from home. This presents an opportunity for cosmetics companies to further develop the use of AI technology in business services.

In the beauty industry, the market value of AI technology use is expected to reach \$27.7 billion by 2021 and is expected to increase five times by 2030. This corresponds to an average annual growth of 19.7%. The forecast is expected to focus on the application of AI technology to recommend products and services more specific to the needs of individual consumers. Additionally, technology companies that provide AI services to technology companies can offer innovations such as a service that analyzes a beauty company's consumer's skin characteristics just by taking a selfie and suggests which cosmetics and skin care products are appropriate. It is expected. Suitable for facial skin needs (Gian, 2022).

The use of AI technology is said to have many benefits for businesses and consumers as it is believed to be more time and cost efficient. Due to the various benefits that AI technology brings to the beauty industry, it can be predicted that the role of AI technology will increase in various aspects of business activities in the beauty sector, such as marketing strategies, production processes, and beauty product development (Sandra et al., 2023).

6. NEXT FUTURE RESEARCH

Here are some suggestions for future research on artificial intelligence (AI): First, develop more efficient AI algorithms and models: Research can improve system performance and increase AI reliability. To improve this, we can focus on developing more efficient and reliable AI algorithms and models. Second, the application of AI in broader sectors: Research can focus on applying AI in broader sectors such as agriculture, manufacturing, and energy to improve efficiency and productivity. Third, AI ethics and safety research: could focus on developing a clear ethics and safety framework to responsibly manage AI development and deployment. 4th: Advanced Artificial Intelligence Development: Research could focus on the development of advanced artificial intelligence and consider the social and economic implications of the possible achievement of artificial intelligence that exceeds human intelligence. Conclusion: Application of AI in Education: Research could focus on the application of AI in education to improve learning efficiency and provide a more personalized and adaptive learning experience. Taking these suggestions into account, future research can help develop AI that is more effective, efficient, and responsible, thereby increasing its usefulness to society as a whole.

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CHAPTER 4

Halal Economy and Its Beyond: A Systematic Literature Review Approach

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ABSTRACT

Halal Economy is a scope in Islamic Economics that consists of halal in the fields of tourism, culinary, supply chain, administration, finance, regulations, and so on. Its development to date has become a special concern for academics as evidenced by the emergence of many studies related to the Halal Economy. Therefore, this study wants to comprehensively map the extent of the development of existing studies related to the Halal Economy to date. This study uses a Systematic Literature Review (SLR) approach with bibliometric analysis techniques as further analysis. The data in this study uses several inclusion criteria such as: Scopus database, keywords, and time period 2013-2023. Data search was carried out using the Publish or Perish (PoP) software. The results at the screening stage found 128 eligible articles which will be analyzed further. The study results generally show that the development of studies mapped in the Halal Economy context refers to studies on Halal Tourism, Halal Industry, Halal Food, Halal Supply Chain, and Halal Certification. It was also found to be related to the keyword economic growth between the years 2022-2023. This indirectly means that the relationship between the Halal Economy and economic growth is starting to be linked to the development of current studies. Another finding, related to the development of studies in Indonesia, is that the keywords most frequently found are related to Halal Tourism, Halal Certification, Halal Culinary, Halal Industry, and Sharia Compliance.

Keywords: Halal economy, Economic growth, SLR

1. INTRODUCTION

The Halal Economy, a key component of Islamic Economics, plays a significant role in various sectors, including tourism, culinary, supply chain, administration, finance and regulations (Elasrag, 2016). In Indonesia, the integration of the Halal Economy with Islamic finance is a priority, with a focus on strengthening regulations, building institutions, and enhancing human resources (Amalia & Hidayah, 2020). Simultaneously, the nation places significant emphasis on the development of Halal food as a cornerstone of the Halal Economy (Dewi et al., 2023; Rachman, 2019), recognizing its pivotal role in aligning economic practices with Islamic principles (Tahir & Muslih, 2023). Halal tourism, a growing trend, is seen as a potential driver of economic development (Putri & Wakhid, 2023). The growth of Halal cosmetics in Indonesia has been noteworthy, driven by increased demand and regulatory support, as reflected in studies such as those by (Widiastuti, et al., (2023). The establishment and enlargement of the Halal value chain ecosystem in Indonesia are also crucial, requiring the collaborative involvement of various stakeholders, including the community, as highlighted by Eka Destyana & Setyowati, (2022). Additionally, the development of the Halal Industry in Indonesia is perceived as a strategy to fortify the Sharia Economy, as indicated by Yazid et al., (2020). As a result, the Halal Economy emerges as a dynamic force, contributing to the ongoing transformation of global economic paradigms.

The development of the Halal Economy extends across Southeast Asia, with countries such as Malaysia, Singapore, and Thailand actively fostering their Halal industries. In Malaysia, initiatives like the Halal Industry Development Corporation (HDC) underscore the government's commitment to promoting Halal finance, food, and tourism (HDC, 2021). Singapore, despite not being predominantly Muslim nations, positions itself as a global Halal trade hub, prioritizing adherence to international Halal standards (Islamic Religious Council of Singapore, 2021). Thailand has also made strides, implementing regulations and certification processes to boost its Halal food production and export (Trade and Investment Promotion, Thailand Halal Assembly, 2021).

Beyond Southeast Asia, major Islamic countries like Saudi Arabia, the UAE, and Turkey are actively developing their Halal economies. Saudi Arabia's endeavor program emphasizes Halal industry diversification (Saudi Arabian General Investment Authority, 2021). Dubai, UAE, serves as a Halal trade hub, while Turkey focuses on Halal tourism and food sectors (Dubai Islamic Economy Development Centre, 2021; The Presidency of the Republic of Turkey, 2021). These efforts collectively highlight the global momentum and diverse strategies in advancing the Halal Economy across different nations.

The dynamic evolution of the Halal industry, particularly prominent in Southeast Asia and major Islamic nations, has captivated scholarly attention, resulting in a notable influx of research articles. The global Halal Economy has become a focal point for researchers seeking to understand its multifaceted dimensions and implications. The interplay between Islamic principles and economic activities, particularly in the fields of tourism, industry, food, supply chain, and certification, has sparked a growing body of literature. Scholars have embarked on

a journey to comprehensively explore and map the existing research landscape to better grasp the development and implications of the Halal Economy.

In this context, our study aims to contribute to this burgeoning field by conducting a Systematic Literature Review (SLR), by employing specific inclusion criteria, such as the Scopus database, relevant keywords, and a time frame from 2013 to 2023. This exploration is crucial for understanding the evolving dynamics, identifying key thematic areas, and discerning the relationship between the Halal Economy and broader economic growth. As we delve into this systematic analysis, our objective is to shed light on the interconnectedness of the Halal Economy and its implications for economic development, both globally and with a specific focus on regional dynamics such as those observed in Indonesia. Through this endeavor, we seek to contribute valuable insights to the ongoing discourse surrounding the Halal Economy and its role in shaping contemporary economic paradigms.

Following this introduction, the subsequent sections will delve into a detailed review of the halal economy, halal industry, halal ecosystem, and the specific context of halal practices in Indonesia.. Scholarly research on these topics will be scrutinized, utilizing the aforementioned methodologies to glean insights into the current discourse, identify gaps, and explore potential areas for future exploration. In conclusion, this paper seeks to provide a comprehensive overview of the development of the halal economy and its beyond, drawing attention to its varied dynamics across different regions and countries.

2. LITERATURE REVIEW

The essence of the Halal economy lies in the production and provision of goods and services that align with Islamic principles, strictly adhering to the tenets of Sharia or Islamic law, as influenced by the distinctive lifestyle and business practices of Muslim consumers (Laila et al., 2021). Rooted in Islamic principles, the concept is synonymous with adherence to Sharia, the Islamic legal framework. The term "Halal" itself translates to "permissible" in Arabic and is often associated with food and beverages (Hudaefi & Jaswir, 2019).

However, the Halal economy extends beyond the realm of food, encompassing various sectors such as cosmetics, pharmaceuticals, finance, and more. According to Salaad (2023), the concept of the "Halal economy" extends far beyond its conventional association with permissible foods. In a broader thematic and conceptual view, "Halal" encompasses ethical considerations across various dimensions. It incorporates the ethics of business transactions, addresses human rights, security concerns, and emphasizes the intricate interactions between humans and the natural world. This diversification reflects the holistic nature of Islamic principles, addressing various aspects of daily life.

The term of 'Halal Economy' gained prominence and began to see increasing use after its introduction in 2011 at the World Halal Forum in Kuala Lumpur. Since then, it has become widely adopted and applied to diverse economic sectors. The recognition and utilization of the concept have expanded as it transcends its traditional link to permissible foods. It has evolved

into a comprehensive framework that seamlessly integrates Halal economic activities with principles derived from Islamic law (Masood, A., & Rahim, 2019).

The Halal industry stands as a multifaceted economic sector, encompassing a myriad of industries united by the shared objective of producing goods and services in accordance with Islamic principles, as highlighted by Abdul Rahim et al., (2022). This expansive sector transcends traditional boundaries, incorporating diverse domains like food, beverages, pharmaceuticals, tourism, transportation, logistics, and even financial systems, including banking, as elucidated by Utomo et al., (2020). The integration of various stakeholders, spanning from business owners and users to governmental bodies, financial institutions, and producers, is emphasized by Utomo et al., (2020), underscoring the need for a comprehensive approach to meet the demands of the Muslim community. Thus, the Halal industry's complexity requires the seamless collaboration and integration of these stakeholders to not only fulfill market demands but also to add substantial value to the Muslim community.

Experiencing remarkable global expansion, the Halal industry has evolved into a substantial global business, boasting a staggering global valuation of USD 2.1 trillion and catering to 1.8 billion consumers, as mentioned Darmawati et al., (2023) and Nor et al., (2023). Driven by growing Muslim population, increasing purchasing power, and the identification of potential Halal markets in non-Muslim nations, as noted by Laluddin et al., (2019), this industry's allure lies in its commitment to delivering high-quality and safe products. Noteworthy is its ability to capture the interest of both Muslim and non-Muslim consumers, as highlighted by Elasrag, (2016). In essence, the Halal industry's substantial global impact underscores its significance and underscores an important point—its ability to bridge diverse consumer preferences by providing products of exceptional quality and safety.

Countries with a sizable Muslim populations, as outlined by Peristiwo, (2020), are actively engaged in the dynamic development and expansion of the Halal industry. These nations recognize the cultural and economic significance of catering to the needs of their Muslim communities, contributing to the sector's growth. Simultaneously, non-Muslim-majority countries, acknowledging the vast economic potential, have also proactively participated in shaping and expanding the Halal industry (Park & Jamaludin, 2018). Collaboration in the Halal industry between Muslim and non-Muslim-majority countries reflects a shared understanding of its economic opportunities. This inclusive approach, regardless of religious demographics, signifies global acknowledgment of the appeal and economic viability of Halal standards.

The Halal ecosystem refers to the interconnected network of businesses, regulatory bodies, certification agencies, and consumers involved in the production and consumption of Halal products and services as outlined by Utomo et al., (2020). Businesses, spanning various sectors like food, cosmetics, and finance, are central to upholding Islamic principles in their operations. Regulatory bodies, typically established at the national level, set and enforce Halal standards, overseeing certification processes and ensuring compliance. Certification agencies, through inspections and audits, verify adherence to established standards, providing consumers with assurance and facilitating international trade. Consumers, pivotal to the ecosystem, drive

market demand for Halal products and services by making informed choices based on certification, actively contributing to the sustained growth and viability of the Halal industry (Ahyar, 2020; Noordin et al., 2014)

The Halal ecosystem also incorporates supply chains, marketing strategies, and distribution channels that strictly adhere to Islamic principles, as emphasized by Randeree, (2019). The overarching goal of this ecosystem is to ensure that every facet of production, distribution, and consumption aligns seamlessly with Islamic principles, creating a market characterized by ethical coherence, as highlighted by Aslam et al., (2023). Importantly, the Halal ecosystem, fortified by Halal certification and brand image, serves as a crucial indicator in bolstering competitiveness, as underscored by Jaelani, (2017). In essence, it establishes a foundation for businesses to demonstrate their commitment to Halal principles, fostering trust among consumers and enhancing their competitive edge in the market.

Indonesia is a prominent player in the global Halal industry, with a large Muslim population and a diverse range of Halal products. With a Muslim population exceeding 200 million, Indonesia possesses a substantial consumer base that actively seeks and supports Halal products (Mujahidin, 2020). This demographic strength positions Indonesia as a crucial market and production hub for Halal goods and services (Mubarok & Imam, 2020). The country has been actively working on developing its Halal industry and implementing Halal standards to enhance its position in the international market (Kadir & Alaaraj, 2023).

Indonesia's expansive Halal product offerings, spanning across sectors like food and beverages, cosmetics, fashion, and tourism, not only demonstrate the nation's commitment to Islamic principles but also encapsulate the richness of its cultural heritage. This diversity, as highlighted by Hariani & Hanafiah (2023) is intricately tied to the adaptability and inclusivity inherent in the country's Halal industry. Chotib et al., (2022) further explains how Indonesia's cultural richness translates into a broad spectrum of Halal options, catering to both local and global markets. Jaelani's insight (2017), complement this understanding, emphasizing that this extensive variety serves as a testament to Indonesia's ability to integrate Islamic principles into various aspects of its economy, reflecting a holistic approach to the Halal industry.

To bolster its standing in the global Halal market, Indonesia has implemented stringent Halal standards. The establishment of clear guidelines and certification processes ensures that Halal products originating from Indonesia meet the highest Islamic standards (Sa'adan & Pauzi, 2017). This commitment to quality and authenticity not only instills confidence in consumers (Suhartanto et al., 2020), but also facilitates trade partnerships with countries and regions with growing Halal markets (Sidqi & Ruhana, 2021). The government has implemented initiatives to streamline certification processes, enhance industry infrastructure, and foster innovation within the sector (Chotib, 2022). These efforts aim to position Indonesia as a leading exporter of Halal goods and services on the international stage.

3. RESEARCH METHOD

In our analysis, we use a systematic literature review (SLR) approach. SLR is a method for evaluating and understanding all available research related to a specific research question, topic, or area of interest. The goal of SLR is to provide a fair assessment of a research topic using a reliable and rigorous methodology. Essentially, SLR is a systematic way of reviewing literature to gather and interpret all relevant information on a chosen research topic.

The key stages in this process include:

1. Keyword Determination:

In this literature review, we employ 3 (three) keywords, namely:

- a. Halal Economy
- b. Halal Industry
- c. Halal Indonesia

2. Article and Data Source Retrieval:

Employ Publish or Perish (PoP) software to search for articles and data sources, ensuring they meet specific publication time criteria and are indexed by SCOPUS.

3. Article Screening:

Apply the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) diagram to screen articles based on predetermined inclusion and exclusion criteria, identifying eligible articles.

4. Data Analysis:

Utilize the VosViewer tool to process eligible articles, generating coding, mapping, matrices, and graphics. This facilitates the analysis of relationships among the articles, providing a nuanced understanding of the interconnections within the body of literature.

In accordance with these steps, employing the three keywords during the article search using Publish or Perish (PoP) software with a publication time criterion spanning from 2013 to 2023 (10 years) resulted in a total of 264 data points ($n = 264$). The specific counts for each keyword are as follows: (i) 18 data points for "Halal Economic," (ii) 131 data points for "Halal Industry," and (iii) 115 data points for "Halal Indonesia."

Subsequently, from the initial pool of 264 data points, the first exclusion criterion was implemented. This criterion specified that the selected data must be in the form of articles, excluding alternative formats such as book chapters, reviews, books, notes, etc. This decision was guided by the upcoming stage, which involves the analysis of keyword networks. Essentially, data in formats other than articles tended to have minimal or no associated keywords.

Following this, we will provide a detailed presentation of the outcomes derived from utilizing the PRISMA diagram. This diagram played a crucial role in the meticulous screening process, focusing on the inclusion and exclusion criteria applied to the selected data sources. For a visual representation of this screening procedure, please refer to Figure 1. which depicts the PRISMA diagram showcasing the systematic approach employed in filtering and selecting articles.

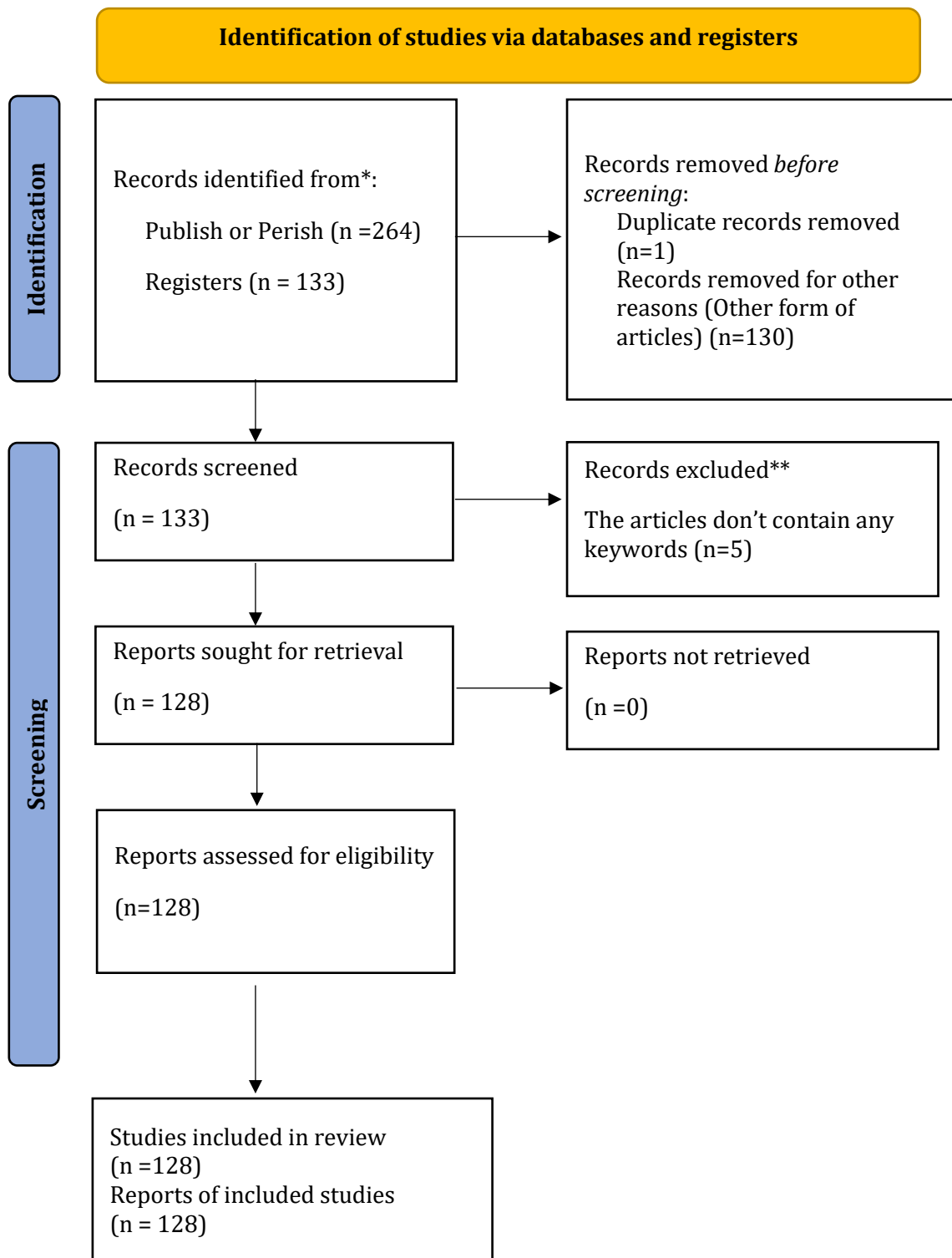


Figure 1. PRISMA Articles Screening Diagram

In the application of the first criterion, a total of 130 data points were identified as formats other than articles, and 1 duplicate was detected. Consequently, the remaining unique data points amounted to 131 (n = 131). The subsequent criterion required selected articles to have associated keywords, a prerequisite for the forthcoming keyword network analysis. In this context, 5 articles lacking keywords were excluded, resulting in 128 articles (n = 128) for

further data processing. Based on the application of these criteria (employing 2 criteria), it can be inferred that there are 128 eligible articles for in-depth analysis. The following table provides an overview of the quantity of articles deemed eligible for inclusion, as follows:

Table 1 Eligible Articles

2013-2023	Keyword Used (Publish or Perish)		
	Halal Economic	Halal Industry	Halal Indonesia
Recorded	18	131	115
Gross Total		264	
Excluded	8	71	57
Included	10	60	58
Total Article Included		128	

4. RESULT AND DISCUSSION

The initial screening process identified a total of 128 articles meeting the specified inclusion criteria, which form the basis for the subsequent results and discussions.

Thematic Landscape of Halal Economy Studies

The results reveal a rich thematic landscape within the Halal Economy, with distinct emphasis on several key areas. Notably, the literature extensively covers topics such as Halal Tourism, Halal Industry, Halal Food, Halal Supply Chain, and Halal Certification. This thematic diversity underscores the multidimensional nature of the Halal Economy and its intricate intersections with various sectors.

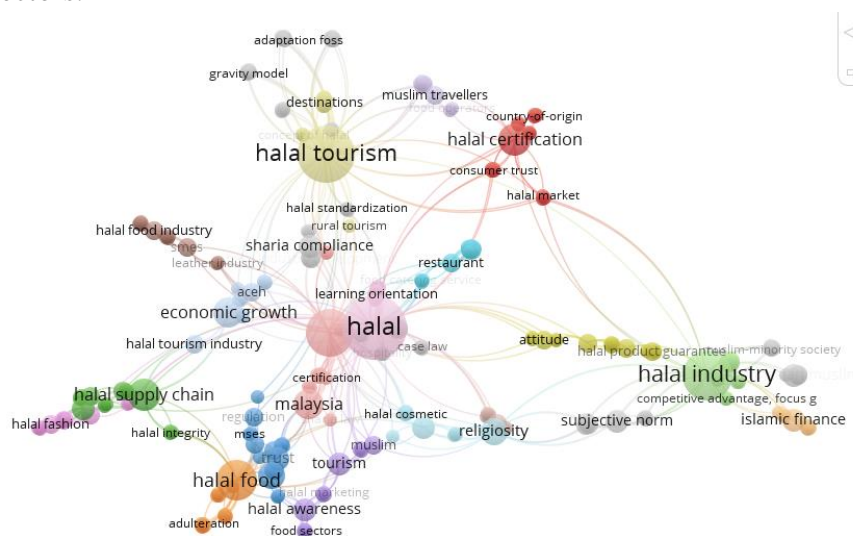


Figure 2. Thematic Landscape of Halal Economy Studies

Within the domain of Halal Tourism, Yusuf et al., (2021) meticulously delineate crucial considerations essential for the advancement of halal tourism in their study. First and foremost, it is crucial to ensure that halal tourism is authentically rooted in the principles of Islamic economics, aligning with both national (central) and local (regional) regulations. Secondly, it should encompass a comprehensive approach, including aspects related to halal certification across hospitality, gastronomy services, and extending to the crucial realm of Human Resources (HR). Thirdly, emphasis should be placed on marketing strategies and institutional development. These three pivotal factors necessitate support not only from governmental entities but also from the Islamic finance industry.

Suseno et al., (2023) in his study, underscores the significance of the Halal Supply Chain in halal tourism, highlighting its crucial role in logistics and its indirect impact on economic growth. The study employed a questionnaire approach with 113 data samples. The significance of the tourism sector within the halal ecosystem is further exemplified by Nawawi et al's., (2020) study in Thailand. The study asserts that Thailand's promotion of halal tourism, despite being a non-Muslim country, has discernible effects on the country's halal branding.

Several other noteworthy studies contribute to the comprehensive understanding of halal tourism. For instance, Zawawi et al., (2017) delves into the fundamental concepts of halal in the tourism sector, while Olya & Al-ansi, (2018) focuses on risk assessment within the halal tourism industry. Additionally, El-Gohary, (2020) explores the impact of the COVID-19 pandemic on the sustainability of the halal industry, with a specific emphasis on the tourism sector. The comparative analysis of halal tourism in Indonesia and Malaysia is explored by Peristiwa (2020), while Pamukcu & Sariisik (2021), concentrates on hospitality standards, among other pertinent research endeavors in the field.

Furthermore, in the study by Mohamed et al., (2020), a significant influence of the halal supply chain on Halal Integrity Assurance (HIA) was identified. The enhancement of HIA is perceived to have an impact on increasing demand for halal products and services. Concerning the halal industry, Hasan & Pasyah (2022) identified barriers to the development of the halal industry, particularly in the food and beverage (F&B) sector. The study revealed persistent challenges in the halal certification process, attributed to costs and the low public awareness, especially in the current digital era. Additionally, several other hurdles related to halal certification, especially in the F&B sector in Indonesia, were mapped out.

In the study by Anwar et al., (2018), the identified obstacles referred to awareness of Micro, Small, and Medium Enterprises (UMKM), human resources, and public perception in one of the provinces in Indonesia. Limited awareness among UMKM was noted, indicating minimal knowledge and understanding of halal certification and non-mandatory regulations. Human resources were also considered insufficient for building a halal supply chain. Furthermore, there was a prevailing perception that the certification process incurred higher costs compared to other processes such as legalities, intellectual property registration, and the like. The hindrance of insufficient awareness and understanding was also confirmed in the study by Prabowo et al., (2015) in one of the provinces in Indonesia. Additionally, studies by Muhamed et al., (2014)

and Utomo et al., (2020) revealed financial concerns, specifically in Islamic finance, related to the integration of the financial sector and the real sector in the halal ecosystem.

Mapping the Evolution of Halal Economy Research Over Time

Based on the years of research, the following image illustrates the intended mapping:

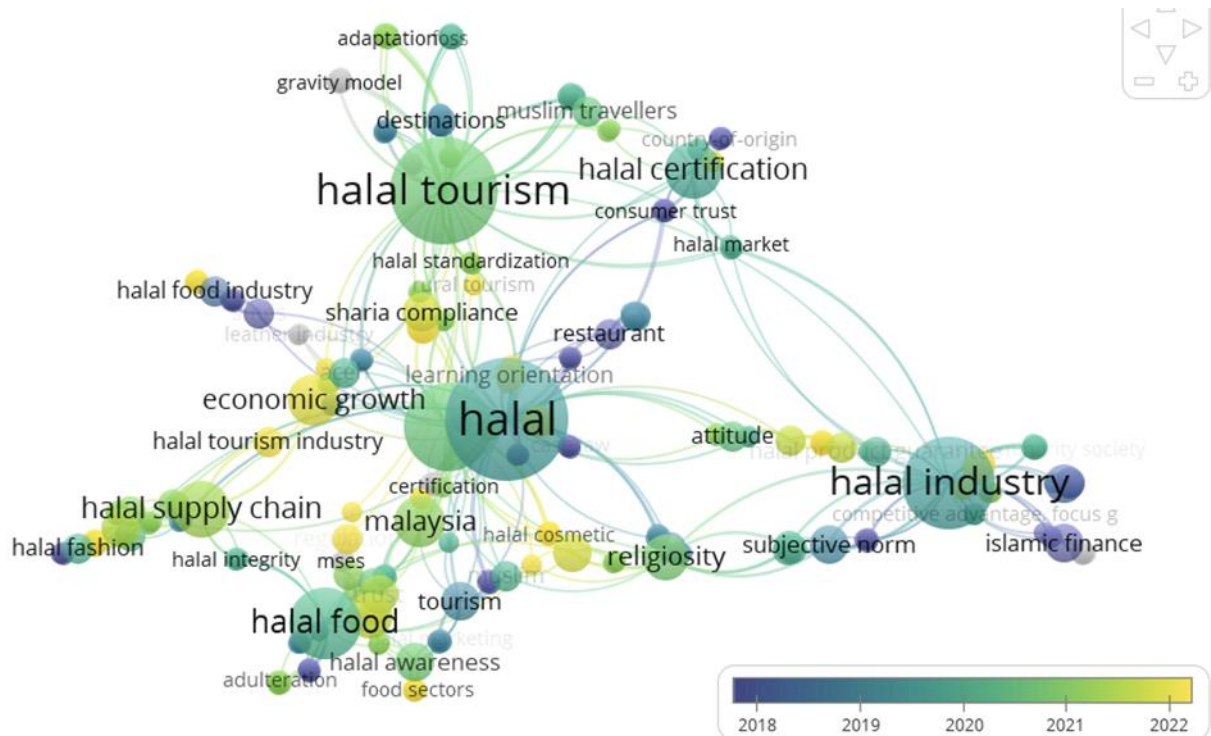


Figure 3. A Time-Based Mapping of Halal Economy Research

The provided information indicates that there are images representing the mapping of research on the halal economy over different years. Specifically, the focus of studies is noticeable in 2019, 2020, and 2021. Interestingly, there is a shift in attention towards keywords related to economic growth in 2022. Additionally, the significance of keywords from 2018 seems to be somewhat reduced in the presented results. The text hints at a forthcoming presentation of density results for each keyword, promising a closer look at their prevalence in the research data.

Moreover, the results based on the density analysis of the combined development mapping of the study using the three keywords are as follows:

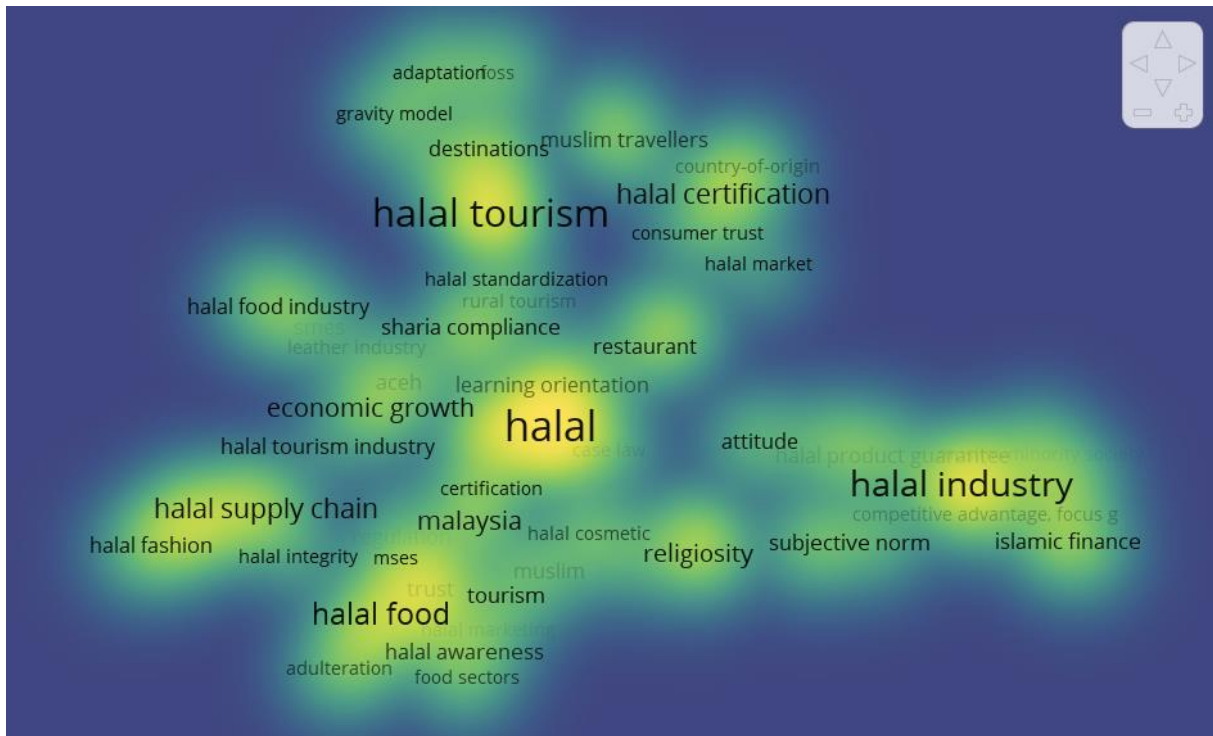


Figure 4. Combining Keyword Density Analysis

The density analysis results indicate that several frequently used keywords in the selected 128 articles include Halal Industry, Halal Tourism, Halal Food, Halal Supply Chain, Halal Fashion, and Halal Certification. However, the connection to economic growth is relatively less prevalent compared to the previously mentioned six keywords.

Mapping Key Focus Areas in Halal Research in Indonesia

Regarding the development of studies in Indonesia, the mapping of keywords related to Halal Indonesia reveals several prevalent themes. In the context of research evolution in Indonesia, the most frequently encountered keywords include halal tourism, halal certification, halal culinary, halal industry, and sharia compliance.

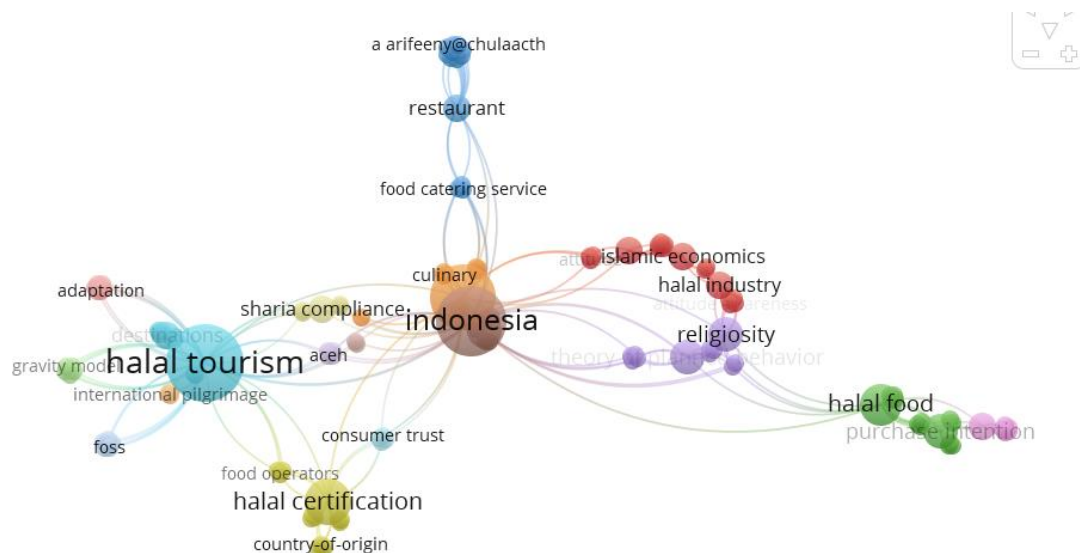


Figure 5. Key Focus Areas in Halal Research Indonesia

As depicted in the above image, halal tourism emerges as the aspect most frequently addressed by studies in Indonesia, with references from various authors such as Kasdi et al., (2018), Perbawasari et al., (2019), (Rindrasih, 2019), Katuk et al., (2021), Vargas-Sanchez et al., (2020), Adinugraha et al., (2021), Effendi et al., (2021), Kasdi et al., (2021), Izudin et al., (2022), Sudarsono et al., (2021), Santoso et al., (2022), Zulvianti et al., (2022), Afnarius et al., (2020) and Alim et al., (2023). This pattern provides an insightful overview of the focus areas within Halal-related research in Indonesia, particularly emphasizing the prominence of halal tourism in recent scholarly works.

From a foundational standpoint, particularly concerning regulations in halal tourism, Effendi et al., (2021), posits in their study that the existing regulations in Indonesia fall short of optimization, lacking compliance with necessary legal requisites. Furthermore, these regulations are deemed overly generic and insufficiently specific, functioning more as supplementary rather than primary. Issues surrounding these regulations are also underscored as recommendations in the study by Izudin et al., (2022), emphasizing the imperative for prioritized development of regulations and policy planning by both the government and local communities to elevate religious tourism. The regulatory shortcomings also manifest in suboptimal implementation within the halal tourism sector, as evidenced by the findings in the study by Alim et al., (2023), pertaining to a specific region in Indonesia.

However, the positive and dynamic progression of halal tourism regulations across diverse regions in Indonesia aligns with the configuration of local tourism policies (Kasdi et al., 2021; Santoso et al., 2022). Additionally, from a marketing standpoint, certain studies, such as the one conducted by Kasdi et al., (2018), spotlight the portrayal of the local region as an integral component of marketing strategies within the realm of halal tourism.

In addition to focusing on halal tourism, numerous studies in Indonesia delve into the realm of halal food and beverages. Vanany et al., (2020) employed a questionnaire to survey 419

respondents, aiming to identify determinant factors influencing the consumption of halal food and beverages using the Theory of Planned Behavior (TPB) as a framework. The results indicate that variables such as awareness, religious commitment, and trust significantly impact the level of halal food consumption. Furthermore, Vizano et al., (2021), conducted a study revealing that another influential factor is the level of awareness, which moderates the relationship between purchase interest and buying behavior. Notably, the certification of halal products in the food and beverage sector significantly influences the industry's overall performance (Yama et al., 2019). The subject of halal food certification is also addressed in the research conducted by Arieftiara et al., (2022). The study looks at how Halal food certification affects the performance of Malaysian and Indonesian food and beverage companies from 2016 to 2020. It found that Halal certification boosts business success but reduces focus on sustainability reporting. Malaysian firms prioritize Halal certification more than sustainability reporting compared to Indonesian companies.

5. CONCLUSION AND RECOMMENDATIONS

In conclusion, this research, employing a Systematic Literature Review (SLR) approach, has yielded insightful principles and generalizations related to determinant factors and the developmental trajectory of studies within the halal economy domain. The exploration, guided by 3 (three) keywords such as Halal Economic, Halal Industry, and Halal Indonesia, resulted in a comprehensive dataset of 264 entries. Applying stringent criteria, 128 articles were identified as eligible for further analysis, ensuring their status as articles, SCOPUS-indexed, and featuring relevant keywords.

This research underscores the overarching development of studies in the halal economy context, encompassing critical areas such as Halal Tourism, Halal Industry (Islamic Finance), Halal Food, Halal Supply Chain, and Halal Certification. Notably, the emergence of the keyword "economic growth" as pertinent for the years 2022-2023 signifies a noteworthy association with considerations of economic growth. The temporal dispersion of studies across the years 2018-2021 suggests a growing linkage with economic growth aspects. Within the context of Indonesia, prevalent keywords associated with study development include halal tourism, halal certification, halal culinary, halal industry, and Sharia compliance.

This research is significant not only for academic understanding but also holds practical implications. It contributes to identifying key research areas and provides insights into the evolving landscape of the halal economy in Indonesia. However, it is essential to acknowledge limitations, such as the temporal scope and potential biases inherent in the available literature. This finding is particularly relevant for policymakers, researchers, and industry practitioners seeking to navigate and contribute to the dynamic field of the halal economy.

Moving forward, this research recommends addressing these limitations in future studies and delving deeper into specific dimensions of the halal economy to achieve a more comprehensive understanding. The overarching conclusion drawn is that this research lays a foundation for

continued exploration and refinement of the halal economy landscape, bridging theoretical insights with practical applications.

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CHAPTER 5

How Do Motivation Constructs Accelerate Admin Staff' English-Speaking Ability in Facing Internationalization of Higher Education?

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ABSTRACT

Internationalization of higher education has focused on the aspects and activities related to the goal of improving the quality of education including policies and practices done by academic systems and institutions, and even individuals to face the global academic environment. Whereas, motivation for internationalization include commercial advantage, knowledge, and language acquisition. This study on how motivation constructs affect the speaking ability of administrative staff in relation to internationalization of higher education highlights that mastery of English skills can improve organizational image which leads to reputation and ranking of the university. Improving English is not only needed by lecturers and students but also by administrative staff. This study employs a descriptive-qualitative method which aims at explaining and evaluating the constructs of motivation concerning the speaking ability of administrative staff and the impact it has towards internationalization at one of the private universities in Indonesia. The research was carried out by conducting several activities, i.e. distributing a set of questionnaires to thirty participants enrolling in the conversation course, doing an in-depth interview with five participants, and analyzing the information gathered. The results indicate that among several constructs of motivation, attitude (instrumental and integrative), engagement (efficacy and interest), and efforts (language course and course material) prove to be the most influential traits in this context. However, discomforts during the course which are represented in the form of fear of making mistakes, fear of being laughed at, fear of failure, and reluctance to stand out have little impact on participants' confidence in speaking English.

Keywords: Motivation, Internationalization, Speaking ability, Higher education, Administrative staff

1. INTRODUCTION

Internationalization is the highest tier of international relations among universities and it is no longer regarded as a goal in itself, but as a means to improve the quality of education (Jibeen & Khan, 2015). It includes the policies and practices done by academic systems and institutions, and even individuals to face the global academic environment, while the motivations for internationalization include commercial advantage, knowledge, and language acquisition, enhancing the curriculum with international content, and many others (Altbach, 2007).

Internationalization of higher education is shifting from internationalization abroad with a strong focus on a small elite of mobile students, faculty, administrators, and programs towards internationalization at home for all students, faculty, and administrators is even more urgent than ever (de Wit & Deca, 2020). The intentional process of integrating an international, intercultural, or global dimension into the purpose, functions, and delivery of post-secondary education, to enhance the quality of education and research for all students and staff and to make a meaningful contribution to society (de Wit et al., 2015). Mohamed (2004) in Getie (2020) specifies that there are many research findings available in the developed world, and we need a link with them to widen the horizon of our generation, especially, the young generation who needs to obtain the available knowledge through English.

Meanwhile, Jenkins (2009) stated that it is a well-established fact that English has become the primary lingua franca of choice around the world among speakers of whom the majority are not native English speakers. Patel & Jain (2008) explained that not only does language act as a communication tool, but it can also make it easier to adapt to the environment and work. By mastering English, a person is one step ahead of achieving goals. The internationalization of higher education nowadays is considered as one of the leading trends that determine the value foundations of the functioning of modern universities. Today, almost all countries in the world are increasingly interested in the internationalization of their higher education because they feel pressured to do so due to globalization (Sharipov, 2020). However, most importantly, they realize that internationalization ensures the flow of revenue into their schools by attracting more students and enhancing their students' learning experiences (Hser, 2005).

Mastery of English skills can improve the organization's image (Rustanta, 2020). By implementing this, Universitas Trisakti (Usakti) can become a reference for cooperation, systems, and organization by any party including foreign educational institutions. To achieve this organizational goal, improving English is not only needed by lecturers and students but also by educational staff because educational staff who are proficient in English can open the door of communication between the campus and foreign parties, and expedite the bureaucratic process and filing. Therefore, based on these facts, English is vital in every aspect of higher education's activities to join the global community.

Spoken language refers to linguistic competence or capacity and linguistic performance (Chomsky & Kenstowicz, 2001). For speaking skills, it is essential first to teach competence and then performance. Learning a foreign language like English is not a simple and easy job. Sometimes, it is boring. Motivation is critical in learning English. How to effectively motivate students in learning English is an important problem (Kong, 2009). Motivation refers to the combination of effort plus the hunger to achieve the goal of language learning with good attitudes towards language learning (Achmad & Yusuf, 2016; Usman et al., 2016; Ulfa & Bania,

2019). Moreover, motivation to learn a second language indicates the degree to which a person works to learn the language because of the urge to do so and the satisfaction they feel in a task (Rubrecht & Ishikawa, 2012).

2. LITERATURE REVIEW

Motivation in language learning has become a prominent issue related to affective variables dealing with the emotional and poignant circumstances of a learner within a long process of language learning, second, or foreign. Research and studies related to the term have extensively been expounded, started by Gardner and his associates (Gardner, 1985; Dörnyei, 1998) whose studies were mostly undertaken in a second language environment (Gardner et al., 1987). The studies resulted in the development of fundamental discernment of motivation vis-à-vis the efficaciousness of second and foreign language learning and the effect it has on learning achievement (Gardner, 1985; Dörnyei, 1998). Gardner through his Socio-educational Model (1985) postulates that cultural beliefs in the language community cover the significance of language learning, the development of language skills, and the specific roles that an individual plays based on their differences will influence second language acquisition or in this context foreign language learning situation. Although there has been inconsistency in terms of the importance of integrative orientations over instrumental motivation in successful second language learning. Gardner refers to integrative and instrumental orientation instead of motivation. An integrative orientation is related to a learner's positive attitude toward the second language group and the desire to interact with and even become more similar to valued members of the community, while an instrumental orientation is the utilitarian view of language in attaining pragmatic goals. Gardner's theory highlights that orientation is motivation antecedent; however, these two constructs of motivation have become the most widely known concepts associated with Gardner's work in the second language field.

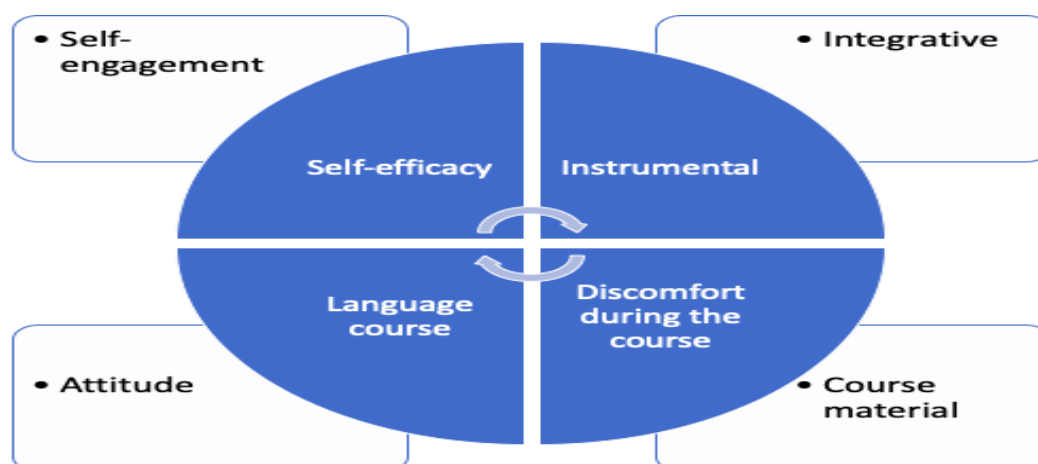


Figure 1 The components of motivation in this learning context adapted from Gardner's Socio-Educational Model (1985:6)

Gardner's model that has been adapted in Figure 1 regarding individual differences are attitudes towards the learning, the context, and language aptitude. These individual differences affect the achievement and the process of learning in which foreign language learning takes place. Addressing differences of the learners by focusing on their attitude towards learning,

instrumental and integrative motivation, their efficacy and engagement in learning will help direct their achievement in learning a foreign language. Regarding attitude towards learning, learners as the main focus of learning need to showcase the result by acquiring a certain level of language proficiency. In terms of engagement and efforts, motivation refers to the combination of efforts together with the needs and engagement to achieve the goal of language learning with a good attitude towards language learning (Azar & Tanggaraju, 2020). Motivation to learn a language will be indicated by how much engagement and effort learners put on the task to learn and complete the task being done and the satisfaction that they feel in a task (Rubrecht & Ishikawa, 2012 in Azar & Tanggaraju, 2020).

One of the most important and difficult skills to acquire in learning a foreign language is speaking (Chen & Lee, 2011). This is related to the nature of speaking as a productive skill which focuses on an active process of negotiation meaning and using micro and macro components toward producing utterances (Tuan & Mai, 2015). This production covers the competence and performance (Burns & Joyce, 1999; Chomsky, 2001) of each individual to speak. Because of this intricate process, motivation is needed in the development of English-speaking skills, especially in foreign language learning environments. Since motivation is the driving force for learning another language, it is significant to enhance the understanding of motivational constructs in foreign language learning. The enhancement covers understanding learners' identity, interest, and needs in learning a foreign language. This understanding needs the support of research on how to improve speaking performance (Tuan & Mai, 2015); however, the intended research related to the impact of motivation in improving speaking performance has been conducted mainly towards students as the target learners (Menggo, 2018; Azhar & Gopal, 2021; Kumar, 2021; Ramarrow & Hassan, 2021). Research on the topic of motivation and speaking performance with administration staff as the target learners as this current research has rarely been implemented. However, motivation in language learning and the relation it has towards speaking ability has been researched over the decade, in which motivation correlates with speaking skills for achieving proficiency in the language (Ramarrow & Hassan, 2021).

Based on extensive motivational research on second and foreign languages, it is assumed that the motivation of the learners in learning English will affect their speaking ability (Menggo, 2018). Speaking skill has different strategies depending on the purpose of the interaction. Interaction falls into two broad categories; transactional and interactional (Burns and Joyce, 1999). Transactional situations usually involve people in interactions where speakers wish to obtain information or goods and services. Whereas, interactional situations usually involve speakers in casual conversations where the main purpose is to establish or maintain social contact with other people. These two categories can be achieved through how to elaborate competence and performance (Burns and Joyce, 1999). The ability to speak a language is synonymous with knowing that language since speech is the most basic means of human communication.

Internationalization of higher education needs a complete understanding of stakeholders as to what needs to be done and what needs to be maintained within higher education. As the terminology itself requires a shift in the role and position of higher education within the globalized world, the complexity lies in its emphasis merely on the reputation and rankings of the university. This situation creates the leaders of regional, national, and international universities to put their attention on creating excellence programs and investment schemes to

be more globally competitive, have world-class universities, and gain higher rankings (de Wit, 2019). One way to achieve higher rankings is by encouraging the stakeholders to improve their abilities in engaging more with the international community by improving their English proficiency. The correlation between excellent programs and internationalization rankings is apparent in this higher education institution (de Wit, 2019). Therefore, all stakeholders must acquire international language to be engaged more with the international community. As part of the stakeholders, the administrative staff is one that usually receives less attention in terms of improving language proficiency. This study focuses on Usakti's laboratory and administrative staff who need certifications of their skills to contribute to the university's accreditation, especially the international one. To get these international certifications, they are required to possess good English skills. This objective is in line with the need of fulfilling the university's rankings to be considered as part of the international community.

The administrative staff have to meet the urgent need to equip themselves with English proficiency to conduct their tasks and obligations sufficiently. Therefore, it is necessary to conduct this study to discern the correlation between the staff's learning motivations and their performance during English class that has been carried out specifically for them. Two questions are raised from this condition:

1. To what extent does participants' motivation affect their performance in learning English?
2. To what extent does participants' English competence affect the internationalization of higher education?

3. METHODOLOGY

This study employs a descriptive-qualitative method which aims mainly at explaining and evaluating the constructs of motivation concerning the speaking ability of administrative staff and the impact it has towards internationalization at Usakti. The research was carried out by conducting several activities, i.e. distributing a set of questionnaires to the 30 participants who enrolled in the conversation course, doing an in-depth interview with five participants, analyzing the information gathered towards the relationship between participants' motivation in learning English and the urgency of internalization on campus. The data gathered unraveled discussions on the constructs of motivation using descriptive methods based on empirical facts which were then summarized, classified, and structured to analyze and answer two research questions (RQ).

This study focuses on Usakti's laboratory and administrative staff, and librarians (30 people) who need certifications of their skills to contribute to the university's accreditation, especially the international one. To get these international certifications, they are required to possess good English skills. The participants have filled out a set of questionnaires consisting of six parts of the question groups. This questionnaire was shared online using the Google form link. Data taken from questionnaires and interviews are categorized based on the six parts of question groups with the scope that is in line with the topic, i.e. motivation, speaking, and internationalization. Concurrently, the data being analyzed are used to answer two research questions that have been stated in the previous part of this paper.

4. RESULTS & DISCUSSION

Thirty participants who are laboratory and administrative staff, and librarians took part in this study. They filled out a set of questionnaires consisting of fifty questions: seven questions indicating their attitudes towards the course, each eight and seven questions indicating their self-efficacy and engagement to the course, each seven questions exploring their integrative and instrumental motivation, seven questions identifying their discomfort when speaking, and seven questions finding their perception of the course materials.

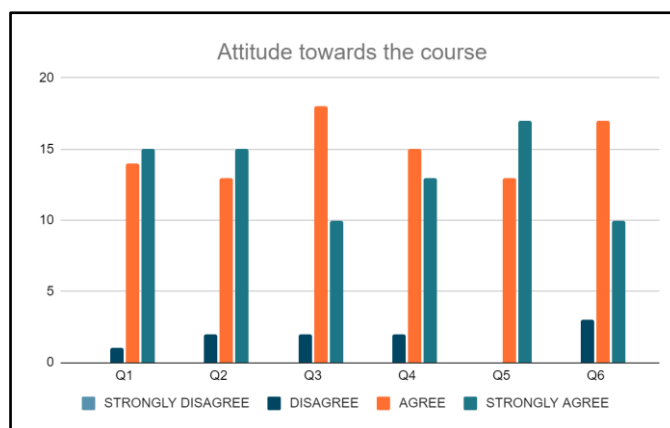


Figure 2. Attitude toward the course

Most participants have positive attitudes toward the English course they took. It is reflected in Figure 2. They joined the English course to improve their knowledge and ability to speak English in daily life and at work. Most of them also willingly did the extra work if the teacher asked them to. Since English became one of their favorite subjects, they wished to get more opportunities to join a similar program and hoped the course would continue.

Most participants believed that they had high expectancy and had improved throughout the course, as shown in Figure 3. Eagerness to participate in both group and individual tasks and clear instruction from the teachers contributed to their improvements and self-efficacy. They would confidently ask the teacher, take notes, and put extra effort into coping with the lessons and these showed their engagement to the class (Figure 4). Nonetheless, they were not confident enough to state that they were better than other participants.

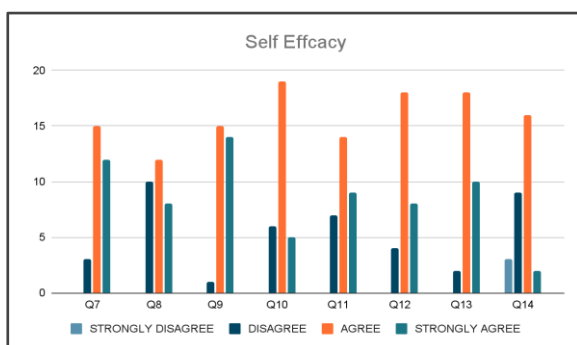


Figure 3. Self-Efficacy

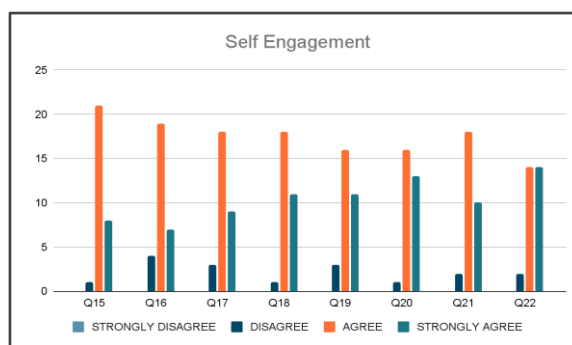


Figure 4. Self-Engagement

Participants' motivation in learning English are mostly both integrative and instrumental. Based on Figure 5, we can see that they learned English based on their choice to learn a foreign

language. They believed that understanding and speaking English in their daily lives and at work is essential and they were proud to show what they were capable of. They were also aware that learning a language was not merely learning to communicate; learning a language meant learning the culture and lifestyle of native speakers that lead them to appreciate English arts and literature.

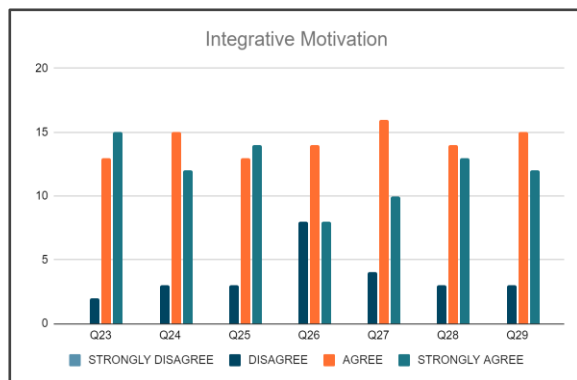


Figure 5. Integrative Motivation

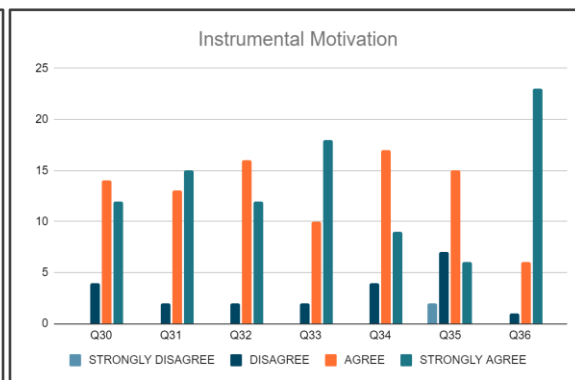


Figure 6. Instrumental Motivation

Additionally, Figure 6 reflects participants' instrumental motivation, especially concerning the internationalization of their institution. Internationalization aims at gaining an international reputation and collaboration with foreign higher institutions and organizations. Throughout the process, all elements of the institution, including staff, will interact with foreign partners, lecturers, and students, and one of the most common international languages is English. Having the ability to interact with them was one of the main reasons participants were learning English. In addition, being competent in English will contribute to international certification and accreditation of their study programs and enable them to participate in international-scale activities held by their departments. Moreover, internationalization includes inbound and outbound programs that are open not only for lectures and students but also for staff and it motivates them to learn English in the hope that once they go abroad, they will not have problems with language. Some also believe that learning English will help improve their career and salary.

Learning is not always about sunshine and rainbows. Participants also experience some discomforts during the course as shown in Figure 7. The discomforts are defined as whether or not learning English is a burden, being laughed at when making mistakes, feeling embarrassed, and fear of failing, and being more comfortable learning other materials than English. According to the participants, the factors that fairly affect their learning of speaking English are fear of making mistakes or being laughed at, when it comes to talking with native speakers, and fear of failure.

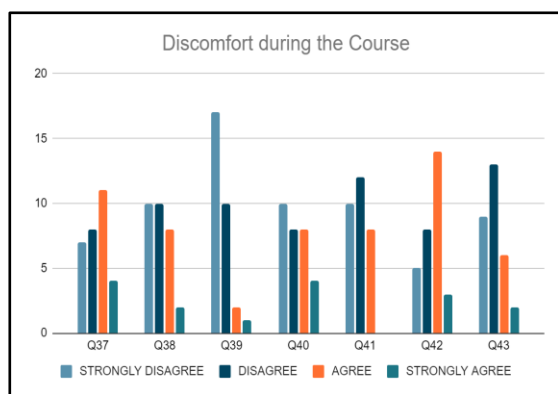


Figure 7. Discomfort during the course

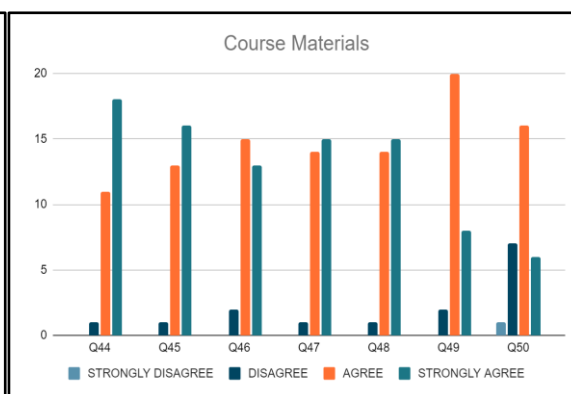


Figure 8. Course Materials

On the contrary to discomfort, course materials affect participants' speaking skills positively. As shown in Figure 8, most participants strongly agree that activities in class and learning materials provided by the teachers help them improve their speaking skills and explore new things in English. Most participants also agree that the activities are enjoyable and fairly easy yet challenging.

In addition to the questionnaire, five participants whose positions are laboratory staff, a librarian, and administrative staff were interviewed. All of them are aware of the importance of English mastery in the era of Industry 4.0 and demonstrate a positive attitude to the course. The instrumental motivation dominates the reasons they learned English, such as the need to communicate with international guests and students, understanding manual books and references that are mostly published in English, and contributing to the internationalization program of the faculty. However, two respondents show strong integrative motivation that speaking English fluently boosts their confidence and enables them to learn the culture of English-speaking countries. Little does the course contribute to their professional development within the organization since the formal assessment of promotion does not include English skills.

The primary goal in answering RQ-1 is to explore how motivation traits can play a role on the participants which leads to improved speaking ability in this particular situation. Learners experience complex and challenging situations, internal and external in speaking English and how to improve their speaking ability which will affect their competencies in learning the language (Aziz & Kashinathan, 2021). To overcome speaking challenges among the learners, useful strategies are suggested to be implemented. One of which is by understanding the differences among learners, i.e., the cultural background of the learner (Lakawa, 2007) and the learner's desire to learn (Kumar, 2021) as well as the importance of teaching materials and the learning method (Aziz & Kashinathan, 2021). Another essential step to apply in improving learners' speaking ability is by using an English-only policy during the teaching and learning situation (Azhar & Gopal, 2021) which will improve learners' level of motivation in learning English. This policy is one way to immerse learners in the use of English all the time during the process of learning which proved to be a success in some other situations. This policy fails to be applied fully in this context since the English ability of all participants is indifferent resulting in the mixed-use of target and native languages.

In this study, several motivational constructs were used to measure how they affect participants' proficiency in learning English, i.e. attitude, engagement, and efforts (Figure 9).

Based on research done by teachers and researchers, motivation of the learner is one of the factors affecting learners' success in foreign language learning (Dörnyei, 2003; Wang, 2008; Zhang & Fu, 2008). Motivation and success in learning demonstrate mutual influence on the part of the learner, that is; high motivation leads to successful learning, and successful learning guarantees high motivation (Cook, 2016). In terms of attitude (Figure 10), participants show a high level of instrumental motivation because of the immediate results that they will have upon completion of the course, such as: being able to communicate with foreign students, lecturers, and staff, being able to acquire international certification, being able to get involved in international meetings, being able to improve their careers and salary which lead to professional development of the participants (Azar & Tanggaraju, 2020). Nevertheless, participants also indicated quite a high level of integrative motivation because they were aware that learning a language was not merely learning to communicate; learning a language meant learning the culture and lifestyle of native speakers that led them to appreciate other cultures and preserve their own culture. The result of participants' attitudes in this context highlights the different and unique levels of motivation in which they show almost the same level of instrumental and integrative motivation from foreign language learning background (Gardner, 1985; Dörnyei, 1998; Lakawa, 2007; Menggo, 2018).

In terms of engagement, participants show an improved level of English proficiency during the course which is represented by their active participation in class exercises and tasks (Figure 9). They willingly participate and take part in the task assigned by the teacher, they also ask questions confidently, and they show high expectancy by contributing much to the assigned tasks (Wu et al., 2011). The participants are eager to participate in both group and individual tasks and clear instruction from the teachers contributed to their improvements and self-efficacy. The participants have shared a positive interest in the course by paying extra attention to understanding the lessons and finishing the work regarding the exercises given for enhancement. However, they did not confidently state that they were better than other participants, this is due to Indonesian culture which in many ways becomes a hindrance to speaking up/standing out on the part of the language learner. One of the components of engagement in learning a foreign language is the participants' self-confidence (Clément et al., 1994; Wu et al., 2011; Bárkányi, 2021) and in this study, the participants have shown a high level of motivation which positively affect their self-confidence in learning the target language (Park & Lee, 2005; Barkanyi, 2021).

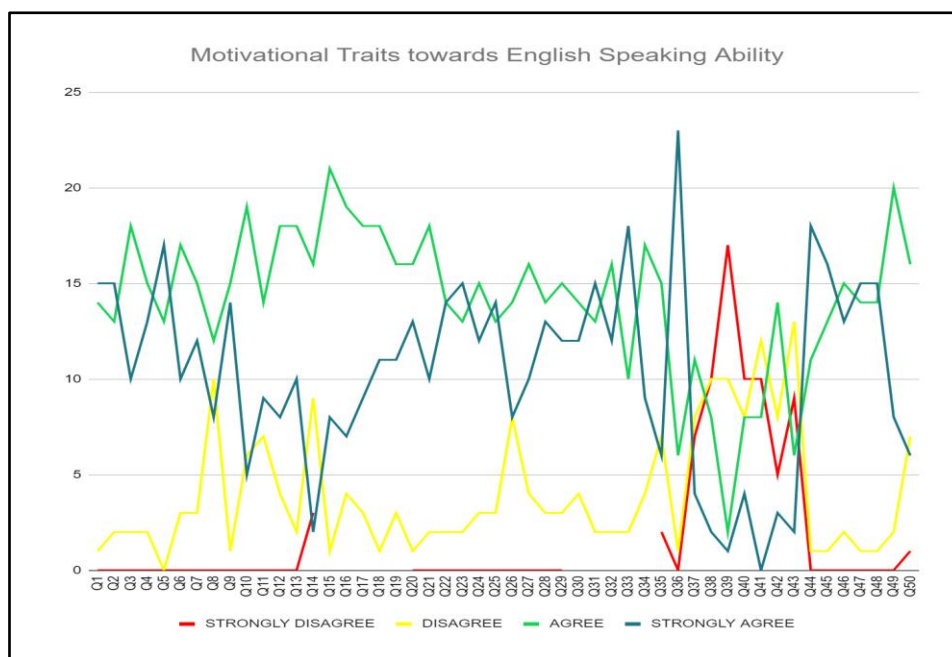


Figure 9. Motivation Traits based on each question

In terms of efforts, participants indicate that language courses and course materials help them to consistently engage in classroom activities during the course (Figure 9). This is due to appropriate material provided by the teacher during the course. Research on motivation shows that good instructional design courses can help improve learners' motivation and help them achieve high motivation by completing the program (Giasiranis & Sofos, 2020). Moreover, research also specifies that there is a need to broaden models of motivation by considering the importance of exposure to content to increase motivation to learn the target language (Ditta et al., 2020). In this context, the teachers have started the course by gathering information regarding the needs of the participants to be included in the course materials. The results of this study show that course materials that meet with learners need to increase participants' level of motivation to complete the course (Kumar, 2021; Ditta et al, 2020). The discomforts in this study are that learning English is a burden, afraid of making mistakes, feeling embarrassed, fear of failing, and more comfortable learning other materials than English. However, the discomforts are the factors that fairly have an impact on the participants speaking English.

RQ-2 is related to whether participants' English competence affects the internationalization of higher education which leads to improved speaking ability in this particular situation. The role of educational staff is vital especially in interactions with international students, lecturers, or visitors. It is imperative for educational staff to provide clear information, assistance, and directions when needed in formal and informal settings, such as in the laboratory, student information center, library, office, or in the campus vicinity. Furthermore, international acknowledgement requires a faculty to be meticulously curated and accredited by at least an international board. The administrative staff plays a crucial role in this internationalization process by furnishing assessors with necessary information about their responsibilities in oral English, undertaken in their respective posts, and by earning professional certification as laboratory technicians which is also reinforced by their proficiency in English. For these objectives, participants in this study enrolled in this language course. The total participants from both classes are 30 people (16 in Elementary Class and 14 in Lower

Intermediate Class). In evaluating participants' speaking skills, a scale ranging from 1 to 4 is utilized and the data of these scores is analyzed qualitatively based on an adaptation of Miles and Huberman methodology (1994) involving data reduction, presentation, and drawing conclusions.

Table 1 Indicators of Success in Speaking Skills Improvement

Score	Percentage	Category
< 12	<60%	Poor
12-14	60-69	Fairly Good
15-17	70-79	Good
18-20	80-100	Very Good

To assess speaking skills, we start by considering the highest possible score, which is 20 (calculated as 5 multiplied by 4). Next, we subtract the lowest possible score, which is 5 (calculated as 5 multiplied by 1). After obtaining this difference, we divide it by 4 to determine the score intervals as shown in Table 1.

Table 2 Speaking Skills Assessment

Score	Category
0-59	Poor
60-69	Fairly Good
70-79	Good
80-100	Very Good

Based on the intervals, the range of scores of speaking skills assessment is then defined as Very Good (80-100), Good (70-79), Fair (60-69), and Poor (≤ 59) as depicted in Table 2. These categories reflect the participants' achievements across all speaking sessions and final assessment. The final score of the participants is based on several indicators. The indicators of the performance include pronunciation, comprehension, fluency, vocabulary, and accuracy. Pronunciation refers to speaking a language with appropriate stress, rhythm and intonation and having good pronunciation is ornamental in speaking that enables speaker to blend it society (Hussain, 2017: 20) Comprehension encompasses the ability to understand questions as well as direct and inference information the participants get from oral communication. Fluency refers to the ability to speak smoothly, accurately, and easily while accuracy refers to the ability to produce grammatically correct sentences (Abbaspour, 2016:147). These indicators reflect participants' ability in both speaking practice and their understanding of the sentence structure needed to convey their message to one another.

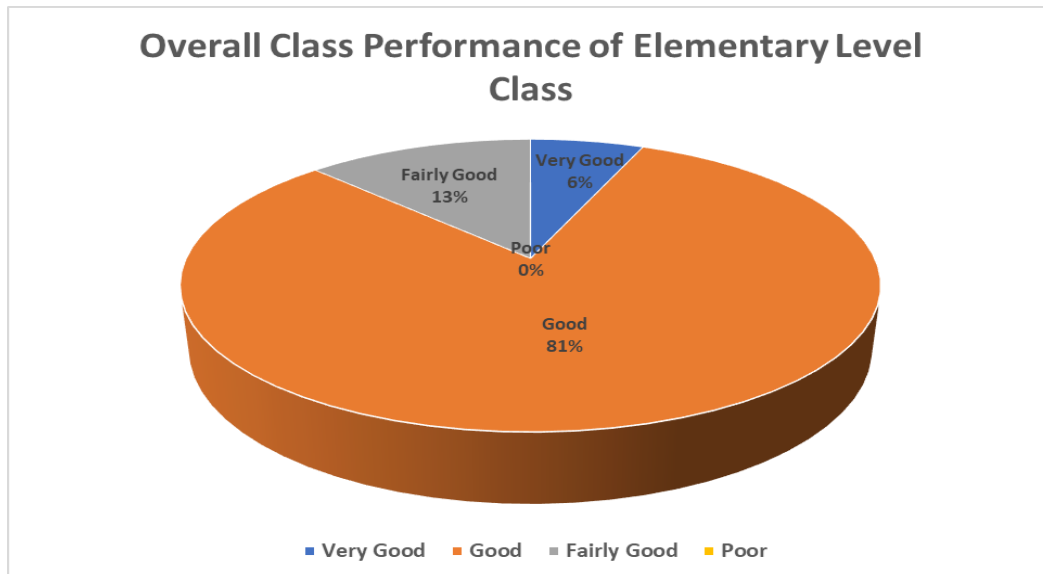


Figure 10. The Overall Class Performance of Elementary Level Class

The majority of participants (81%) performed “good” competence in speaking English due to their good comprehension of daily English conversation. They have adequate knowledge of daily vocabularies and simple sentence structures, but still lack a bit in pronunciation and fluency. Only a few of them have a bit of advanced vocabulary knowledge, probably due to their different experience and frequency of exposure toward English Language. One person with a “very good” predicate from the elementary class possesses quite a wide range of daily vocabularies. He was very active and spoke quite well and sometimes asked questions outside of the materials. His questions often help the other students gain more vocabulary and knowledge to enhance their English conversation skill in their daily life. In general, the difference between those with “good” predicate and “very good” predicate is their fluency and confidence in speaking English. Meanwhile, those who got “fairly good” were quite shy to talk or reluctant to stand out. They actually have basic daily vocabulary knowledge, but are quite struggling and anxious in using those vocabulary to make proper sentences to deliver their intentions. These feelings kind of hinder them from performing better.

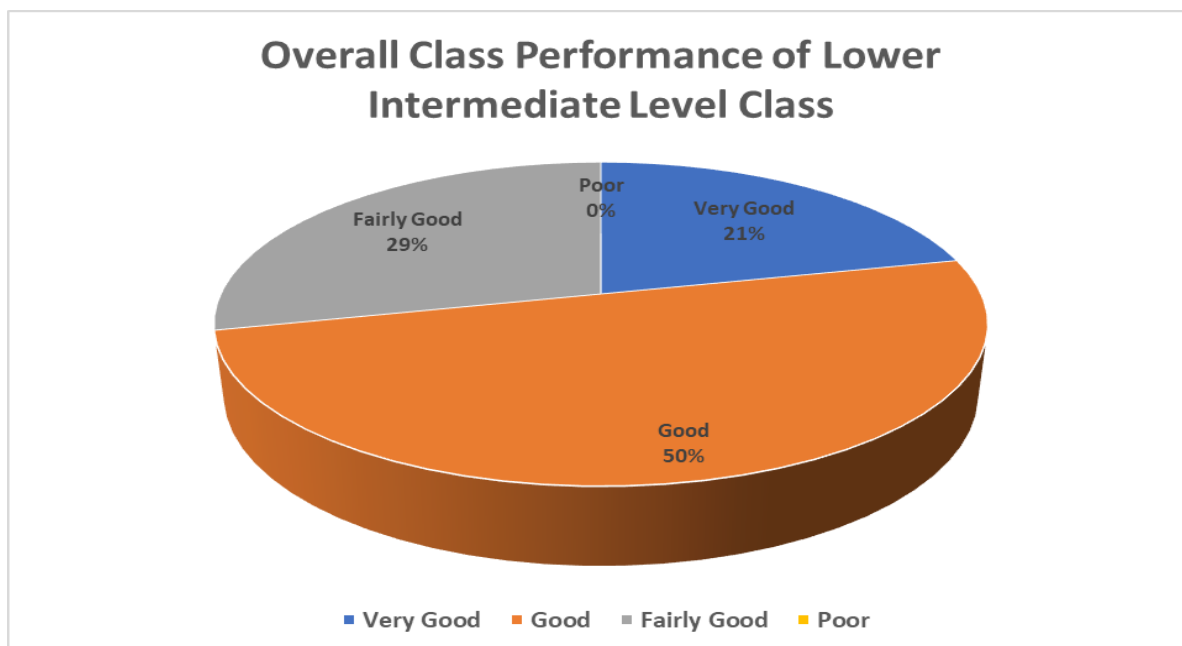


Figure 11. The Overall Class Performance of the Lower Intermediate Level

In the Lower Intermediate Level Class, participants are required to demonstrate their ability to talk about typical days at work from diverse fields of work, past events regarding their pastimes, educational background, and previous career. They also discussed their personal and professional experiences, achievements, and plans, evaluated, and compared working conditions, transportation, and campus facilities. In addition, they had to demonstrate their ability to deliver clear information and instructions to students or visitors as the users of the facilities or units they manage such as laboratories, libraries, and student information centers.

Figure 11 describes that half of the participants in the Lower Intermediate Level Class demonstrated good speaking skills. They express their ideas confidently in well-structured sentences with acceptable pronunciation. Some participants exhibit accents like Sundanese; nevertheless, they remain distinctly comprehensible. Their good performance is also supported by a fairly wide range of vocabulary although in some cases, for example where technical terms are required, some pauses might occur in search of vocabulary when speaking. Those who are in the “very good” category (21%) are highly motivated students that demonstrate the ability to speak with confidence in fairly high accuracy and master a wide range of vocabulary. Their involvement in science projects and report writing might contribute to their vocabulary mastery particularly in technical terms. One participant even runs an English podcast and frequently engages virtually with speakers from other countries to improve his speaking skills. The rest of the participants (29%) have fairly good English proficiency in speaking. The accomplishments of these participants are comparatively less commendable than those of others, primarily attributed to their diminished confidence, a gradual pace in acquiring new vocabulary, and occasional utilization of inaccurate terms in expressing their ideas during oral communication.



Figure 12. The Model of Motivation Constructs concerning Speaking Ability in this learning context

The model of motivation constructs in this study as can be seen in Figure 12 represents the background situation which highlights the importance of motivation as predictors for the success of participants in this particular situation. Based on much research done from various backgrounds, it is suggested that motivation of the learner is one of the factors affecting learners' success in foreign language learning (Dörnyei, 2003; Wang, 2008; Zhang & Fu, 2008). Motivation and success in learning demonstrate reciprocal influence on the part of the learner, that is; high motivation and successful learning, and the other way around (Cook, 2016).

Research highlights that instrumental motivation and integrative motivation are included in attitude. Instrumental motivation occurs from foreign language learning background whilst integrative motivation from second language learning, yet this particular study shows almost equal levels of integrative and instrumental motivation. This is mainly because the participants learned English based on their choice to learn a foreign language. They believed that understanding and speaking English in their daily lives and at work is essential and they were proud to show what they were capable of. They were also aware that learning a language was not merely learning to communicate; learning a language meant learning the culture and lifestyle of native speakers that lead them to appreciate foreign culture. Moreover, they need

English-speaking ability to help the process of internationalization of their employer university (instrumental motivation). According to Gardner (1985), when learners see no practical value for learning the intended language, but they learn it to show their liking or passion for the intended language, it is known as integrative motivation.

Further, in terms of engagement, the participants present quite a high level of interest and efficacy in learning the language, mainly because they used English as a catalyst that inspires them to learn and master the language for practical purposes which can affect their careers. Participants show interest and efficacy in learning the language with positive energy and practical direction for all aspects in supporting learning achievement. The participants are motivated to engage in the relevant activities, expands efforts, persists in the activities, attends to the tasks, shows desire to achieve the goal, enjoys the activities, and others which lead to the mastery of speaking English as the consequence to motivation in learning (Menggo, 2016). In this case, the participants have voluntarily enrolled in the course which encourages them to be involved in classroom interaction.

Participants provide information on how efforts were represented through the enrollment on the language course and the course materials that helped them in achieving the goal to be able to communicate within certain situations. The language course required participants to do a presentation about their job description and daily task and make a roleplay out of it. As for the course materials, participants were taught to speak about their future achievements and plans, express construction criticism, talk about rules in their office, give directions to others, etc. Speaking is defined as much more complex that involves certain skills and several types of knowledge, as part of daily life involving micro and macro skills as basis in supporting communicative competence in terms of language teaching (Thornbury, 2005; Brown, 2004; Freeman, 2003; Fromkin, 2003). Therefore, it is indeed significant to include motivation of the learner in order to achieve successful language achievement which eventually affects the participants to be fluent in speaking English.

5. CONCLUSION & RECOMMENDATIONS

The teaching and learning of English as a foreign language has undergone numerous revisions and changes over the past decades. Previously, the emphasis of learning English was on the part of mastery of structures, whereas the use of speaking or communication has been the stress of teaching English recently. This is in line with the need to increase the ability to communicate among academic society in particular towards ranking and certification in internationalization of higher education. The internationalization of higher education is one of the trends in which almost all countries in the world are interested in dealing, with the hope that it will meet the standard as a globalized community.

This study on how internationalization affects the administrative staff in pursuing certification as well as the ranking of universities prove to meet the urgent need to equip themselves with English proficiency to conduct their tasks and obligations sufficiently. The research questions cover how motivation and competence affect speaking performance of administrative staff which eventually lead to internationalization of higher education.

In this study, the participants are the administrative staff who enrolled in English conversation class with the objectives of improving their ability in English in order to be able to engage more and to be part of the process in procurement of certain certification and ranking of the faculty and university. The participants were divided into two classes, i.e. elementary

level and lower intermediate level. Both classes indicate that the majority of participants have acquired good and very good ability in English speaking skills which exemplify their active participation to improve their English competence.

The constructs of motivation are represented in the form of traits regarding attitude covering instrumental and integrative motivation, engagement including interest and efficacy, and efforts representing language course and course materials. These motivation traits prove to play a significant role in improving participants' ability in terms of speaking towards internationalization.

However, discomfort during the course reveals some participants to produce fairly good results towards their English-speaking skill. These discomforts are exposed in the form of fear of making mistakes, fear of being laughed at, fear of failure, and reluctance to stand out with little impact on participants' confidence in speaking English language.

The adequate competence and proficiency in English endow for further and thorough results that entails the improvement of self-confidence and self-reliance on the part of the participants. The administrative staff may develop communication with local and foreign partners, in which English is vital in every aspect of higher educations' activities to join the global community and to be part of internationalization and globalization in terms of ranking and reputation.

As for the future study, it is necessary to arrange activities or programs that will help administrative staff to overcome their fear of making mistakes, fear of being laughed at, fear of failure, and reluctance to stand out in order to successfully conduct their daily tasks and jobs. It is also important to design the language course and materials to meet their immediate needs in performing their jobs by assisting assessors, lecturers, and students with information in English. International acknowledgement requires a faculty to be curated and accredited by at least an international board, one of the significant parts in this arena is the administrative staff. Therefore, in order to fulfill the need to be recognized globally, the faculty should encourage the administrative staff to improve their English proficiency and to acquire professional certification as laboratory technicians or other kinds of international certification.

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CHAPTER 6

Investigation of Cement Substitution with Industrial Solid Waste as an Alternative Material in Construction: A Review

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ABSTRACT

As the growth of infrastructure in Indonesia increases, the need for concrete rises. The reduction of environmental, energy, and CO₂ impact resulting from the use of concrete for construction is crucial as it is directly associated with the depletion of natural resources and the increasing severity of the greenhouse gases effect. Cement is a fundamental material utilized in the construction industry, working as a major component for ordinary concrete, an essential material for construction for society. This research investigates the possibility of utilization of industrial waste as an additional cementitious ingredient in the manufacturing of concrete. The objective is to emphasize a method of utilizing these waste materials by providing comprehensive details related to their technology, physical, and chemical properties. This is an overview of the present knowledge regarding the effective utilization of industrial waste materials, such as fly ash, ground granulated blast furnace slag, silica fume, and nickel slag, within the building materials sector. An innovative approach that might be adopted is minimizing the utilization of cement by employing eco-friendly alternative materials.

Keywords: Cement, Cementitious, Construction, Fly Ash, Greenhouse gases

A. Introduction

Along with the acceleration of infrastructure development in Indonesia, the demand for concrete is increasing. Minimizing environmental, energy, and CO₂ impacts is crucial. The intensity of concrete used for construction plays a pivotal role, as it is directly proportional to the decline in natural material resources and the increasing greenhouse effect. Cement, a primary material in conventional concrete essential for the community and the construction industry, is obtained through mining natural minerals. The availability of these minerals is dwindling due to production processes that emit greenhouse gases, including carbon dioxide (CO₂), contributing to global warming. An innovative approach to address this is to reduce cement use by incorporating environmentally friendly substitute materials. According to literature (McLellan et al., 2011), global cement production contributes about 5-7% of total carbon dioxide gas (CO₂) emissions to the Earth's atmosphere. Therefore, Ordinary Portland Cement (OPC) can be replaced with more environmentally friendly materials.

Advancements in science and technology have led to the discovery of materials that can substitute cement in making concrete. Geopolymer concrete, also known as Geopolymer Concrete, is one such innovation resulting from research proving that cement can be replaced with industrial solid waste materials. Industrial waste, including fly ash, slag, rice husk ash, and metakaolin, serves as alternatives that can replace the role of cement (Wallah & Rangan, 2006).

Utilizing industrial and agricultural solid waste with the concept of Supplementary Cementitious Materials (SCMs) can act as partial replacements for cement. These materials enhance concrete durability, reduce the risk of thermal cracking, and further minimize CO₂ emissions compared to traditional cement (Berndt, 2009). Previous studies have shown that alternative materials like SCMs can significantly reduce the amount of CO₂ produced by concrete (Flower & Sanjayan, 2007).

Creating environmentally friendly construction involves considering factors that affect the mechanical characteristics and microstructure of concrete, including compressive strength tests, tensile strength tests, and Scanning Electron Microscopy (SEM) tests. In the following sections of this book, the author will discuss the results of several studies on the use of industrial solid waste as an advanced material in environmentally friendly concrete fabrication to promote sustainable development.

B. Literature Review

The previous research journals that became references in this study were with SCMs criteria (*Supplementary cementitious materials*) and the application of different research. The lack of SCMs research using industrial solid waste is a limitation in this study. Usually, industrial solid waste is used as a substitute for aggregate and asphalt mixture in road pavements, because the size and texture of the base material are more in the gradation in aggregate form. To be substituted with cement, the industrial solid waste must go through several processes to form a fine powder /*Powder*. Previous research that became a reference in this study can be seen at

Table 1.

Table 1. Previous Research

No.	Reference	SCMs	Application	Country
1	(Oksri-Nelfia et al., 2016)	Waste recycled concrete	Concrete	French
2	(Karwur et al., 2013)	Glass Powder	Concrete	Indonesian
3	(Raharja, 2013)	Rice Husk Ash	Concrete	Indonesian
4	(Bahedh & Jaafar, 2018)	<i>Fly Ash</i>	Concrete	Malaysia
5	(Berndt, 2009)	<i>Fly Ash</i>	Concrete	Australia
6	(Danasi & Lisantono, 2015)	<i>Fly Ash with Silica Fume and Quartz Sand Filler</i>	Concrete	Indonesian
7	(Saha & Sarker, 2018)	<i>Fly Ash and GGBFS</i>	Concrete	Australia
8	(Kadhafi, 2015)	<i>Copper Slag</i>	Concrete	Indonesian
9	(Moura et al., 2007)	<i>Copper Slag</i>	Concrete	Brazil
10	(Edwin et al., 2016)	<i>Copper Slag</i>	Concrete	Belgium
11	(Afshoon & Sharifi, 2014)	<i>Copper Slag</i>	<i>Concrete Workability</i>	Iran
12	(Sugiri, 2005)	<i>Nickel Slag</i>	Concrete	Indonesian
13	(Oksri-Nelfia et al., 2020)	<i>Nickel Slag</i>	Concrete	Indonesian
14	(Nabiilah et al., 2019)	<i>Nickel Slag</i>	Concrete	Indonesian
15	(Wu et al., 2018)	<i>Nickel Slag</i>	Road	China
16	(Wu et al., 2019)	<i>Nickel Slag</i>	Cement Paste	China

Based on the results of previous research, industrial solid waste can be categorized as SCMs that have the potential to be utilized more optimally.

B.1. Effect of Cement Substitution with Substitute Material

Cement plays an important role in construction materials, both in building structures and road construction. On the other hand, cement has a bad impact on the environment. World cement production of 1.6 billion tons contributes 7% of CO₂ to the atmosphere annually. Every 1 ton of cement production requires about 4 GJ of energy and the manufacture of cement releases 1 ton of CO₂ into the atmosphere (Edser, 2005).

From year to year, the use of cement material in the construction industry is increasing and this increase has an impact on increasing the production of exhaust gas, CO₂ in nature which results in the formation of the greenhouse effect. With the aim of minimizing adverse effects on the environment caused by technology and the use of materials that are not environmentally friendly, experts in the field of construction engineering continue to strive to find alternative technologies and materials that can produce environmentally friendly construction materials without reducing structural performance (Waani et al., 2017).

C. Methodology

The research method used in this study is a literature study method from previous studies that discuss the use of industrial waste such as *fly ash*, *copper slag*, *steel slag*, *nickel slag*, and others as *Supplementary Cementitious Materials* (SCMs). The data and results of the study are expected to provide information to find out how much influence SCMs have on construction materials, and can also be used as a reference for further research so that it can continue to be developed.

D. The Effect of SCMs on Construction Materials

D.1. Procedure for Using SCMs for Construction Materials

Some previous studies refer to SNI-03-6468-2000(SNI 03-6468-2000, 2000) and ASTM International & Statements in 2003, due to the absence of regulations regarding the composition of designs using SCMs in concrete, especially in nickel slag, concrete recycling waste, metakaolin and others. For road construction, research (Wu et al., 2018) Refer to the provisions in GB13693-2005 for mineral clinker. To make cement paste with SCMs, research (Wu et al., 2019) do *dry mixed* at *nickel slag* and Ca(OH)₂ with a mass ratio of 1:1 for 5 minutes, then mixed with water to form *binders* nickel slag. The water/binders ratio is 0.42. To *binders* with *nickel slag*, *nickel slag* mixed with water so that a ratio is obtained *water/binders* the same.

D.2. Construction Material Composition in Previous Research

Previous research used different SCMs, as well as different construction applications. Therefore, the composition of the material mixture in each study is certainly different. Variations in the composition of concrete mixtures are not only carried out with SCMs, some studies make substitutions on coarse aggregates and fine aggregates, mixing two types of industrial waste, with variations in cement water factor (w / c), and the presence or absence of fine aggregates, as well as the number and type of *superplasticizer use*. The many variations carried out will certainly affect the characteristics of concrete.

There is a slight drawback in previous studies that do not include the composition of the concrete mixture completely and in detail, as well as the different ways of calculating the composition of the mixture so that there are some incomplete data and must be explored further. The composition of the material mixture is divided into three tables, where

Table 2 is a composition of construction materials that use SCMs in previous research with concrete applications, Table 3 is the composition of previous research with road applications, and Table 4 is the composition of previous research with the application of cement paste.

Table 2. Composition of Previous Research with Concrete Application

Reference	Coarse Aggregate	Fine Aggregate	SP*	Water	Cement	W/C	Waste recycled concrete	Glass Powder	Rice Husk Ash	Fly Ash	Silica Fume	Quartz Sand	GGBFS	Copper Slag	Nickel Slag	Steel Slag
	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3		kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3
(Oksri-Nelfia et al., 2016)		1431		299	499	0.6	0	–	–	–	–	–	–	–	–	–
		1431		299	374	0.8	99	–	–	–	–	–	–	–	–	–
		1431		299	249	1.2	197	–	–	–	–	–	–	–	–	–
		1431		299	125	2.4	296	–	–	–	–	–	–	–	–	–
(Karwur et al., 2013)	848	735	–	203	388	0.5	–	0	–	–	–	–	–	–	–	–
	848	735	–	203	365	0.6	–	23	–	–	–	–	–	–	–	–
	848	735	–	203	357	0.6	–	31	–	–	–	–	–	–	–	–
	848	735	–	203	349	0.6	–	39	–	–	–	–	–	–	–	–
	848	735	–	203	341	0.6	–	47	–	–	–	–	–	–	–	–
	848	735	–	203	330	0.6	–	58	–	–	–	–	–	–	–	–
(Raharja, 2013)	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	0%	–	–	–	–	–	–	–
	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	2.5%	–	–	–	–	–	–	–
	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	5%	–	–	–	–	–	–	–
	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	7.5%	–	–	–	–	–	–	–
	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	10%	–	–	–	–	–	–	–
	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	15%	–	–	–	–	–	–	–
(Bahedh & Jaafar, 2018)	–	1050	40	160	657	0.2	–	–	–	0	–	–	–	–	–	–
	–	1050	40	160	591.3	0.3	–	–	–	65.7	–	–	–	–	–	–
	–	1050	40	160	525.6	0.3	–	–	–	131.4	–	–	–	–	–	–
	–	1050	40	160	459.9	0.3	–	–	–	197.1	–	–	–	–	–	–
	–	1050	40	160	394.2	0.4	–	–	–	262.8	–	–	–	–	–	–

Reference	Coarse Aggregate	Fine Aggregate	SP*	Water	Cement	W/C	Waste recycled concrete	Glass Powder	Rice Husk Ash	Fly Ash	Silica Fume	Quartz Sand	GGBFS	Copper Slag	Nickel Slag	Steel Slag
	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³		kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³
(Berndt, 2009)	1118.2	739.1	3.90	156.3	390.4	0.4	–	–	–	0		–	0	–	–	–
	1090.3	720.7	3.81	152.4	190.3	0.8	–	–	–	190.3		–	0	–	–	–
	1119.1	739.7	3.91	156.5	195.4	0.8	–	–	–	0		–	195.4	–	–	–
	1117.9	738.0	3.91	156.4	117.3	1.3	–	–	–	0		–	273.6	–	–	–
	1094.0	723.1	3.82	153.0	191.0	0.8	–	–	–	95.5		–	95.5	–	–	–
(Danasi & Lisantono, 2015)	N/a*	N/a*	2%	N/a*	N/a*	N/a*	–	–	–	0%	10%	10%	–	–	–	–
	N/a*	N/a*	2%	N/a*	N/a*	N/a*	–	–	–	5%	10%	10%	–	–	–	–
	N/a*	N/a*	2%	N/a*	N/a*	N/a*	–	–	–	10%	10%	10%	–	–	–	–
	N/a*	N/a*	2%	N/a*	N/a*	N/a*	–	–	–	15%	10%	10%	–	–	–	–
	N/a*	N/a*	2%	N/a*	N/a*	N/a*	–	–	–	20%	10%	10%	–	–	–	–
(Saha & Sarker, 2018)	0	1355	–	197.87	421	0.47	–	–	–	181	–	–	–	–	–	–
	435	1015	–	197.87	421	0.47	–	–	–	181	–	–	–	–	–	–
	873	678	–	197.87	421	0.47	–	–	–	181	–	–	–	–	–	–
	1306	338	–	197.87	421	0.47	–	–	–	181	–	–	–	–	–	–
	1744	0	–	197.87	421	0.47	–	–	–	181	–	–	–	–	–	–
	0	1355	–	197.87	421	0.47	–	–	–	–	–	–	181	–	–	–
	435	1015	–	197.87	421	0.47	–	–	–	–	–	–	181	–	–	–
	873	678	–	197.87	421	0.47	–	–	–	–	–	–	181	–	–	–
	1306	338	–	197.87	421	0.47	–	–	–	–	–	–	181	–	–	–
1744	0	–	197.87	421	0.47	–	–	–	–	–	–	181	–	–	–	
(Kadhafi, 2015)	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	–	–	–	–	–	0%	–	–
	N/a*	N/a*	N/a*	N/a*	N/a*	N/a*	–	–	–	–	–	–	–	10%	–	–

Reference	Coarse Aggregate	Fine Aggregate	SP*	Water	Cement	W/C	Waste recycled concrete	Glass Powder	Rice Husk Ash	Fly Ash	Silica Fume	Quartz Sand	GGBFS	Copper Slag	Nickel Slag	Steel Slag
	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3		kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3
	N/a*	N/a*	N/a*	N/a*	80%	N/a*	–	–	–	–	–	–	–	–	20%	–
	N/a*	N/a*	N/a*	N/a*	70%	N/a*	–	–	–	–	–	–	–	–	30%	–
	N/a*	N/a*	N/a*	N/a*	60%	N/a*	–	–	–	–	–	–	–	–	40%	–
	N/a*	N/a*	N/a*	N/a*	50%	N/a*	–	–	–	–	–	–	–	–	50%	–
	N/a*	N/a*	N/a*	N/a*	40%	N/a*	–	–	–	–	–	–	–	–	60%	–
	N/a*	N/a*	N/a*	N/a*	100%	N/a*	–	–	–	–	–	–	–	–	0%	–
	N/a*	N/a*	N/a*	N/a*	90%	N/a*	–	–	–	–	–	–	–	–	10%	–
	N/a*	N/a*	N/a*	N/a*	80%	N/a*	–	–	–	–	–	–	–	–	20%	–
	N/a*	N/a*	N/a*	N/a*	70%	N/a*	–	–	–	–	–	–	–	–	30%	–
	N/a*	N/a*	N/a*	N/a*	60%	N/a*	–	–	–	–	–	–	–	–	40%	–
	N/a*	N/a*	N/a*	N/a*	50%	N/a*	–	–	–	–	–	–	–	–	50%	–
	N/a*	N/a*	N/a*	N/a*	40%	N/a*	–	–	–	–	–	–	–	–	60%	–
(Oksri-Nelfia et al., 2020)	1030	662	–	195	400	0.47	–	–	–	–	–	–	–	–	0	–
	1030	662	–	195	380	0.47	–	–	–	–	–	–	–	–	20	–
	1030	662	–	195	360	0.47	–	–	–	–	–	–	–	–	40	–
	1030	662	–	195	340	0.47	–	–	–	–	–	–	–	–	60	–
	1030	662	–	195	320	0.47	–	–	–	–	–	–	–	–	80	–
	1030	662	–	195	300	0.47	–	–	–	–	–	–	–	–	100	–
(Nabiilah et al., 2019)	1109.38	590.85	5.92	96.32	591.94	0.16	–	–	–	–	–	–	–	–	0	–
	1109.38	587.54	5.62	84.86	562.34	0.15	–	–	–	–	–	–	–	–	29.60	–
	1109.38	584.22	5.33	85.14	532.74	0.16	–	–	–	–	–	–	–	–	59.19	–
	1109.38	580.90	5.03	85.42	503.15	0.17	–	–	–	–	–	–	–	–	88.79	–
	1109.38	577.58	4.74	85.70	473.55	0.18	–	–	–	–	–	–	–	–	118.39	–

Reference	Coarse Aggregate	Fine Aggregate	SP*	Water	Cement	W/C	Waste recycled concrete	Glass Powder	Rice Husk Ash	Fly Ash	Silica Fume	Quartz Sand	GGBFS	Copper Slag	Nickel Slag	Steel Slag
	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³		kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³	kg/m ³
1109.38	574.26	4.44	85.98	443.95	0.19	–	–	–	–	–	–	–	–	–	147.98	–
1109.38	570.94	4.14	86.26	414.35	0.21	–	–	–	–	–	–	–	–	–	177.58	–

Information:* : the calculation of the composition of the mixture is carried out by means of *by weight*

SP* : *Superplasticizer*

N/a* : *not available* (no use listed in the literature)

% : the calculation of the composition of the mixture refers to the proportion of cement

On research (Saha & Sarker, 2018), substitutions are made on SCMs and their coarse aggregates and fine aggregates. In addition, research (Sugiri, 2005) perform fineness comparisons of SCMs *nickel slag* with cement. The fineness of the cement used = 312 m² / kg, while the fineness *nickel slag powder* type A is coarser than cement at 284 m²/kg, and fineness *nickel slag powder* type B is 306 m² / kg which is closer to the fineness of cement.

Table 3. Composition of Previous Research with Road Application

Reference	Sample	Lime tone	Fly Ash	Nickel Slag	Clay	Steel Slag	Gypsum	CaF ₂	KH	BC	IM
(Wu et al., 2018)	A	74	4	14	–	7	0.6	0.4	0.90	1.31	0.67
	B	73	2	20	4	–	0.6	0.4	0.80	1.91	0.64
	C	75	2	18	4	–	0.6	0.4	0.88	1.90	0.66
	D	70	3	15	4	–	8	1	0.87	1.88	0.77

Description: KH : *Lime Saturation Factor*
 BC : silica modulus
 IM : alumina modulus

Table 4. Composition of Previous Research with Cement Paste Application

Reference	Sample	Cement	Gypsum	Nickel Slag
(Wu et al., 2019)	0	95	5	0
	1	85	5	10
	2	75	5	20
	3	65	5	30
	4	55	5	40
	5	45	5	50

Description: the calculation of the composition of the mixture is carried out by the method by *weight*

D.3. Characteristics of Test Objects in Previous Research

The characteristics of construction materials can be seen in the results of compressive strength, tensile strength, and *Scanning Electron Microscopy (SEM)*. *Workability or slump flow testing is also carried out to determine the consistency (workability or not) of fresh concrete mixture to determine the workability level of the influence of SCMs material with cement and the effect of adding admixture to the test specimen mixture.*

D.3.1. Mechanical Characteristics of Test Specimens

The mechanical characteristics analyzed are *workability* test, compressive strength test, and tensile strength test. Treatment methods (curing) carried out in previous studies also vary, some use water curing *and* water *curing*. The test result observed was a 28-day-old specimen.

Table 5. Mechanical Characteristics of Test Specimens in Previous Research

Reference	<i>Slump</i>	<i>Flow Table</i>	<i>Curing</i>	<i>Temperature</i>	Compressive Strength	Strong Tensile
	Mm	Mm	<i>water</i>	°C	Mpa	Mpa
(Oksri-Nelfia et al., 2016)	45.8 ± 1.45	–	<i>Water curing</i>	–		–
	38.4 ± 0.46	–		–		–
	16.4 ± 0.19	–		–		–
	4.2 ± 0.19	–		–		–
(Karwur et al., 2013)	77	–	<i>Water curing</i>	–	26.23	–
	81	–		–	27.69	–
	85	–		–	29.15	–
	85	–		–	31.07	–
	80	–		–	27.12	–
	80	–		–	24.13	–
(Raharja, 2013)	–	18.25	<i>Water curing</i>	–	87.96	–
	–	17.25		–	92.1	–
	–	16.6		–	90.03	–
	–	16.15		–	97.28	–
	–	15.55		–	100.38	–
	–	14.85		–	80.72	–
(Bahedh & Jaafar, 2018)	–	50	<i>Water curing</i>	–	78	–
	–	120		–	90	–
	–	170		–	105	–
	–	215		–	118	–
	–	240		–	122	–
	–			–		
(Berndt, 2009)	75	–	<i>Water curing</i>	23°C	42	2.5
	170	–			24	–
	65	–			46	2.7
	60	–			44	2.2
	130	–			38	–
(Danasi & ;	175	–	<i>Water curing</i>	–	38.07	–
	197	–		–	74.04	–
	204	–		–	66.44	–

Reference	<i>Slump</i>	<i>Flow Table</i>	<i>Curing</i>	<i>Temperature</i>	Compressive Strength	Strong Tensile
	Mm	Mm	<i>water</i>	°C	Mpa	Mpa
Lisantono, 2015)	188 203 195	– – –		– – –	58.86 58.93 66.26	– – –
(Saha & Sarker, 2018)	N/a*		<i>Water curing</i>	– – – – – – – – – –	18 18.5 19 17 15 19 19.5 20 19.5 18	– – – – – – – – – –
(Kadhafi, 2015)	N/a*		<i>Water curing</i>	– – – – –	19.249 21.798 23.496 20.76 17.174	– – – – –
(Moura et al., 2007)	70 ± 10	– – – – –	<i>Water curing</i>	– – – – –	38.7 28.1 22 39.6 34.8 28.7	3.9 3.23 2.95 4.4 3.8 3.2
(Edwin et al., 2016)	– – – – –	185 188 193 215 218	<i>Fountaining</i>	20 ± 2	155 128 135 121 125	
(Afshoon & Sharifi, 2014)	– – – – – – –	670 695 655 670 655 660 675	– – – – – – –	– – – – – – –	– – – – – – –	– – – – – – –
	N/a*		N/a*	–	65.92	–

Reference	<i>Slump</i>	<i>Flow Table</i>	<i>Curing</i>	<i>Temperature</i>	Compressive Strength	Strong Tensile
	Mm	Mm	<i>water</i>	°C	Mpa	Mpa
(Sugiri, 2005)				–	66.71	–
				–	62.21	–
				–	56.47	–
				–	54.8	–
				–	42.1	–
				–	40.81	–
				–	65.92	–
				–	67.13	–
				–	68.75	–
				–	57.59	–
				–	53.22	–
			–	43.31	–	
			–	41.77	–	
(Oksri-Nelfia et al., 2020)	20 ± 0	–	–	–	41.7	–
	20 ± 6	–	–	–	39.8	–
	40 ± 8	–	–	–	36.1	–
	40 ± 8	–	–	–	34.2	–
	60 ± 10	–	–	–	30.2	–
	60 ± 10	–	–	–	28.4	–
(Nabiilah et al., 2019)	210	–	<i>Water curing</i>	–	–	6.2
	230	–		–	–	6.4
	230	–		–	–	6.3
	240	–		–	–	5.8
	250	–		–	–	5.3
	250	–		–	–	4.9
	250	–		–	–	4.8
(Wu et al., 2018)	–	–	–	1350	52.5	14.5
	–	–	–		50	10
	–	–	–		40	13.5
	–	–	–		35	6
	–	–	–			

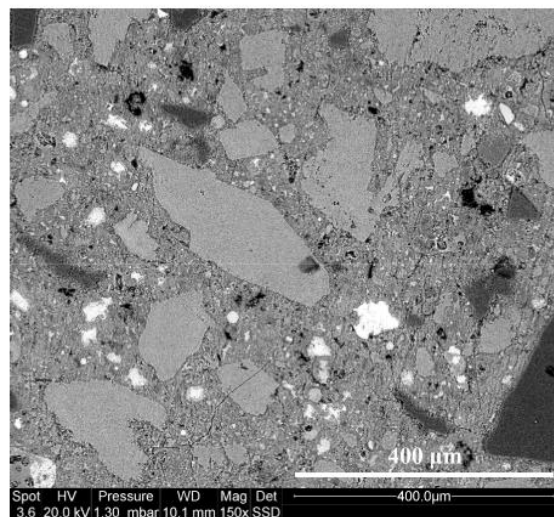
Description: n/a* : *not available* (not listed in literature)

At Table 5 It can be concluded that the composition of the mixture of test specimens and methods *Curing* The specimen affects the results of the compressive strength and tensile strength of the specimen. The use of SCMs can increase compressive strength and tensile strength at the right proportions, if the proportions used excessively will decrease the strength.

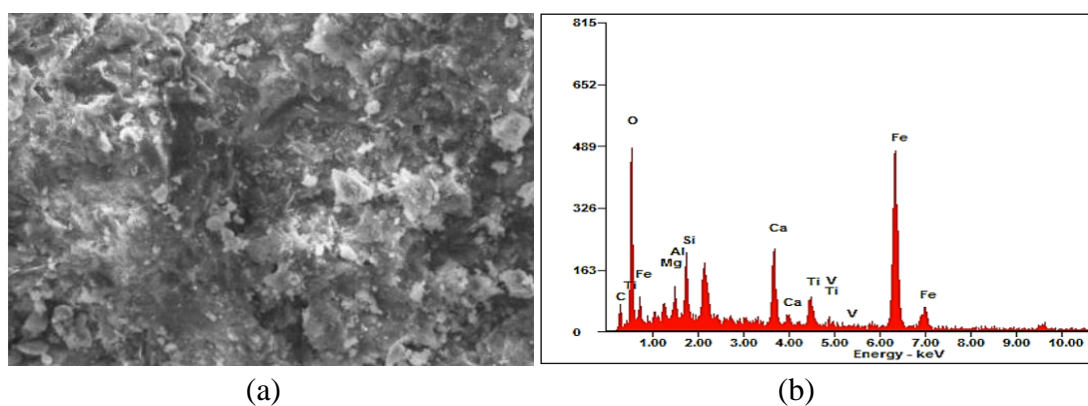
In some studies, the compressive strength achieved exceeds $f_c' \geq 41.4$ MPa. Where it can be categorized as high quality concrete (SNI 03-6468-2000, 2000).

D.3.2. Microstructural characteristics in concrete

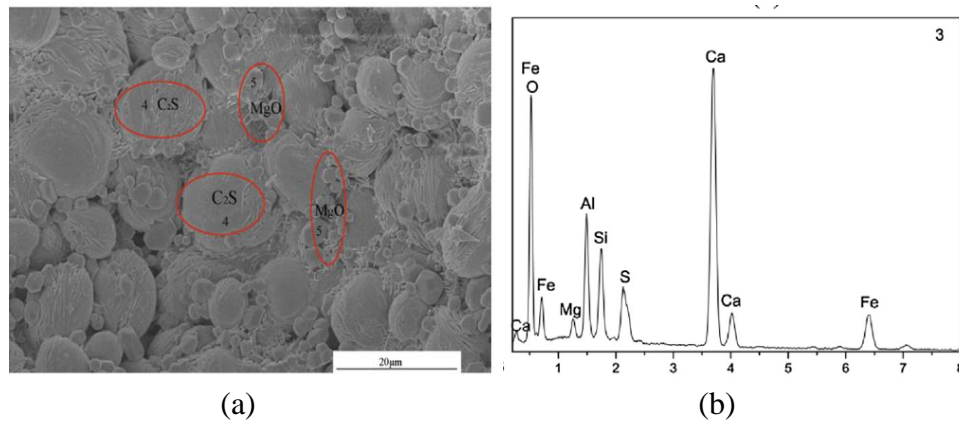
The characteristics of the analyzed minerals are: *Scanning electron microscopy (SEM)*. SEM observations were made on concrete with recycled concrete waste SCMs, concrete with SCMs *nickel slag powder* 28 days lifespan, road construction with SCMs *nickel slag*, and cement paste with 30% SCMs *nickel slag* age 7 days and 120 days. From the results of the SEM image with recycled concrete waste (Picture 1) shows that there are still parts of cement that have not been hydrated even with a low percentage of 4% shown in white. These results provide *impact* which is good in the possibility of rehydration process the use of such concrete waste as a cement substitute. While on Picture 2 It is shown that in concrete containing nickel composition there is a content of Magnesium, alumina, and calcia which is shown from the results of SEM with EDS analysis where the mineral content contained in the concrete has similarities with conventional concrete that uses 100% cement in the mixture.



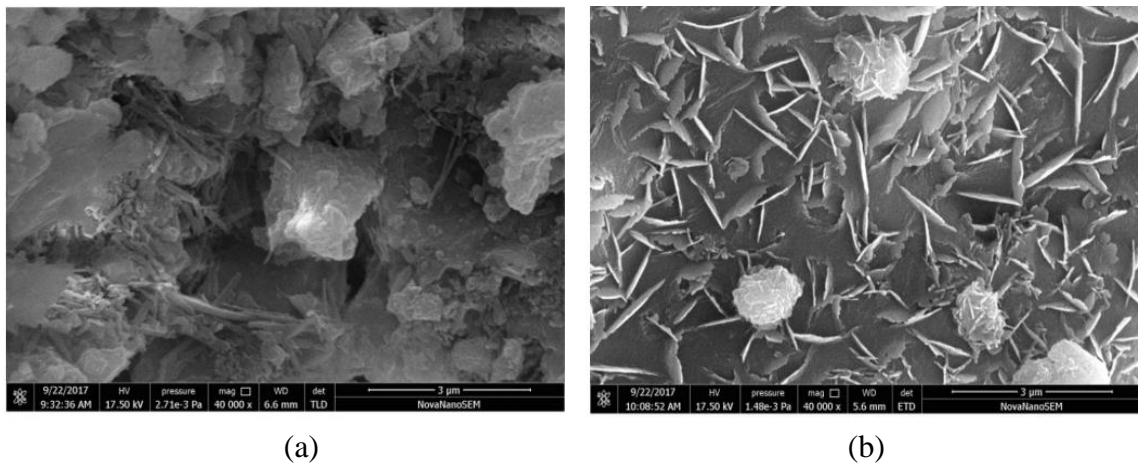
Picture 1. Results of Concrete SEM with SCMs of Recycled Concrete Waste (Oksri-Nelfia et al., 2016)



Picture 2. (a) Concrete SEM Results with SCMs Nickel Slag Powder, (b) EDS Analysis (Oksri-Nelfia et al., 2020)



Picture 3. (a) SEM Results of Road Construction with SCMs Nickel slag, (b) EDS Analysis (Wu et al., 2018)



Picture 4. SEM yield of cement paste with SCMs 30% *nickel slag* (a) age 7 days ; (b) age 120 days (Wu et al., 2019)

E. Conclusions and Recommendation

E.1. Conclusions

From the results of research based on literature studies, research (Raharja, 2013) with rice husk ash SCMs, research (Edwin et al., 2016) with SCMs copper slag, and research (Sugiri, 2005) with SCMs *nickel slag powder* is able to reach $FC' \geq 41.4$ Mpa so it can be categorized as high quality concrete. This proves that industrial solid waste is very competent if used in the right proportion.

E.2. Recommendation

For future research, testing can be done over the age of 28 days to see the effect of pozzolan from industrial solid waste. The type of *admixture* can also be varied because it affects the strength of the test object.

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CHAPTER 7

Embracing Voluntary Green Behavior Among Academician: Evidence from Indonesia

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ABSTRACT

Nowadays, universities are looking for ways to reduce environmental impact. This is linked to the higher education institutions' commitment to the United Nations' Sustainable Development 2030 Program. However, there are still many universities in Indonesia that face challenges in increasing lecturers' sustainability effort. Therefore, strategic steps need to be taken in determining factors contributing to green voluntary behavior among lecturers. This research presents Trisakti University as a green university based on the UI Green Metric World University Ranking. This study examines the driving factors of voluntary green behavior among lecturers. This research is expected to help Trisakti University increasing the commitment of lecturers and to help Trisakti University to continue to achieve its environmental excellence and to become green guide for other universities. The findings shows that green strategy and green human resource management are well implemented in driving voluntary green behavior among lecturers. This is proven by the strategic measures and human elements of sustainability that Trisakti University consider. Findings also show efforts and initiatives carried out by lecturers, consisting of innovation, research publication, seminars, campaigns, special interest groups, community outreach focusing on the environment. Everything can be achieved with environmentally friendly strategies that consider the impacts of each activity that takes place at the university. Apart from the role of green strategy and green human resources management, the role of the whole academic community is emphasized as the key to greener Trisakti University. **Keywords:** sustainability, united nations' sustainable development 2030 agenda, green strategy, green voluntary behavior, trisakti University

1. INTRODUCTION

Nowadays, with ongoing environmental issues especially related to climate change and global warming, sustainability is one of the most important agendas of the higher education institutions. So that higher education institutions with their commitment to implement environmentally friendly initiatives to support the achievement of sustainability, especially by reducing water use, energy efficiency, reducing waste, providing indoor workplaces with clean air and a healthy workplace atmosphere. These initiatives can create better quality lives, better economic conditions, and a reduced carbon footprint (Jnr, 2021).

Jnr (2021) further explains that this is done by higher education institutions, because universities are like small cities in terms of urban characteristics and population size. Activities that occur in the university environment can have a direct or indirect impact on the natural environment. So that practitioners in higher education institutions are required to implement environmentally friendly practices where there are solutions in achieving sustainability in universities.

Winarto et al. (2022) coined that the efforts made by the university not only aim to demonstrate their responsibility to the environment but also consider the role of human resources and factors that can encourage the performance of the university environment among the academic community, especially lecturers to achieve a sustainable, i.e. through OCBE. Organizational Citizenship Behavior toward the Environment (OCBE) An extra effort by employees in increasing their involvement in protecting the environment in the workplace is an essential factor in ensuring active participation of employees in environmental conservation programs. With employees who have a high OCBE, employees will be more involved in creating new practices and initiatives that can be developed in environmental conservation procedures and policies. Thus, the environmental performance of the organization can also be improved.

Although the role and environmental responsibility of higher education institutions are clearly stated in the SDGs, history shows low involvement and slow response from higher education institutions to sustainable development. Thus, the three big questions are: 1) do universities that respond publicly to the SDGs consider sustainable development as an agenda and action for strategic planning? 2) how can OCBE helps the higher education institutions in achieving its SDGs goals? 3) what are the strategic factors that drive high level of OCBE in the higher education institutions?

This research itself focuses on Trisakti University which is one of the private universities in Indonesia that contributes to the fulfillment of SDGs goals and is proactive in implementing green practices. Not only that, Trisakti University also ranked as one of the green and sustainable universities based on the UI Green Metric World University Ranking. Of course, this ranking was achieved by Trisakti University by passing various challenges. However, the initiatives carried out by Trisakti University, especially in encouraging environmentally friendly behavior of the academic community, are supported by the existence of green strategies and green human resource management.

Environmentally friendly behavior by the academic community, especially OCBE, is needed to encourage high commitment from the academic community, especially lecturers, to consider the environmental impact of individual and university actions in daily operations (Ma

& Ma, 2023). With the strong commitment of the academic community to the environment, the ethical responsibility of the academic community can also be built and environmental preservation at the university can be fulfilled optimally.

One of the many strategic factors that can encourage the creation of OCBE in the university environment is green strategy. The university as the frontline in higher education institutions focuses on designing policies or strategies that focus on protecting the environment (de Castro et al., 2023). For example, by emphasizing the importance of resource management and the ability of resources to allocate their attention into environmental practices that can increase the proactivity of the academic community in carrying out its role as a green champion.

Green human resource management is no less important in building an altruist attitude in the academic community. At Trisakti University, HR management provides stimuli both in terms of strengthening the competence of lecturers, environment-themed motivation, and facilities provided by Trisakti University in increasing the involvement of lecturers in environmental conservation actions that can strengthen and encourage lecturers, with the aim of succeeding the ideals of Trisakti University in preserving the environment.

This research offers a case study related to how a tertiary institution, namely Trisakti University, sees the fulfillment of SDG goals as a catalyst that can encourage universities to form ethical responsibilities among lecturers and Trisakti University's response in creating strategic approaches that can help realize the implementation of green universities in a sustainable manner.

2. LITERATURE REVIEW

Green Strategy

Green strategy is needed in managing the environment by the organization because it can support an environmentally friendly climate among the members of the organization and increase the chances of employees in shaping their environmentally friendly behavior. With the green strategy, management can align organizational attention in supporting practices that support environmental management by creating various standards through rewards or sanctions and support organizational members to voice their concerns regarding ethical issues and consider the importance of protecting the natural environment in the organizational environment (Naz et al., 2021).

A well-communicated green strategy into organizational policies can have more influence than just employee compliance where it can instill strong enough motivation for employees to act and demonstrate environmentally friendly behavior. In addition, the strategy can also be a clue for employees that the environmental conservation movement is something important for the organization, so that it can inspire employees to engage in efforts that go beyond their formal responsibilities in the organization in protecting the environment (OCBE) (Kim et al., 2020).

Green Human Resource Management

The organization ensures the fulfillment of environmental performance by emphasizing aspects of HR management as reflected in research by Anwar et al. (2020), namely green competence, green motivation, and green employee involvement by integrating these practices with the aim of maintaining the organizational environment. Employees who become agents of

change spend time demonstrating environmentally friendly behaviors in the workplace and supporting the organization to balance the economic, social, and environmental goals of the organization to achieve a greener organization.

One example of how green human resource management affects OCBE is when green training and green development programs as important aspects of green human resource management help improve employee skills and employee volunteer behavior towards environmental management. In addition, motivational practices provided by organizations, especially those based on performance appraisals and rewards, can also stimulate employee voluntary behavior through providing motivation to employees and aligning individual employee goals with organizational environmental goals (Anwar et al., 2020).

Organizational Citizenship Behavior toward the Environment (OCBE)

OCBE provides an opportunity for employees to engage more proactively in managing the organizational environment. Employees with high OCBE levels tend to have high levels of performance which can be motivated by the individual's own motivation. With this stimulus helps organizations in directing, strengthening individual efforts, and providing enthusiasm for employees to volunteer to succeed all organizational goals in preserving the environment (Kim et al., 2020).

The study by Ojedokun (2021) also provides an explanation regarding the role of OCBE which helps organizations in stimulating participation among employees and initiating change through various programs in increasing environmental awareness in organizations. Having employees who have a high level of OCBE also facilitates the exchange of ideas related to environmental conservation and awareness for employees to enrich skills and knowledge that focuses on environmental sustainability.

3. RESEARCH METHOD

This research adopts a case study approach and represents empirical findings related to the sustainability agenda of Trisakti University. Two sources of information used in this case study include: a literature review related to the role of higher education institutions in achieving SDGs goals and analysis and study of Trisakti University's agenda as an agent of green change to achieve environmental sustainability. Systemic transformation and planning within Trisakti University are depicted in this case study. This case study also details the efforts made by the academic community of Trisakti University, especially lecturers in demonstrating concern for the environment which can be a guide for other universities in implementing green agendas in their daily operations.

4. RESULT AND DISCUSSION

Profile of Trisakti University

Trisakti University was established on November 29, 1965, as the only private university in Indonesia established by the Government of the Republic of Indonesia, is located very strategically in Jakarta which is the center of the government of the Republic of Indonesia. Trisakti University strives to become one of the universities that can become a university that can bring change both on a national and international scale.



Figure 1. Trisakti University (Source: Trisakti.ac.id, 2023)

Various achievements have been achieved by Trisakti University, one of which is the achievement as one of the green universities based on the UI Green Metric World University Ranking (UI Green Metric, 2022). Trisakti University is ranked 65th with a total score of 4960 where the assessment categories consist of: 1) Setting and infrastructure with a score of 665, 2) Energy and Climate Change with a score of 1035, 3) Waste with a score of 825, 4) Water with a score of 500, 5) Transportation with a score of 685 and 6) Education with a score of 1250.

Based on observations made by researchers, both field and online observations. Trisakti University has many success factors as well as advantages in managing its environment. These success factors are illustrated in the activities reflected in the variables of this study, namely green strategy, green human resource management, and Organizational Citizenship Behavior toward the Environment (OCBE). A detailed explanation of each research variable is summarized in the following discussion points:

Trisakti University's Green Agenda

Green Strategic Planning and Organizational Values

Luu (2020) explains how crucial the role of green strategy is in determining the level at which environmental maintenance activities are seen as a priority in an organization. With these priorities, environmental conservation actions can be translated into meaningful actions and ensure the fulfillment of these goals.

In fulfilling environmental performance and encouraging environmentally friendly behavior among the academic community, Trisakti University builds a strategic plan that is concretely contained in the Strategic Plan and Operational Plan 2020/2021 – 2024/2025. The plan was prepared based on the Rector Regulation of Trisakti University Number: 16 of 2020 concerning the Strategic Plan and Operational Plan of Trisakti University.

This policy is prepared so that Trisakti University can continue to play a role in building quality Indonesian human resources and could compete globally. Therefore, a comprehensive, holistic, and predictive medium-term development plan is needed by always paying attention to internal capabilities and external developments.

In the strategic and operational plan, Trisakti University underlines the importance of environmental conservation at Trisakti University. Some policies that focus on achieving optimal environmental performance are contained in:

1. In strategy 8 which titled Improving the Quality of Infrastructure Facilities and Creating a Friendly, Clean, Orderly, and Safe Campus Environment to Support the Comfort of the Learning Process, explained that Trisakti University provides a comfortable and environmentally friendly green open space with a program description; 1) rearranging green spaces on all campuses of Trisakti University, 2) providing trash cans based on the 3R concept, and 3) developing a clean culture of the academic community of Trisakti University as a role model.
2. In the description of policy no.3, it is mentioned that Trisakti University provides healthy, safe, and comfortable canteens and environmentally friendly, with program descriptions: 1) formulating policies and guidelines for canteen management in the campus environment, 2) compiling standardization and building canteens that meet health, safety, and comfort and are environmentally friendly, 3) implementing cashless transactions.
3. In the policy description no. 4, it is explained that Trisakti University provides clean, neat, K3-compliant, and friendly infrastructure to all stakeholders including people with disabilities, with program descriptions: 1) formulating K3 management policies and guidelines and carrying out K3 audits.

Not only that, the findings obtained by researchers also show a commitment by Trisakti University to improve its environmental performance through vision and mission, especially reflected in the overall mission of Trisakti University which includes:

1. To increase the participation of Trisakti University in producing human resources who have intellectual abilities, international standards and Tridharma Trisakti characteristics through educational and teaching activities.
2. To increase research activities to develop science, technology, and art based on local wisdom to answer national problems and improve the quality of life and civilization.
3. To increasing the role of Trisakti University in supporting the needs of society and industry through community service activities.
4. To increase the commitment of Trisakti University in upholding good university governance.

The vision and mission of Trisakti University reflect green values that can help motivate and offer opportunities for academics to be proactively involved so that such involvement can contribute to the university's environmental performance. This is in line with the findings made by Hooi et al. (2021).

Trisakti University's Human Resource Management towards Green Strategic Plan Green Background of Academics

To be able to transform optimally, green initiatives are needed that support the success of human resource management. Transformation from traditional HR management to green human resource management requires policies that are aligned with the organization's vision that can drive policy implementation that leads to environmental sustainability (Hameed et al., 2019).

Trisakti University to build human resources that can play a role in green environmental management, Trisakti University hires lecturers based on the environmental awareness that the

individual has. Qualifications, competencies, and experience that focus on the environment, be it from work experience, research owned especially by lecturers who are also experts serving in various institutions that promote the sustainability of various aspects of life in the Trisakti University environment such as Trisakti Sustainability Center, CECT Sustainability, and Sustainable Industry Research Centre (PSIB).

Green background is seen as an important element in determining the level of green voluntary activities of academics. This is supported by research by He et al. (2021) which states that academic expertise, especially senior managers in an organization who sit in strategic positions, affects green innovations that can be created. The green background needed to form an innovation through green voluntary behavior includes technical background, overseas background, and political connection that can improve the academic experience of senior managers towards the resulting green innovation.

Motivation Inducing Green Behavior Among Academics

Kim (2020) assesses that motivation can have an influence on emotions provided by external stimuli. To be able to improve environmentally friendly behavior among academics, Trisakti University offers various forms of motivation such as green performance indicators for lecturers and the availability of UT Bike and Parking Space.

Green Performance Indicators

Green performance indicators are applied in the performance appraisal of lecturer employees. This is stated in the Academic Policy of Trisakti University in section 5.2.1 of the General Research Policy, numbers 3 and 4.

Number 3 is stated "The direction of research carried out by Trisakti University must follow the focus areas, themes, and research topics contained in Presidential Regulation Number 38 of 2018 concerning the National Research Master Plan (RIRN)".

Number 4 is stated "Trisakti University's research accommodates the issue of Gender Equity and Social Inclusion (GESI)".

In addition, based on data by LPPM Trisakti University, the 2020-2030 Research Road Map of Trisakti University (Figure.2) present the vision and mission of Trisakti University, the Trisakti University Research Master Plan has focused on four research focuses on Trisakti University, namely, Green Energy, Green Urban Environment, Green Society and Green Healthy Life.

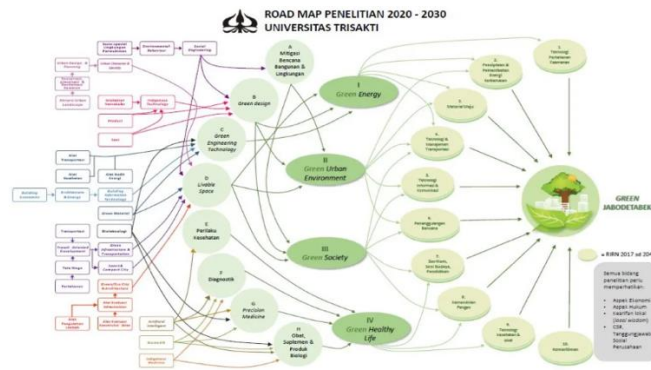


Figure 2. Research *Road Map* 2020-2030 Trisakti University (Source: LPPM Trisakti.ac.id, 2023)

UT Bike and Parking Space

As an effort to realize an environmentally friendly campus, Trisakti University provides bicycles and bicycle parking lots in the campus environment. This aims to facilitate students and lecturers to use bicycles as an environmentally friendly means of transportation. This is highlighted in the study of McQueen et al. (2020) which explains that e-bikes can potentially help cities and regions to achieve their climate goals due to average reduction of 225 kg CO₂ per year. The e-bike facility is also offered by Trisakti University with the aim of maintaining the fitness of the academic community. This is supported by research conducted by Van Cauwenberg et al. (2022) regarding the effect of e-bike use on health where in the study it was concluded that non-e-bike users have a higher BMI compared to e-bike users. There were also findings in the study where the use of e-bikes affected the cardiorespiratory health of e-bike users.



Figure 3. UT Bike and Parking Space (Source: Observer's documen, 2023)

Collaborative Platforms for Green Society

Trisakti University offers various platforms for academics to be involved in achieving SDGs, some of which are by building the Trisakti Sustainability Center, CECT Sustainability Trisakti University, and Sustainable Industry Research Centre. Those collaborative platforms

are believed will provide mechanism that exert influence over green practice and green behaviour among academics due to its green contagion effect as mentioned in the study of Mena and Schoenherr (2020). In the study, it also mentions that the collaborative efforts also involve practices such as joint working sessions, knowledge sharing, and collaborative green technologies in environmental-focused activities.

Trisakti Sustainability Center

Trisakti Sustainability Center (TSC) has been established since 2012 which has helped more than 70 multinational companies, state-owned companies, and private companies and institutions in Indonesia and abroad, with various types of industries. Built by combining diverse expertise: practitioners and academics, TSC has developed solutions for corporate reporting, with Sustainability Reports, Annual Reports, and Integrated Reports as areas of expertise (LPPM Trisakti, 2023).

Some of the solutions offered by TSC for *Sustainable Development* consist of:

1. Management Assistant
 - a) Blueprint Sustainability
 - b) Climate Change Strategy, Carbon Calculation, Life Cycle Analysis
 - c) Sustainable Finance
 - d) Assisting on ESG Index, Sustainability Governance
2. Impact Assessment
 - a) ISO 26000 Assessment
 - b) Community Development Assessment
 - c) Social & Stakeholders Mapping
 - d) Social Return on Investment (ROI)
 - e) PROPER (Gold and Green)
3. Report and Publication
 - a) Annual Report
 - b) Sustainability Report
 - c) Integrated Report
 - d) Community Involvement and development Book
 - e) Environmental Book
 - f) SDGs Report
 - g) Reporting Standard Updated and Assistance
4. Sustainability Data Management System
 - a) ESG Data Management System
 - b) Climate Change Calculation & Data Integration
 - c) Reporting Standard Management System

CECT Sustainability Universitas Trisakti

CECT is a research center at Trisakti University that also serves as a consultant for Sustainability. CECT initiated the birth of MM-Sustainability (Master Program specializing in Sustainability) by obtaining a grant provided by the Ford Foundation in 2008. As a think tanks of MM-Sustainability, CECT's main roles are optimizing the curriculum, writing case studies

based on consulting work, and assisting the publication process of research on Sustainability conducted by alumni of MM-Sustainability (CECT Sustainability, 2023). The vision of CECT is: “Achieving excellence and making changes”. In addition, the mission of CECT is:

1. Conduct research that focuses on cases by incorporating local wisdom.
2. Offer high quality training with international standards.
3. Disseminate research results.
4. Collaborate with relevant stakeholders in three sectors to achieve broader impact.
5. Provide trustworthy consultative activities.

Sustainable Industry Research Centre (PSIB)

Trisakti University lecturers are often involved in improving the quality and solving environmental issues, for example by developing competencies in 4 fields. This is done by the Sustainable Industry Research Centre (PSIB) Faculty of Industrial Technology, Trisakti University with the vision: “Become a trusted, professional, superior institution in the field of industrial technology that encourages increased competitiveness and sustainable industry”.

While the mission of the Sustainable Industry Research Centre (PSIB) consists of:

1. Carry out research activities that support the development of national industry through multi, inter and cross-disciplinary approaches to solve problems faced by the industrial world.
2. Dissemination of the results of research, studies and development to the industrial community and related stakeholders.
3. Carry out education and training on actual industrial technology based on sustainable development.

The scope of work applied at the Sustainable Industry Research Centre (PSIB) is to empower supporting technology Industry 4.0 to realize the related Sustainable Development Goals (SDGs) as described below:



Figure 4. Industry 4.0 Relationship Scenario with SDGs
(Source: Sustainable Industry Research Centre, 2023)

Referring to the picture above, PSIB will develop competencies in 4 areas as (1) Field of Materials and Metallurgy; (2) Energy, Transportation, and Agro-industry; (3) Sustainable Manufacturing dan Smart Factory; and (4) Digital Transformation and Big Data Analytics

Trisakti University's Voluntary Green Behavior: Call for Action Green Seminar and Green Workshop

With the massive progress of fulfilling the green agenda of Trisakti University, it is appropriate to increase the voluntary behavior of academics to continue to contribute to the achievement of sustainable university environmental performance. This can be seen from the many green workshops and seminars held by academics at Trisakti University. The knowledge sharing program is carried out to increase green awareness not only among academics and students but also the public in general.

Table 1. Green Seminar and Workshop

(Source: Trisakti.ac.id, 2023)

No.	Workshop / Seminar Title	Date	Venue	Aim	Speaker
1	Green Talk: Journey of 3 Cities Preparing Green Building Codes	5 December 2019	Auditorium C Building 9th floor A Campus, Trisakti University	Provide knowledge about the concept of Green Building so that it can be implemented in real life.	<ol style="list-style-type: none"> 1. Sandra Pranoto (Indonesian Green Building Program Leader International Finance Corporation) 2. Pandita (Head of DKI Jakarta Local Government Building) 3. Satrio Nugroho (Lecturer of Architecture, Diponegoro University, Semarang) 4. Irfan Febianto C.K. (Head of Building Planning and Architecture Section of Bandung City)
2	Green Talk: Introduction to the Green Building Practitioner Profession in Indonesia	4 March 2021	Online	Provide an overview to students as prospective young professionals from various disciplines in understanding the role of green building experts in supporting the implementation of sustainable development in Indonesia.	<ol style="list-style-type: none"> 1. Surendro (Deputy Director of Green Building Council Indonesia) 2. Dian Fitria (General Secretary of IABHI) 3. Yodi Danusastro (Green Building Practitioner) 4. Ariko Andikabina (Architect) 5. Andra Jonathan Tjokrorahardjo (IABHI General Treasurer/ MEP Practitioner)
3	Webinar The Future of Sustainability Marketing	17 February 2023	Online	To be able to understand the planet, people, profit aspects in	<ol style="list-style-type: none"> 1. Assoc. Prof. Dr. Jati Kasuma Ali (Faculty of Business and Management UiTM Sarawak Branch)

				sustainable marketing.	2. Dr. Ayu Ekasari, MM, CMA, CPMA (Faculty of Economics and Business, Trisakti University)
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Green Training

Various, green-themed training activities are also carried out at Trisakti University where 3 (three) of them are:

1. **Training on Strategies and Tactics to Realize Sustainable Manufacturing**
 This training was held on February 16, 2021, as a community service activity (PKM) in collaboration between the Faculty of Industrial Technology, Trisakti University, and the Karawang Engineering Entrepreneurs Association (APEK). This PKM provides several training topics, namely: Material 1 Training on Sustainable Manufacturing Concepts in order to achieve Sustainable Development Goals (SGDs); Material 2 Supply Chain Management Training for MSMEs/SMEs; Material 3 Training on Sustainable Supply Chain Management for MSMEs/SMEs; Material 4 Training on the Implementation of Reduce, Reuse and Recycle for MSMEs / SMEs; Material 5 Lean Sustainability Training for MSMEs/SMEs; and Material 6 Eco Industrial Park Concept for MSMEs/SMEs (Trisakti.ac.id).
2. **Internal Training SEOJK 16, POJK 51 & GRI Standard 2021**
 Trisakti Sustainability Center as a study center and SGDs Center at Trisakti University on July 24, 2023, held an internal training focusing on the themes SEOJK 16, POJK 51, and GRI Standard 2021 as a guide in making Sustainability Reports and Annual Reports. This activity aims to improve the knowledge and skills of the internal Sustainability team of Trisakti University in implementing the provisions of the Financial Services Authority (OJK) regulations regarding corporate responsibility and environment as well as the 2021 Global Reporting Initiative (GRI) in sustainable reporting. Facilitators of this activity include the internal team of Trisakti Sustainability Center. While the participants consist of Trisakti's internal Sustainability team who have roles and responsibilities in the process of preparing Sustainability Reports and Annual Reports (Trisakti.ac.id, 2021).
3. **Community Service, Indonesia Seminar on Community Service and Social Responsibility 2021 I-Care 2021 to advance villages, disadvantaged areas and transmigration, in Indonesia there are approximately 74 thousand villages in Indonesia and there are around 15 villages that are currently developing. Trisakti University already has several assisted villages which are managed by supervisors and implemented by students to advance the economy in these villages, and it is hoped that apart from advancing the economy, it can produce green entrepreneurs from these villages (Trisakti.ac.id, 2021).**

By carrying out knowledge sharing, training, and seminars will increase public awareness at large because there are opportunities for participants to internalize green values and good environmental practices in line with obtaining green knowledge from the knowledge

sharing session. This is supported by research from Marco-Lajara and Zaragoza-Sáez (2022) which states the influence of knowledge transfer on the stimulation of creativity of knowledge sharing session participants.

Individual Voluntary Green Behavior

The academics at Trisakti University have a high individual awareness of environmental sustainability. This is evidenced by the high level of volunteerism in considering the impact of each action taken on the environment. Some of them are: 1) by bringing their tumblers to campus based on eco-friendly materials to minimize waste in the university environment, 2) initiatives to use the virtual meeting method to coordinate, 3) supporting environmental protection programs, 4) monitoring emission levels from each operational activity.

This is in line with the findings made by Francoeur et al. (2021) who examined green workplace behavior and identification of voluntary behavior. Individual voluntary green behavior can act as an instrument that has a direct influence on the environmental performance of the organization (for example by sorting and recycling waste in the workplace). This shows concrete involvement of employees towards existing problems in the environment. With the initiatives carried out to protect the environment, reflecting actions that prioritize the interests of environmental conservation and responsibility to the environment in the workplace.

5. CONCLUSION AND RECOMMENDATION

This research reflects an evaluation of the progress made by the academics at Trisakti University, especially in realizing the green agenda. Initiatives have been carried out by academics at Trisakti University which shows tremendous support and commitment from academics in facing the challenges of fulfilling SDGs goals which can be summarized in the following points:

1. Trisakti University has a strategic plan that supports the fulfilment of SDGs goals with a strategic plan and operational plan that has a comprehensive, holistic and predictive approach to manage internal capabilities and external developments that works well in enhancing green performance and behaviour both organizational and individual.
2. OCBE helps the higher education in achieving its SDGS goals in terms of the green seminar, workshop, training supported by the high level of the voluntary green behaviour among academics as an individual. This is not only help to spread awareness among academician but also public as a whole.
3. Strategic factors that drive high level of OCBE including green strategy and green human resource management. Both factors have the strength to facilitate and enable sincere social responsibility among academic community in Trisakti University especially looking from the perspective of both factors as an integration mechanism.

The substantial efforts made by academics in driving change contribute to sustainable development in higher education institutions. However, comprehensive implementation is needed, not only in certain faculties, but support is needed from each faculty and each academic community so that the approach to fulfilling the university's environmental performance can be more integrative and holistic.

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CHAPTER 8

The Effect of Audit Quality on Earnings Management with the Audit Committee as Moderating Variable

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ABSTRACT

This study aims to examine and analyze the effect of audit quality on earnings management with the moderating variable of the audit committee. In this study, the control variables include firm size, age, leverage, and profitability. The sampling method used is purposive sampling. The analysis was conducted on 101 samples of consumer goods companies for the period 2015-2019 on the Jakarta Stock Exchange with the moderated regression analysis. The results show that audit quality reduces the company's earnings management. The implication of this research is that audit quality is one of the things management considers in reducing earnings management. One of the agency problems that can be used is to improve audit quality. Investors also need to consider audit quality in choosing investments in companies. The Audit Committee can be used to improve company supervision to reduce the relationship between audit quality and earnings management. Thus, this study has the potential to help stakeholders, boards of directors, regulators, and auditors who are concerned with increasing corporate oversight and reducing opportunities for managers, to engage in earnings management.

Keywords: Audit Committee, Audit Quality, Earnings Management

1. INTRODUCTION

The phenomenon of earnings management has occurred in several companies in Indonesia. In May 2018, PT Sunprima Nusantara Financing (SNP Finance) was in the spotlight of financial authorities and the public because it was bankrupt. [1]. The Otoritas Jasa Keuangan (OJK) stopped SNP's business activities because the company failed to pay the MTN interest of Rp. 6.75 billion on May 14, 2018. It is suspected that SNP Finance did not submit financial statements correctly or were fictitious. The KAP PT SNP is KAP Satrio, Bing, Eny. In the case of PT SNP, KAP gave an Unqualified opinion on SNP Finance's financial statements. However, this was inversely proportional to the results of the OJK examination, where SNP Finance indicated that it had presented financial statements that were significantly inconsistent with the actual financial condition. Furthermore, OJK provides administrative sanctions in the form of cancellation of registration to KAP Satrio, Bing, Eny (www.ojk.go.id), Mei, 18 2018).

Research on audit quality has been carried out by [2], which stated that audit quality was found to significantly affect moderating the relationship between the audit committee and financial reporting quality. There is also evidence that audit quality moderates the audit committee on earnings management. [3], [4], [5], [6], [7]. Meanwhile, several other research results did not find the effect of audit quality on earnings management [2], [8], [9], audit quality cannot moderate the relationship between audit committee independence and audit committee expertise on earnings management.

The quality of information from a financial report is supported by good audit quality because the audited financial statements should not contain material misstatements. However, audit quality may vary, given the number of audit firms with different capabilities. Audit quality shows how well the audit detects material misstatements in the financial statements [10] and reduces earnings management. This research uses audit quality as proxied by audit tenure on earnings management, and there are still differences. The results of research conducted by [11] found that audit quality had a positive effect on firm value and manipulated earnings did not weaken the positive effect of audit quality on firm value. The results of this study are supported by the results of research by [12], [13], [14], [15], which show that audit committee effectiveness has a positive influence on earnings quality. In comparison, several other studies have found that it has a negative effect [14] [6].

This research is expected to contribute ideas in enriching insight into the influence of The Effect of Audit Quality on Earnings Management with the Audit Committee as Moderating Variable. Then practically, the results of this study can be used as a reference by auditors to audit quality and contribute to the government as material for policy considerations regarding the issue of earning management.

2. THEORY FRAMEWORK AND HYPOTHESES

2.1.1 Agency Theory

This theory assumes that each individual involved in the contract aims to maximize their respective interests. Management will use its authority through earnings management to maximize its interests. Audit quality is one way that can be used to reduce earnings management. The Audit Committee is expected to be able to supervise management in reducing earnings management actions carried out by agents.

2.1.2 Audit Quality

Measurement of audit quality includes dimensions of competence and independence, which are measures of audit quality that have been used in previous studies. This competency dimension consists of Public Accountant size (big four), auditor industry specialization, and audit tenure. Meanwhile, the independence dimension consists of auditor independence (client importance) and audit opinion reporting (going concerned).

2.1.3 Audit Committee

According to the National Committee on Governance Policy (2006), "An audit committee is a group of people chosen by a larger group to do specific tasks from members of the board of commissioners of a client company, who are responsible for assisting the auditor in maintaining his independence from management."

In this study, the audit committee will be measured using the audit committee's expertise, namely members with adequate knowledge and experience in the fields of accounting, finance, and auditing. Therefore, audit committee members will find it easier to carry out their duties and supervisory functions on the company's financial reporting [16].

2.1.4 Earnings Management

"Earnings management is a choice by a manager of accounting policies, or actions affecting earnings so as to achieve some specific reported earning objective." [17]. The external auditor's role is to ensure that the financial statements issued by managers are of reasonable quality. However, earnings management is a common practice in every company and is only known by external parties in the event of a scandal [18]

Managers carry out earnings management in two forms; First, in Accrual Earnings Management (AEM), managers use judgment in preparing financial statements to decide accounting estimates and interpret accounting standards to align with their interests. [16] Second, in Real Earnings Management (REM), managers make decisions and operations that cause the firm to deviate from the regular pattern to have the desired effect on the firm's earnings at the end of the period. [18]

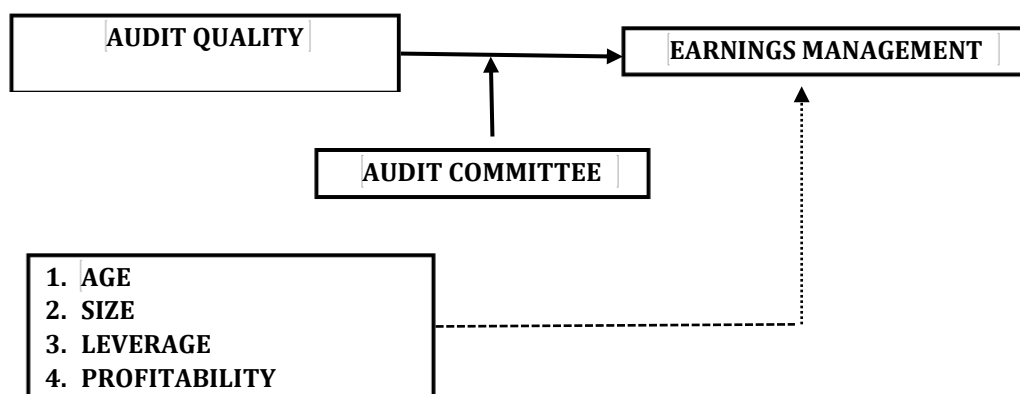


Figure 1
Research Conceptual

2.2 The Effect of Audit Quality on Earning Management

Audit quality is essential to ensure that their audit procedure is conducted according to the standard and regulations. This study to measure audit quality with the audit quality score [19] states that audit quality can be seen from the size of the Public Accountant (auditor size) that conducts the audit. [20] explained that the auditor's industry specialization could detect earnings management because specialist auditors have more knowledge (superior knowledge) about specific industries. The results of a study conducted by [6],[14]

A quality audit will reduce the occurrence of earnings management in the company's financial statements. Therefore, the hypothesis is formulated as follows:

H1: Audit quality has a negative effect on earnings management.

2.3 The Effect of Audit Quality on Earnings Management with the Audit Committee as Moderating Variable

Audit committee, which is an independent commissioner financial experts are effective in reducing management earnings [21]. The company's audit committee will affect the relationship between audit quality and earnings management on the company's financial statements. The results of a study conducted by [3][5][7]. Therefore, the hypothesis is formulated as follows:

H2: Audit committee will affect the relationship between audit quality and earnings management on earning management

3. METHODS

The analysis was conducted on 101 samples of consumer goods companies for the period 2015-2019. The sampling method used was purposive sampling used to determine the sample of this research. The documentation method was carried out by taking secondary data from the annual report (<https://www.idx.co.id>) and the sample company website.

Earnings management is measured by modified Jones discretionary accruals. The measurement of audit quality, which includes the competency dimension, consists of the size of KAP (big four), auditor industry specialization, audit tenure, and the independence dimension consists of auditor independence (client importance) and going concerned audit opinion reporting. Audit committee expertise (Com_Exp) is measured as a comparison between the number of committee members with educational background and experience in accounting, auditing, and finance to the total number of members of the company's audit committee.

Effectiveness measured by the audit committee on the relationship between audit quality and earnings management, the following model is used:

$$Dacc_Rev = \beta_0 + \beta_1 Aud_Score + \beta_2 (Com_Exp \times Aud_Score) + \beta_3 AGE + \beta_4 SIZE + \beta_5 LEV + \beta_6 ROI + \varepsilon$$

Information:

Dacc_Rev = akrual diskresioner (manajemen laba)

Aud_Score = Audit Quality Score

AGE = Age Corporate

SIZE = Size Corporate

LEV = Leverage

β = Regression Coefficient

ε = Error Term

4. RESULTS AND DISCUSSION

The results of descriptive statistical tests are presented in Table 1

Table 1
Statistik Deskriptif

Variable	N	Minimum	Maximum	Mean	Std. Deviation
DACCREV	101	-0.4507	1.056	0.066	0.274
AUDSCORE	101	1	5	2.842	1.129
COMEXP	101	0.3333	1	0.656	0.242
AGE	101	18	114	42.46	17.73
SIZE	101	11.80	20.96	14	15
LEV	101	0.071	1	0.4322	0.229
ROI	101	0.13	0.92	0.080	0.138
AUDSCORE_COMEXP	101	0.5	4	1.738	0.779

Tests were carried out through multiple regression analysis with moderation. Before testing the hypothesis, the classical assumption test was carried out as a normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test. The normality test results using the Kolomogrov-Smirnov Test showed a sig value of 0.799. This results that the regression model being normally distributed.

Autocorrelation test with test Durbin-Waston (DW), if $du < DW < 4-du$, it indicates no positive or negative autocorrelation. The results of the autocorrelation test on the sample studied were 101 (the number of samples after removing outlier data) obtained a DW stat value of 2.091, the value of $dl = 1.6357$ $du = 1.7163$ and $4-du = 2.3643$ $4-dl = 2.2837$. These results indicate that the model is free from autocorrelation disease.

Heteroscedasticity testing aims to test whether, in a regression model, there is an inequality of variance from the residual of one observation to the residual of another. These results indicate that the model is free from autocorrelation disease. The results of the Heteroscedasticity test with the Gletsjer Test show that the model is free from the heteroscedasticity problem.

Multicollinearity tests whether there is a correlation between the independent variables. The amount of Variance Inflation Factor (VIF) and Tolerance can detect the presence or absence of multicollinearity. The test results show that the Tolerance and VIF are free from multicollinearity problems.

The hypothesis is made by testing the model with the coefficient of determination (adjusted R²), F test, and partial test (t). The test results are presented in Table 2

Table 2
Hypothesis Results

Variable	Pred	Beta	t-stat	Sig	Decision
CONSTANTA		-1,300	2,661	0,000	
AUDSCORE	-	-0,136	-1,658	0,048	H1 Accepted
AUDSCORE_COMEXP	+	0,081	1,015	0,023	H2 Accepted
COMEXP	+	0,294	1,130	0,262	
AGE	+	0,004	2,963	0,004	
SIZE	+	0,064	3,157	0,002	
LEV	+	0,161	1,686	0,095	
ROI	+	0,399	1,761	0,082	

Adj R2	0.407	
F stat	10.787	0.000 (sig)

The goodness of fit model shown by Adj R-squared produces a value of 0.407, which means that variation of the independent variable can explain the variation of the dependent variable by 40.7%, and the rest is a variation from other independent variables that affect the dependent variable but are not included in the model. The results of the F test show the F-stat value of 10,787 with a sig value of 0.000. it means that in the model used, at least one independent variable affects earnings management.

4.2 The Effect of Audit Quality on Earning Management

The results of hypothesis testing 1 show the Audit Quality coefficient value of -0.136 with the value of the probability or significance generated, which is $0.048/2 = 0.024 < 0.05$ (alpha 5%), meaning that Audit Quality is proven to reduce earnings management. Based on the test results, the first hypothesis proposed is that audit quality has a negative effect on earnings management and cannot be rejected, or the first hypothesis is accepted.

This result is supported by [22],[23], The research shows a positive between audit quality and earnings management in both sectors (industrial and service). This finding indicates that the increase in audit quality will affect to enhance and improve earning management. On the other hand, [2] [8] shows that the results cannot prove that audit quality can affect real earnings management.

4.3 The Effect of Audit Quality on Earnings Management with the Audit Committee as Moderating Variable

The audit committee can moderate the effect of audit quality on earnings management by having a coefficient value of 0.081, meaning that the higher or stronger the perception of the Audit Committee, the higher the perception of the audit committee. The higher or stronger the level of perception influential with audit quality on earnings management is 0.081 units. Based on the test results obtained, with a probability value of $0.023 < 0.05$ (alpha 5%), it can be concluded that the Audit Committee can statistically moderate the effect of audit quality on earnings management.

The audit committee does not support audit quality on earnings management because the results of this study have a minor negative relationship with the results of the effect of audit quality on earnings management. Audit quality has been able to reduce earnings management without the moderation of the audit committee. . This research is in accordance with previous research conducted by [6], [14], which shows a significant negative effect on the specialization of auditors moderated by the audit committee on earnings management.

On the other hand, [3],[9] show that audit committee size has a statistically positive relationship with earnings management. There is also evidence that audit quality moderates audit committees with earnings management. This study expands the existing literature by examining the moderating effect of audit committees on the relationship between audit quality and earnings management.

All control variables, namely age, size, leverage, and ROI, are accepted positively affecting earnings management.

5. CONCLUSION

This study depends on the fundamental agency problem between managers and shareholders. The presence of information asymmetry allows managers to manipulate earnings to meet short-term earnings targets. Based on the analysis and discussion of the results of the partial hypothesis test (t-test), it can be concluded that (i) Audit Quality has a negative effect on earnings management, and (ii) Audit Committee moderates the effect of audit quality on earnings management. This study still has limitations in the presence of unavoidable outliers, and the presence of this outlier reduces the research data that is processed.

The implication of this research is that audit quality is one of the things management considers in reducing earnings management. One of the agency problems that can be used is to improve audit quality. Investors also need to consider audit quality in choosing investments in companies. The Audit Committee can be used to improve company supervision to reduce the relationship between audit quality and earnings management. Thus, this study has the potential to help stakeholders, boards of directors, regulators, and auditors who are concerned with increasing corporate oversight and reducing opportunities for managers, to engage in earnings management.

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CHAPTER 9

Green Supply Chain Management's Role as a Mediator of The Influence of Corporate Social Responsibility on Operational Performance: Evidence from Indonesian's Manufacturing Industry

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ABSTRACT

This research aims to determine the influence of corporate social responsibility on operational performance, mediated by green supply chain management in the manufacturing industry in the Indonesian capital region. The study employs a quantitative method with a sample size of 200 respondents determined using a purposive sampling method. The data collection tool in this research is a questionnaire distributed to manufacturing company employees using Google Forms. Hypothesis testing is carried out using the Structural Equation Model (SEM) approach operated with AMOS software. The Sobel test is performed to assess the effect of mediation. The research results indicate that Corporate Social Responsibility has a direct positive and significant effect on Green Supply Chain Management and Operational Performance. However, Green Supply Chain Management does not exhibit a significant direct effect on Operational Performance. In indirect testing, Green Supply Chain Management plays a significant role as a mediating influence of Corporate Social Responsibility on Operational Performance. Based on the research findings, the managerial implication is that managers and employees must uphold corporate social responsibility because it is crucial for improving environmentally friendly supply chain performance and operational performance in the manufacturing industry in the Indonesian capital region.

Keywords: Corporate Social Responsibility, Green Supply Chain Management, Operational Performance, Manufacturing Industry.

1. INTRODUCTION

Increasing concern for environmental protection and sustainability, social sustainability performance at the corporate level is more dependent on social practices in the supply chain, including safety practices and environmentally friendly production practices (Awan, 2019). A survey conducted by Schneider Electric of companies in 9 Asian countries found that 98 percent of Indonesian companies had set sustainability goals. However, according to the Annual Sustainability Survey, some sustainability goals set by companies are short-term or less than 4 years in duration. Although almost everyone surveyed in Indonesia has sustainability goals, only 4 out of 10 companies say they are taking action and have an overall sustainability strategy (Subagyo, 2023). Manufacturing companies face challenges in limiting fossil fuel byproducts, finding ways to maintain sustainable cycles, and increasing their financial returns. In this situation, practical and effective environmentally friendly development efforts can transform the manufacturing industry (Wang and Yang, 2021). However, companies often ignore the social and environmental impacts caused by ongoing company activities, for example waste pollution or air pollution which can disrupt the activities of the surrounding community, so companies must carry out social responsibility towards society and the environment so that companies can do this. can survive for a long period of time. There is increasing interest in clarifying the extent to which GSCM practices have the potential to improve not only environmental protection but also corporate performance, thereby offsetting implementation costs (Tseng et al., 2019).

Investing in clean technologies also contributes to achieving environmental sustainability goals (Khan et al., 2022). Stakeholders are increasingly holding companies responsible for the environmental damage created by their supply chains (Payán-Sánchez et al., 2019) and are pressuring companies to expand their environmental responsibilities with the implementation of Green Supply Chain Management (GSCM) practices (Al-Sheyad et al., 2019). Environmentally friendly business practices in supply chains have become a top priority for organizations wishing to achieve their environmental and organizational goals (Rizzi et al., 2022).

GSCM activities can be internal, related to green design and investment recovery, and external, including green procurement and working with customers to comply with environmental regulations and improve service quality (Rahman, 2020). Meanwhile, Suppliers who rank low in environmental performance can be assisted through various environmentally friendly supplier development programs such as ISO 14000 certification, supplier training, resource sharing, supplier awards, capacity building. Companies are increasingly adopting practices aimed at addressing environmental issues in their supply chains. A large body of existing literature shows that the implementation of green supply chain management (GSCM) practices has a positive effect on environmental performance (Sadia et al., 2019) and operating cost performance (Schmidt et al., 2019).

Several studies have emphasized the importance of identifying key improvement programs before implementing GSCM, such as total quality management practices and green innovation (Green et al, 2019). So companies need to pay attention to the role of mediation GSCM on the influence of corporate social responsibility and operational performance (Shahzad et al, 2019). In previous research, attention was paid to assessing

impacts GSCM activities are still limited, with a research focus mainly in developed countries such as China and the United States (Choudhary and Sangwan, 2022).

2.1.2 Supply Chain

The supply chain is an organizational system that includes roles and participation in various activities, including information, capital and other interrelated resources, in the movement of products or services from supplier to supplier, consumer or customer (Putradi, 2017). According to (Radhi & Hariningsih, 2019), the supply chain is a physical network, especially all companies that play a role in supplying raw materials, producing goods, and sending them to consumers/end users. The supply chain includes not only manufacturers and suppliers, but also carriers, warehouses, retailers, and even customers themselves. In any organization, such as a manufacturer, the supply chain includes all the functions involved in receiving and fulfilling customer demand. These functions include but are not limited to new product development, marketing, operations, distribution, finance and customer service (Tulus Saktiawan, 2021).

In recent years, global supply chains have become increasingly long and complex. As a result, supply chains become more vulnerable to natural disasters and emergencies. These unpredictable emergencies have increased in recent years and often lead to supply chain disruptions (Cavalcante et al, 2019). According to the literature review, studies on supply chain performance measurement in the manufacturing industry have been conducted for many years. One of the most important points in measuring supply chain performance is determining appropriate performance criteria (Maaz and Ahmad, 2022). Properly defined supply chain performance measures enable strategic distribution of processes across multiple companies (Zhao et al., 2022) and create opportunities for companies to increase success by providing competitive advantages through differentiated services and low costs (Narayanan and Ishfaq, 2022) .

2.1.3 Supply Chain Management

Supply Chain Management (SCM) is a management component that is responsible for controlling and coordinating organizational activities from upstream to downstream. This shows that supply chain management strategies are an indispensable tool for increasing creativity and performance, helping businesses develop and adapt to environmental changes, thereby helping businesses overcome obstacles (Hazen et al, 2021). SCM aims to organize and coordinate the procurement, transportation and management of materials from a system-wide perspective across multiple functions and multiple supplier levels (Centobelli et al, 2021). According to (Anindita, 2019), supply chain management is a series of activities needed to plan, control and manage product lines in the most effective and cost-effective way.

Supply chain management involves integrating various activities, such as purchasing goods and services, converting them into semi-finished goods and final products, and delivering them to customers. These activities include purchasing, procurement from other parties, and important functions coordinating with suppliers and distributors (Heizer, 2019). Supply chain management can be viewed as the process of strategically managing the supply of raw materials, transportation and storage of raw materials, spare parts, and final inventory across an organization and its distribution channels, marketing, to support current and future operations

(Artekal, 2023). Based on (Education, 2019) there are 5 main components in SCM that must be considered :

1) Production

Aims to produce what the market wants, at the right time suitable for sufficient production volumes.

2) Inventory

Inventory levels also act as a buffer to protect businesses from demand uncertainty.

3) Location

Make decisions to select optimal locations within various facilities, warehouses and storage facilities.

4) Transportation

The need to move goods from one place to another throughout the supply chain.

5) Information

Emphasize decision making regarding qualification requirements in data collection and sharing.

2.1.4 Green Supply Chain Management

Green Supply Chain Management (GSCM) starts the supply chain process with suppliers of environmentally friendly raw materials, then produces them using environmentally friendly technology, then produces environmentally friendly products before carrying out the marketing process for environmentally friendly products (Fahmi, 2022). Green Supply Chain Management (GSCM) can be a way for companies to effectively balance environmental, financial and social performance (Hidayat et al., 2022). Indeed, GSCM involves a number of factors that can encourage companies to be more environmentally friendly in managing their operations, such as environmentally friendly product design, environmentally friendly materials, and environmentally friendly and environmentally friendly production processes. In this regard, other research also shows that environmental cooperation has been proposed as a moderator of the relationship between GSCM practices and corporate sustainability (Ali et al, 2022).

GSCM, today, is a fundamental part of sustainable supply chain management (Fang and Zhang, 2018). In particular, green supply chain management (GSCM) has developed significantly in recent years (Rajeev et al, 2017). Green supply chains rely heavily on activities that reduce costs, increase efficiency, and produce “green” or environmentally friendly products (Tseng et al, 2019). GSCM can be understood as the integration of environmental issues into supply chain management practices. In the literature, GSCM and sustainable supply chain management (SSCM) are often used interchangeably. However, SSCM is also sometimes used as a broader term encompassing SCM activities, including social, environmental and ethical actions (Ahmed et al, 2020), whereas GSCM activities only refer to improving environmental performance (Al-Sheyadi et al, 2019). The following GSCM practices can be classified based on a synthesis of different approaches in the literature (Acar et al, 2019):

1) Green supplier orientation, i.e. partnering with suppliers, green purchasing, etc.

2) Green design, namely using environmentally friendly designs, innovating environmentally friendly products, etc.

- 3) Green production, that is production that respects the environment by reducing waste and preventing pollution, etc.
- 4) Green customer orientation, namely collaboration with customers and logistics.

Using green suppliers in GSCM will help produce more green products and increase green innovation. GSCM practices encourage environmentally friendly retrofit performance standards that have been proven to increase environmentally responsible manufacturing (Abu Seman, N. A. et al. 2019). Product design, sourcing and material selection originate from GSCM which can be said to integrate environmental thinking to implement supply chain management, complete product design, material procurement, production processes, raw material selection, delivery of final products to users, such as managing product afterlife, end of life use it (Ariyanti, 2018).

2.1.5 Corporate Social Responsibility

Corporate social responsibility (CSR) is an important issue that companies must engage in to meet the expected benefits of stakeholders in various ways and maintain an economic unit that functions effectively and sustainably (Dawit et al, 2020). Corporate Social Responsibility (CSR) is an effective strategy that demonstrates a company's commitment to long-term economic, social, and environmental prosperity that can be achieved through business resources, practices, and policies. Initially a good thing to do, over the years CSR has changed from a charitable nature to a mandatory and obligatory nature, until it has become a successful business model that guarantees a company's comparative advantage at a good level (Ye at al, 2020). Timely implementation of CSR is very important to increase sustainability and company value (Mahmuddah et al., 2020). CSR is increasingly viewed as an important non-market strategy that can ultimately generate competitive advantage (Flammer, 2018) and when CSR is viewed from a strategic viewpoint, it originates from the vision and values of senior management and is not seen as an expenditure, but rather as an initiative strategies that an organization has and is ready to implement to differentiate itself from competitors (Beji et al, 2021).

Companies are struggling to maintain an image that reflects their responsibilities, as they use more and more ways to communicate with the public. However, it is important for companies to communicate their corporate responsibility actions if they want to maintain their financial health. Faced with increasing public skepticism about how companies use social media to demonstrate corporate responsibility (Vizard, 2016), as well as differences in shareholder perspectives on managerial decision-making regarding corporate responsibility (Bocquet et al., 2015), it is important to understand the ways where social media corporate responsibility can be framed to promote corporate health and well-being. Understanding this is critical to helping address the often unclear questions that lie at the heart of understanding the role of business in society, particularly whether corporate responsibility impacts operational performance (DiSegni et al., 2015). All listed companies have a separate section on the company website where the CSR strategy is presented under the heading sustainability or CSR. Classified CSR topics, information related to community involvement topics, and environmental topics are emphasized more than other classified topics (Briones, 2020). Some multinational companies even offer training and incentives for suppliers to implement sustainable practices. Through

this training, suppliers made significant changes to their production processes and began requiring their suppliers to implement sustainability standards (Villena and Gioia, 2020).

2.1.6 Operational Performance

Operational performance can be interpreted as a specialized area of management in the production of goods and services, and using special tools and techniques to solve production problems. Operational performance is an achievement which results from the activity of transforming input into measurable output (results). with standards of success in achieving the goals set by the company (Mardiana et al, 2022). The operational goal is to reduce and increase effective costs in managing an organization (Acquah et al., 2022). Apart from that, the operational efficiency of an organization illustrates its ability to effectively convert raw materials in quantities

big into quality goods, on time and without waste (Sharma & Modgil, 2020). 2020). On The main focus of previous research is the quality, cost and time factors can be measured. This last factor was not taken into account because the companies studied did not using flexible and agile processes and systems, and in employee pilot studies who work in the operations department do not understand topics related to these variables. (Thoumy et al, 2022).

1) Quality

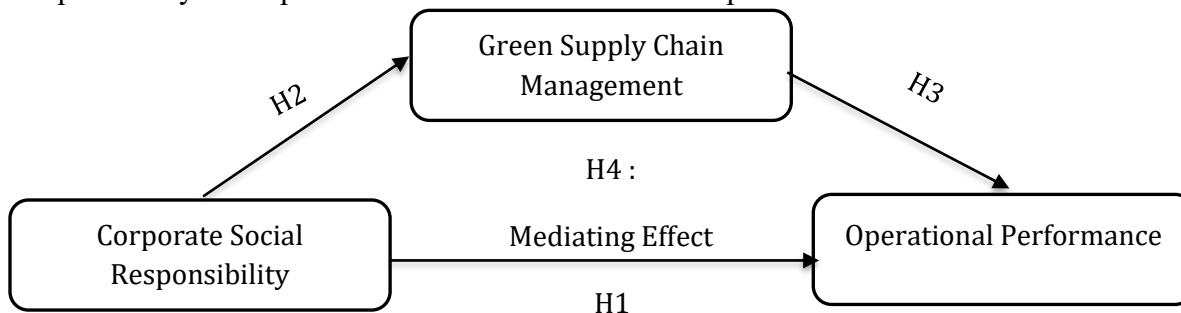
Quality is the act of earning customer trust by ensuring that every project activity or manufacturing process complies with quality standards planned or desired by customers by defining, monitoring and improve quality. This is then recorded and given to the customer for ensure and guarantee the reliability of the people involved. (Suharto, 2017). Quality can be described as meeting the agreed specifications and standards agreed to by stakeholders and is a key factor in achieving success organization and business growth (ISO, 2017).

2) Cost

Cost efficiency, also known as cost minimization theory or cost optimization theory, is an important concept in economics and management that focuses on maximizing results while minimizing costs (Thoumy et al., 2022). This is basic principles that guide decision making in various fields, starting from manufacturing to supply chain management (Tseng et al., 2019).

2.2. Conceptual Framework

In this research the independent variable used is Social Responsibility which company will be tested with Operational Performance as the dependent variable. Then test the effect of Green Supply Chain Management (GSCM) on Performance Operational and testing the influence of Green Supply Chain Management (GSCM as a variable mediation of Corporate Social Responsibility and Operational Performance. The conceptual framework is as follows:



2.3 Hypotheses Development

Corporate Social Responsibility (CSR) is an organizational activity that is based on many connections in the management and operations of the organization (Valdez-Juárez et al., 2018), the development of CSR practices depends on how and to what extent these practices are implemented, and integrated into business practices at the moment. (Marques-Mendes and Santos, 2016). Therefore, integration between CSR activities and core business functions is essential important for value creation and business performance (García-Madariaga and Rodríguez-Rivera, 2017). Companies also play an important role in socio-economic development area. By carrying out activities that have a positive impact on society and environment, the business world can help create a more business environment sustainable and ethical, as well as strengthening relationships with stakeholders such as consumers, investors and government (Irawan et al 2022). Based on previous research It is said that the implementation of a company's CSR has a positive impact on its operations. It should be noted that the company can maintain good relations with society through the implementation of CSR which can bring positive and lasting change to surrounding communities (Aris Susilo, 2023). H1. Corporate Social Responsibility has a positive influence on Operational Performance

Quality responsibility as an aspect of CSR is closely related to practice green supply chain management (GSCM), where quality matters negative impact on the environment (Yu et al., 2019). Responsibility for quality can motivate companies to implement GSCM (Heydari et al., 2021). GSCM is this Previous research results show that trust customers can reduce the negative impact of corporate social responsibility and improve company performance (Wei et al, 2020). Additionally, a study by Canh et al. (2019) shows that, while capital is spent to implement Corporate social responsibility does not produce a return on investment, that is have a good impact on company performance. Implementation of CSR is a policy established by the government so that companies pay attention to environmental conditions. Determining policies is very important, so that companies can rapidly create and deploy eco-innovation to reduce emissions (Leitão et al. 2019). GSCM is a partner-based initiative that requires companies to collaborate with suppliers and customers to implement friendly management strategies and

projects environment (Qin et al, 2019). Previous research shows that CSR has an effect positive towards GSCM, CSR activities aimed at improving quality and Environmental awareness can help and facilitate environmentally friendly management of suppliers and customers (Xu et al, 2022).

H2. Corporate Social Responsibility has a positive effect on Green Supply Chain Management

Companies can reduce their production costs by involving internal suppliers green initiatives, for example recycling of materials, sustainable packaging and adoption of economical equipment energy (Tseng et al 2019).. Second, quality improvement is closely related to supply chain practices green (Villena and Gioia, 2020). Development and implementation of green supply chain management environment (GSCM) is influenced by various pressures. These pressures are summarized and classified in institutional theory. Institutional pressure forces companies to review and adopt GSCM practices. Competitiveness, customer demands, increasing environmental awareness, and regulatory restrictions encourage companies to incorporate GSCM activities in their business strategy (Scur and Barbosa, 2017). GSCM method improve functional attributes, such as functionality, cost, and flexibility without affecting implementation time (Famiyeh et al, 2018).

Supplier selection plays an important role in green purchasing. Has it was found that the environmental impact of green procurement can be attributed to suppliers, not producers, and have a positive impact on the economic performance of producers (Green et al., 2019). Eco-friendly design for packaging measures whether packaging These can be reused and recycled (Foschi et al., 2020). These criteria will be effective in reducing inventory levels, reducing scrap, improving product quality, increasing product variety and increasing capacity utilization (Green et al., 2017). Research conducted (Xu et al, 2022), shows that Green Supply Chain Management positive effect on Operational Performance. Therefore, GSCM can be considered as an effective strategy to help companies increase their competitive advantage them from the aspects of quality and cost.

H3. Green Supply Chain Management has a positive effect on Operational Performance

The influence of CSR on business performance is increasingly difficult to ignore (Ortiz-Martínez et al, 2023). According to stakeholder theory, CSR and company performance in general have a positive relationship (Palacios-Manzano et al, 2019). Research in this area shows that company CSR activities increase market value, operational profit, reputation and employee engagement (Ali et al, 2020). Likewise research (Piyathanavong et al, 2019) found that several Thai manufacturing companies are considering implementation of sustainable operations as a company initiative. Previous research (Baliga, 2019) with supply chain manager respondents in the field manufacturing shows that motivational factors have an impact on SSCM practices and that SSCM practices fully mediate the relationship between motivational factors and performance SSCM. Lean management (Lean Management), Supply management (Supply Management) and motivational factors that influence SSCM performance, and sustainability activities in SCM fully mediate the relationship.

H4. Corporate Social Responsibility has a positive effect on Operational Performance through Green Supply Chain Management

3. RESEARCH METHOD

3.1 Research Design

The research employs a quantitative method. The unit of analysis studied were directors, managers, and employees in manufacturing companies.

3.2 Variable and Measurement

The variables used in this study are Corporate Social Responsibility, Green Supply Chain Management, and Operational Performance.

3.3 Population and Sample

The population in this study were directors, managers, and employees in manufacturing companies. The determination of the sample was carried out using a non-probability method, namely purposive sampling with 200 samples filling out the questionnaires. According to Hair et. al (2018), the maximum sample size is the number of statements multiplied by ten.

3.4 Research Instrument Testing

From the results of the research instrument testing, all constructs are valid because have a factor loading of more than 0.4. All variables are also reliable because they have a Cronbach alpha of more than 0.6

3.5 Analysis Method

The analysis uses descriptive statistics in the form of mean and for hypothesis testing using the Structural Equation Model with AMOS software.

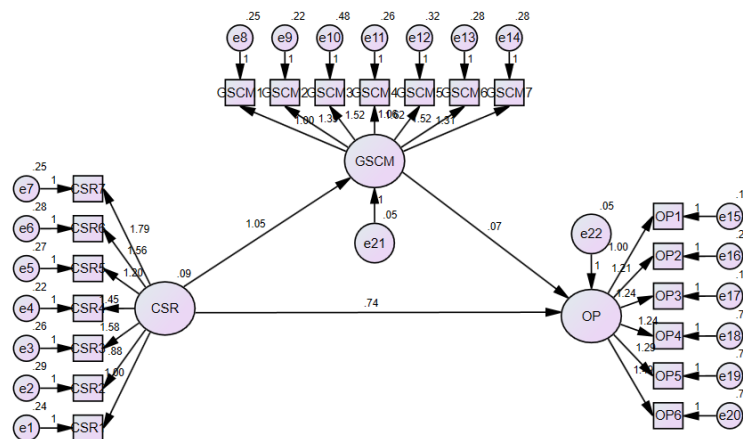


Figure 1: Structural Equation Model

4. RESULT AND DISCUSSION

4.1 Respondent Demographic Characteristics

Most of the respondents were male (72.5%), and many of them were 41-50 years old (34.0%) with a length of work of >15 years (48.0%) and the last education was a Bachelor Degree (93.5%).

4.2 Descriptive Statistics Analysis

Table 1: Descriptive Statistic Corporate Social Responsibility

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Indikator	N	Minimum	Maximum	Mean	Std. Deviasi
Public health issues are considered a company/ division responsibility	200	2	5	4.68	.575
Environmental issues are considered as a company/division responsibility	200	3	5	4.67	.602
The organization extends its quality commitment to the external community	200	2	5	4.28	.697
Incorporate environmental performance objectives in organizational plans	200	3	5.0	4.48	.642
Voluntarily exceed government environmental regulations	200	2	5	4.55	.643
Financially support environmental initiatives	200	2	5	4.30	.709
Measure the organization's environmental performance	200	2	5	4.15	.733
	200			4,44	0.657

Source: Data processed (2023)

From table 1 above, it can be concluded that the total mean for the corporate social responsibility variable is 4.44. This result shows that call center employees feel entirely bound by their work and are forced to do it, so there is pressure on employees to carry out their work.

Table 2: Descriptive Statistic Green Supply Chain Management

Indikator	N	Minimum	Maximum	Mean	Std. Deviasi
Providing design specifications to suppliers that include environmental requirements for purchased items	200	2	5	4.37	.636
Cooperation with suppliers for environmental objectives	200	1	5	4.37	.718
Environmental audit for suppliers' internal management	200	1	5	4.09	.914
Suppliers' ISO14001 certification	200	3	5	4.41	.659
Cooperation with customers for eco-design	200	2	5	4.31	.853
Cooperation with customers for cleaner production	200	1	5	4.39	.800
Cooperation with customers for green packaging	200	2	5	4.47	.743
	200			4,34	0.760

Source: Data processed (2023)

It can be concluded that the total mean of the distributive injustice variable is 4.34. This shows that employees feel mistreated regarding the rewards and workload they receive because it is not under what they have invested in the company.

Table 3: Descriptive Statistic Emotional Exhaustion

Indikator	N	Minimum	Maximum	Mean	Std. Deviasi
High-performance products that meet customer needs	200	3	5	4.62	.546
Produce consistent quality products with low defects	200	2	5	4.57	.623
Offer high reliable products that meet customer needs	200	3	5	4.59	.561

Produce products with low costs	200	1	5	3.79	.958
Produce products with low inventory costs	200	1	5	3.61	0.987
Produce products with low overhead costs	200	1	5	3.67	1.008
	200			4,14	0.781

Source: Data processed (2023)

From Table 3 above, it can be concluded that the total mean for the emotional exhaustion variable is 3.95. It means that call center employees feel exhausted because they have to show emotions that their employees do not feel.

4.3 Hypotheses Testing Result and Discussion

Table 4: Hypotheses Testing Result

Hypotheses	Estimation (β)	ρ value	Decision
Corporate Social Responsibility □ Operational Performance	0.736	0.000	Supported
Corporate Social Responsibility □ Green Supply Chain Management	1.051	0.000	Supported
Green Supply Chain Management □ Operational Performance	0.74	0.569	Not Supported
Corporate Social Responsibility □ Green Supply Chain Management □ Operational Performance	0.190	0.000	Supported

Source: Data processed (2023)

Based on the P-value results, a value of 0.000 is obtained so that H_a is accepted and it can be concluded that there is a significant positive influence between Corporate Social Responsibility and Operational Performance. Corporate social responsibility for operational performance has an estimated value of 0.736, meaning that corporate social responsibility has quite a large and positive influence on operational performance. It is proven that manufacturing companies in Jakarta have implemented Corporate Social Responsibility well, this success can be explained by the level of understanding and responsibility of the Company regarding its social responsibilities. All levels in the corporate hierarchy, from owners, directors, managers, supervisors, to employees, have responded well to the important role played by corporate social responsibility in supporting improved company operational performance. Awareness of the importance of cooperation in order to achieve common goals has permeated all levels of the organization, providing strong support for the successful implementation of corporate social responsibility. Health, work safety and environmental issues are also included in the factory section of the Work Agreement. In this agreement, the company is committed to implementing health, safety and environmental programs that comply with applicable regulations, while employees are committed to following the program and also playing an active role in the company's efforts to maintain its health, safety and environmental performance. So the existence of this program will have an impact on high performance that will meet customer needs.

Based on the P-value results, a value of 0.000 is obtained so that H_a is accepted and it can be concluded that there is a significant positive influence between Corporate Social Responsibility and Green Supply Chain Management. Corporate social responsibility for operational

performance has an estimated value of 1.051, meaning that corporate social responsibility has a large and positive influence on green supply chain management. In this research, manufacturing companies in Jakarta have succeeded in proving that they can implement corporate social responsibility successfully, by including environmental performance goals in organizational plans related to supplier cooperation with environmental goals. Develop an organizational performance plan which is in line with government regulations for environmental purposes, namely preparing a road map which has been submitted to the Indonesian Ministry of Environment and Forestry. This is in line with government regulations regarding a clear and measurable producer road map in supporting waste collection and recycling efforts. As well as involving the community more actively so that they can jointly restore ecosystems on land and in the sea. The company has been proven to include environmental performance goals in its organizational plans by implementing an Environmental Management System (EMS) based on ISO 14001 for each of its suppliers. Suppliers are committed to preserving nature, the company strives to ensure that the natural raw materials used are produced in a responsible manner and do not damage nature.

Based on the P-value results, a value of 0.570 is obtained, so H_a is rejected and it can be concluded that there is no influence between Green Supply Chain Management and Operational Performance. Previous research conducted on manufacturing companies in China by (Xu et al, 2022) showed that green supply chain management had an effect on operational performance. However, the results of this study are not in line with previous research (insufficient data evidence). There are several factors that make the hypothesis rejected, namely that some companies do not implement supply chain management well, this is because the companies do not understand the green supply chain and are not fully responsible for the green supply chain itself. According to (Ghosh et al, 2020), environmentally friendly supply chain management practices, including the implementation of environmental practices in supply chain activities, continue to have inconsistent and disruptive impacts on performance across industries, countries and continents. Green supply chain management is a complex activity and must require the involvement of many people. So there must be a mediating role in managing a superior green supply chain to achieve good operational performance. Research conducted by (Inman & Green, 2018) states that it does not support the statement that green supply chain management has a positive impact on operational performance in manufacturing companies.

The results of the latest hypothesis testing based on the results of the Sobel test, it is known that Corporate Social Responsibility has a positive relationship with Operational Performance mediated by Green Supply Chain Management of 0.1902, meaning it has a low influence. Based on the P-value results, a value of 0.000 is obtained so that H_a is accepted and it can be concluded that there is a significant positive influence between Corporate Social Responsibility on Operational Performance through Green Supply Chain Management. This research shows that green supply chain management partially mediates corporate social responsibility on operational performance. Based on research (Barakat et al, 2023) shows the existence of a partial mediation effect. This means that companies that successfully implement green training and development programs tend to place greater emphasis on sustainability in their supply chain management practices. The mediating role of green supply chain management can implement a commitment to external partnerships that have an impact on consistent quality. The company

is proven to provide education to partnerships that produce raw materials, the company also always monitors the quality of the raw materials managed by the partnership. Therefore, the products produced by the company will have consistent quality and a low defect rate.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Based on research that has been conducted regarding the influence of Corporate Social Responsibility on Operational Performance mediated by Green Supply Chain Management in manufacturing companies, several things can be concluded as follows:

1. This research shows that corporate social responsibility influences operational performance. This means that when manufacturing companies increasingly pay attention to public health issues as a company/division responsibility, they will increase high-performance products that can meet customer needs.
2. This research shows that corporate social responsibility influences green supply chain management. This means that when manufacturing companies pay more attention to environmental issues as a company/division responsibility, they will increase cooperation with customers for environmentally friendly packaging.
3. This research shows that the data available cannot prove the influence of green supply chain management on operational performance. This means that when companies work together with customers for cleaner production, there is no impact on high-reliability products that meet customer needs.
4. This research shows that corporate social responsibility influences operational performance mediated by green supply chain management. This means that the company goes beyond government regulations regarding the environment, so it will increase product output with consistent quality and low defect rates by having a mediating role, namely cooperation with suppliers for environmental purposes.

In this research there are several limitations, including that the research only received 200 respondents and the operational performance variable only took 2 dimensions. While some Researchers say there are several other dimensions.

5.2 Recommendations

The further research could use more respondents to get better results and it is recommended to include other variables such as procurement, transportation, and other social factors.

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CHAPTER 10

How Green Intellectual Capital Affect Operational Performance in Coffee Shops Businesses in the Jakarta, region?

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ABSTRACT

This research aims to analyze the influence of environmentally friendly intellectual capital on operational performance in coffee shops in the Jakarta area. The study utilizes quantitative methods and employs purposive sampling techniques. Through a questionnaire as the data collection tool, a sample size of 252 respondents is obtained. The questionnaires were distributed to managers, supervisors, and baristas at coffee shops using a Google Form. Hypothesis testing is conducted using the Structural Equation Model (SEM) method. The research results reveal that Environmentally Friendly Intellectual Capital does not exert a significant influence on Operational Performance but has a positive and significant impact on Environmentally Friendly Supply Chain Management. Meanwhile, the hypothesis testing results on the influence of Environmentally Friendly Supply Chain Management on Operational Performance also did not yield significant outcomes. These findings may suggest that environmentally friendly orientation and practices in coffee outlets are still limited and have not yet impacted performance significantly. Based on the results of this research, the managerial implication underscores the importance of increasing awareness among coffee shop managers and employees regarding environmental issues. This awareness is crucial to ensuring that the coffee shop's supply chain management practices are conducted in an environmentally friendly manner, thereby enhancing operational performance and contributing to the preservation of the natural environment.

Keywords: Green Intellectual Capital, Green Supply Chains Management, Operational Performance, Coffee Shops.

1. INTRODUCTION

Implementing Sustainable Logistics and Green Remanufacturing (SGLR) is essential to reduce carbon footprint and emissions, achieve climate-neutral weapons and supply chains, control emissions, manage climate change, and address environmental and environmental issues. Sustainable and environmentally friendly development can improve transportation and logistics systems, reduce energy consumption, reduce waste and pollution, and increase the use of renewable energy sources (Domagala et al., 2022). According to the World Bank, in 2014, global carbon emissions from various sectors in 2011 were almost 375% higher than in 1960 (Zhou et al., 2021). Green supply chain management has received more attention in recent decades due to the challenges of global warming and resource shortages that cause pressure on legal businesses, public interests, or competitive opportunities (al., 2018). Digital transformation considers the application of digital technologies to leverage data between and within companies in real-time and bring “smartness” to business and technological processes (Holmström et al., 2019). They lack confidence and believe that the programs they propose and implement can produce significant improvements in environmental performance (Anvar et al., 2018).

Due to increasing external pressures and the desire to improve, companies are looking for ways to improve their environmental performance. However, business leaders do not know how to reduce their environmental footprint (Hendriks et al., 2018). The relationship between the environment, government policies towards globalization and industrial development forces industrial companies to implement sustainable practices (Sahoo and Vijayvargy, 2020). The implementation of new technologies such as additive manufacturing (AM) brings new challenges in terms of business support, requiring a broader view of the production process, including the company's internal processes and the entire supply (Ford and Despeisse, 2016). Increasing concerns about environmental change and economic decline are becoming more prominent at the global level. For example, in the food supply system, many environmental problems are related to agriculture, such as the impact of soil erosion, excessive fertilization, and animal management practices (Jose et Shanmugam, 2019). Voluntary environmental certification is one tool that companies use to demonstrate their commitment to environmentally friendly initiatives. Until now, there are various types of tools (Marchette, 2016).

In the 21st century, “sustainability” is one of the most important issues for all types of companies due to its important role in profitable business growth and protecting social and environmental values (Kolk and Pinkse, 2008). In this context, consumers play an important role in improving their consumption habits that are socially and environmentally responsible. Given the increasing concerns of consumers regarding global warming, environmental protection and social impacts, many organizations are adopting sustainable strategies (Gold et al., 2010).

2.1.2 Supply Chain

The supply chain is an organizational system that involves roles in carrying out various activities involving information, finance and other resources that are interrelated in the movement of a product or service from supplier to consumer or customer (Putradi, 2017). The supply chain is a physical network, namely all companies that supply raw materials, produce goods and hand them over to consumers/end users (Radhi and Hariningsih, 2019). In recent decades, the agri-food industry has faced challenges arising from increasing

global competition and increasing pressure on companies to adopt sustainable and inclusive business practices (Jambor and Babu, 2016). Companies operating in supply chains provide greater value to customers with higher product quality and lower costs, which also improves the long-term performance of the company and the supply chain (Qrunfleh and Tarafdar, 2013). The capital goods industry continues to experience technological changes leading to its integration into supply chains to compete internationally by providing low-cost, high-quality products and services to customers (Puga and Castro, 2018). Based on the opinion above, it can be concluded that the Supply Chain is a work network system in which there are various activities ranging from supplying raw materials to sending them to customers or final consumers. Properly defined supply chain performance measures enable strategic distribution of processes across multiple companies (Zhao et al., 2022) and create opportunities for companies to increase success by providing competitive advantages through differentiated services and low costs (Narayanan and Ishfaq, 2022).

2.1.3 Supply Chain Management

Supply chain management is a set of approaches to effectively integrate suppliers, manufacturers, warehouses and stores so that inventory can be produced and distributed in the right quantities, in the right places, at the right time so that total system costs can be minimized. to meet needs and services (Radhi and Haringsih, 2019). Supply Chain Management is a network of organizations that are interconnected and need each other (Riadi, 2017). They also work together to organize, monitor and improve the flow of goods and information from the point of delivery to the end user. Supply Chain Management is a series of activities required to plan, manage and direct the flow of products effectively, in the most efficient and cost-effective way (Anindita, 2019). Therefore, knowledge management is an important contribution to supply chain management in the new era of digitalization (Xue, 2014). Supply chain management is the planning, design and management of the flow of materials and information in the supply chain with the aim of current and future customer satisfaction (Schroeder, 2007). Supply chain management is a way of integrating various organizations that procure or distribute goods. suppliers, manufacturers, warehouses and stores. so that goods are produced and distributed in the right quantities, in the right places, at the right time at the lowest possible cost (Levi, Kaminsky). SCM aims to organize and coordinate the procurement, transportation and management of materials from a system-wide perspective across multiple functions and multiple supplier levels (Centobelli et al, 2021). According to Maaz, he is also at the top of hypothesis development (Maaz, et al 2021).

2.1.4 Green Supply Chain Management

Green supply chains management is considered a supply chain management approach to environmental management that includes strategic positioning and environmental practices to enhance a company's environmental goals (Zhu et al., 2013). The relationship between the environment, government globalization policies, and industrial development is forcing manufacturing companies to shift to implementing sustainable practices (Sahoo and Vijayvargy, 2020). Environmentally friendly supply chain management is the process of using environmentally friendly inputs and converting inputs into outputs that can be recycled at the end of the cycle, thereby creating a sustainable supply chain (Penfield, 2017, Samir K. Srivastava, 2007). Meanwhile, according to Srivastava (2007), Green Supply Chain Management explains the integration of environmental issues into supply chain management, including product design, raw material supply and supplier selection, production processes

to delivery of final products to consumers. Green supply chain management introduces traditional supply chain management practices that combine environmental criteria or purchasing decision issues for goods or services and long-term relationships with suppliers (Gilbert, 2000).

Environmentally friendly supply chain management integrates environmental and supply chain management and promotes the role of the supply chain in environmental protection efforts. Green Supply Chain Management identifies and measures the environmental impact of an organization's various supply chain processes. Supply chain improvements that have a positive impact on the environment include the following policies and practices (Charbel Jose et al. 2016).

Some operational activities and environmentally friendly supply chain management functions (Ninlawan and Toke, 2010) include:

1. Environmentally friendly procurement
Refers to environmental conditions of procurement consisting of participation in the procurement process in savings activities, strategic reuse and recycling of materials. Green purchasing is a solution for environmentally and economically conservative companies and a concept for obtaining product and service options that minimize environmental impact.
2. Green production (green production)
Eco-friendly manufacturing is a production process that uses environmentally friendly raw materials, is highly efficient, and produces little or no waste and pollution. The impact of implementing green manufacturing is that it can reduce raw material costs, increase production efficiency and improve the company's image.
3. Environmentally friendly distribution
Environmentally friendly distribution activities include environmentally friendly packaging and environmentally friendly logistics. Environmentally friendly packaging includes saving on packaging, using environmentally friendly materials, working with suppliers to standardize packaging, saving on material use and unpacking time, and implementing recycling programs. Environmentally friendly logistics, including direct delivery to users using the website, use of alternative fuel vehicles, and delivery of products in bulk.
4. Reverse logistics
Reverse logistics is the process of obtaining products from end users to add value and disposing of them properly. Reverse logistics activities include collection, combined sorting, recycling, redistribution and disposal.

2.1.5 Operational Performace

Operational Performance is a field of management that specializes in the production of goods and services and uses special tools and techniques to solve production problems (Daft. 2013). Operational performance is the implementation of management activities in selecting, planning, updating, using and monitoring production systems (Handoko, 2010). The concept and application of data and analytics in management is gaining increasing attention, as researchers and practitioners strive to understand how data can be transformed into actionable insights that lead to improved organizational performance (Chierici et al., 2019; Ferraris et al.). Performance is an important factor in organizational analysis and there is no organizational theory that does not have this concept (Goodman and Pennings 2017). In this rapidly developing and dynamic environment, one of the effective factors for organizational success, improving organizational performance and maintaining competition is a focus on innovation and strategic planning. Many studies emphasize that innovation often leads to competitive advantage (McCollera Salenna and Wewardena; -Kennedy, 2019). An

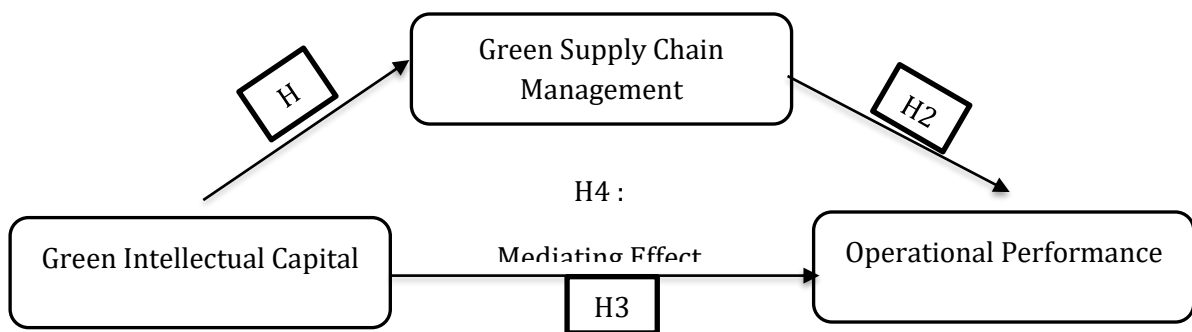
innovative culture in an organization is a key factor in the success of new products, new services, and process improvements. Many authors consider innovation as the main strategy for improving and creating new products or services, developing new approaches to production, distribution and delivery, change management processes and communicating ideas that lead to high efficiency and competitive advantage (El. -Kassar and Singh, 2019). According to Handoko (2010) every company defines their company's strategy and goals, then identifies operational performance objectives that must be met in order to achieve the company's strategy. Next, the company will define the measuring tools that will be used to determine whether the objectives of the brand's operational performance are met.

It can be concluded that basically in order to achieve organizational goals in operational performance, namely by implementing the following functions:

1. Planning
These are decisions that involve the creation of methods for carrying out productive operations.
2. Organizing
Are long-term output level planning decisions or basic demand forecasts and short-term work scheduling and employee allocation decisions.
3. Actuating
These are decisions made in the production system based on changes in demand, organizational and management goals.
4. Controlling
These are procedures that involve taking corrective action in operations producing goods or providing services.

2.2. Conceptual Framework

In this research the independent variable used is Green Intellectual Modal which coffee shops will be tested with Operational Performance as the dependent variable. Then test the effects of Green Supply Chains Management on Operational Performance and testing the effects of Green Supply Chains Management, GSCM as a variable mediation of Green Intellectual Modal and Operational Performance. The conceptual framework is as follows:



2.3 Hypotheses Development

Intellectual capital is well defined and practical compared to core competencies, learning organizations and knowledge creation processes (Roos, 1998). The Organization for Economic Cooperation and Development (OECD) defines intellectual capital as the economic value of a company's intangible assets and includes organizational (structural) and human capital (OECD, 2000). The OECD definition differentiates between intellectual capital and intangible assets and describes intangible assets as a subset of intangible assets (Petty and Guthrie, 2000). Intellectual capital is a product of expertise and commitment and is the only company asset that experiences an appreciation in value while other assets experience a decrease in value (Ulrich, 1998). Intellectual capital is a non-physical and non-financial resource that provides added value to an organization through knowledge (Allameh, 2018). Chen introduced the concept of GIC in 2008 by integrating the environment with intellectual capital (Yong et al., 2019; Yusoff et al., 2019). GIC is a collection of intangible assets in the form of knowledge, skills and relationships in environmental management or green innovation at the individual and organizational levels of a company (Chen, 2008).

H1. Green Intellectual Capital has a positive effects on Green Supply Chains Management

Chen's definition combines environmental management and intellectual capital to cover the previous gap (Huang and Kung, 2011). Green intellectual capital consists of two parts. The first aspect refers to the ownership of knowledge at various organizational levels in environmental management, and the second aspect refers to the exploitation of existing knowledge in environmental management to achieve competitive advantage (Lopez-Gamero et al., 2011). Green intellectual capital is classified into three types: green human capital, green structural capital, and green relational capital (Chen, 2008). The Green supply chains management literature has developed with the understanding that environmental management is not limited to organizational boundaries. The scope of green supply chains management includes industrial ecology, industrial ecosystems, product life cycle analysis, and manufacturer responsibility and management (Zhu et al., 2005). Interest in green supply chains management is increasing among researchers mainly due to environmental degradation, depletion of raw materials, wastage of resources, and increasing pollution (Srivastava, 2007). Green supply chains management has been studied from various perspectives such as product design (Gupta, 1995), process design (Klassen and McLaughlin, 1996), its practice (Zhu and Sarkis, 2004), etc. The scope of green supply chains management varies from reactive approaches to external approaches. environmental management to a proactive approach. , such as recycling, regeneration, reproduction and reverse logistics. There is no agreement regarding the definition of green supply chains management and this is not surprising because this concept is an interface between environmental management and supply chain management (Zhu and Sarkis, 2004).

H2. Green Supply Chains Management has a positive effects on Operational Performance

Environmental problems greatly influence industrial management systems. The concept of green management emerged in the 1920s to help companies overcome environmental problems (Kim et al., 2011). The emergence of environmental problems changes the focus of management towards environmental or environmental sustainability. Environmental orientation is known as a management initiative related to reducing a company's environmental impact. Orientation refers to the corporate culture that applies in the company, which ultimately leads to environmental management principles and procedures. Orientation towards the external environment is related to managers' actions in meeting the needs and demands of stakeholders outside environmental management (Chan et al., 2012). The literature on green supply chains management orientation is limited. Kim et al. (2011) define

green supply chains management orientation as a set of business philosophies and practices aimed at improving the environmental performance of supply chains. Green orientation is an organization's long-term commitment to produce environmentally friendly products and services by improving environmental management systems in the past, present and future (Hong et al., 2009). Companies' orientation towards green supply chains management allows them to better understand the resources and opportunities for implementing green supply chains management practices (Kirchoff et al., 2016).

The supply chain is a complex network of various parties, including manufacturers, suppliers, transporters, and retailers, who are directly or indirectly involved in meeting customer demand (Chopra and Meindel, 2003). Adding an ecological component to supply chain management will improve relationships between suppliers, circuit and environment (Hervani et al., 2005). Narasimhan and Carter (1998) define green supply chains management as a purchasing function that focuses more on reducing, reusing, recycling and replacing materials. Green supply chains have evolved from hybrid supply chains that seek to comply with environmental regulations and product development, manufacturing, reuse, recycling, and reuse requirements (Nelson et al., 2012). Green supply chains management integrates environmental and supply chain management, including product design, procurement, production, delivery, and end-of-life management (Srivastava, 2007).

H3. Green Intellectual Capital has a positive effects on Operational Performance

In the studies mentioned above, the authors used different GSCM practices or defined their own GSCM practices to measure their impact on organizational performance. In previous research, green procurement, customer collaboration, green design, and investment recovery are mostly used as GSCM practices (Vijayvargy et al., 2017). According to Hervan (2005), GSCM practices are environmentally friendly procurement, environmentally friendly production, environmentally friendly distribution/marketing, and reverse logistics. This research adopts from Sharma et al. define GSCM rules. (2017) because these practices are indicators of the agricultural industry and are therefore related to the subject of this research. Operational performance, financial results and employee job satisfaction. Operational performance is interrelated with the company's efficiency in production and delivery. Zhu et al.'s concept of functional performance. (2008a, b), is the company's ability to produce and deliver it to customers efficiently. The literature widely supports a positive relationship between environmental management and operational performance (Szwilski, 2000; Shimomura, 2001), but the relationship between GSCM practices and operational performance provides mixed results (Diab., 2015).

H4. Green Intellectual Capital has a positive effects on Operational Performance mediated by Green Supply Chains Management.

3. RESEARCH METHOD

3.1 Research Design

The research employs a quantitative method. The population consists of manager, supervisor, and coffee master in coffee shops in the Jakarta region.

3.2 Variable and Measurement

The variables used in this study are Green intellectual Capital, Green Supply Chains Management, Operational Performance

3,3 Population and Sample

The population in this study were were manager, supervisor, and coffe master in coffee shops in the Jakarta, region. The determination of the sample was carried out using a non-probability method, namely purposive sampling with 252 samples filling out the questionnaires. According to Hair et. al (2018), the maximum sample size is the number of statements multiplied by 10 (ten).

3.4 Research Instrument Testing

From the results of the research instrument testing, all constructs are valid because have a factor loading of more than 0.4. All variables are also reliable because they have a Cronbach alpha of more than 0.6

3.5 Analysis Method

The analysis uses descriptive statistics in the form of mean and for hypothesis testing using the Structural Equation Model with AMOS software.

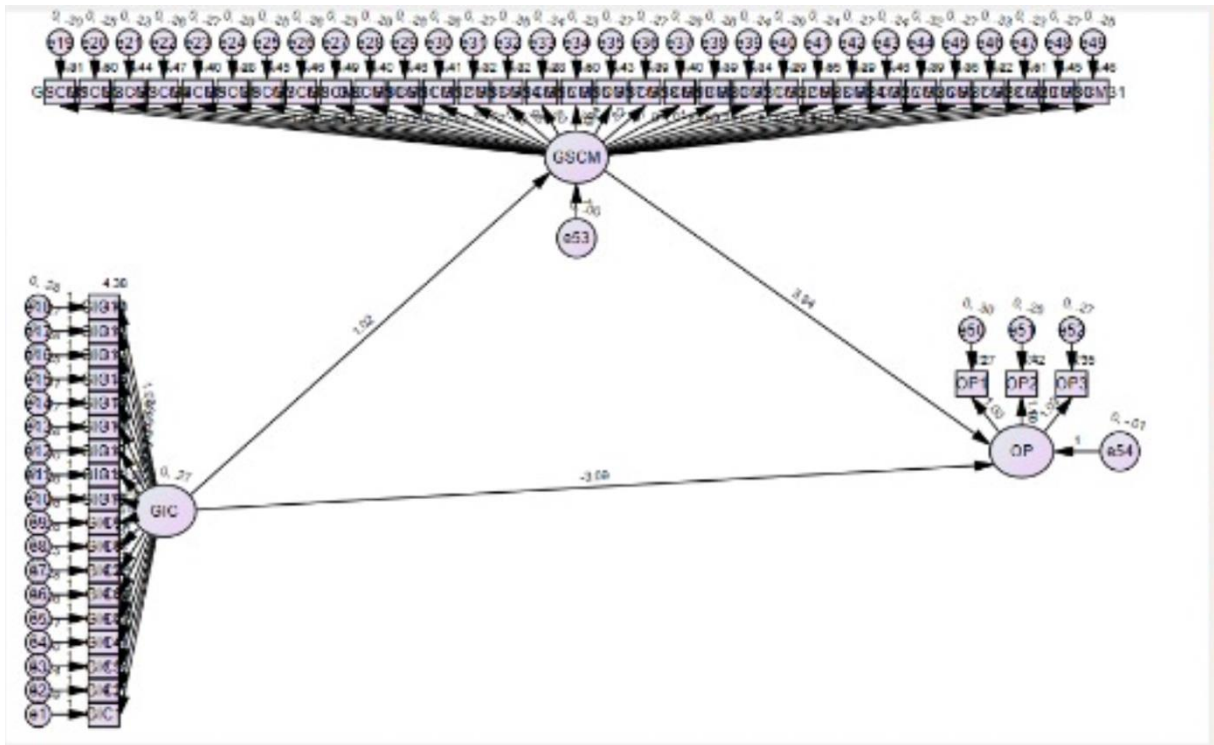


Figure 1: Structural Equation Model

4. RESULT AND DISCUSSION

4.1 Respondent Demographic Characteristics

Most of the respondents were female (56,7%), and many of them were 20 - 30 years old (48,4%) with a length of work of 1-5 years (47,6%)and the last education was a Bachelor Degree (65,1%).

4.2 Hypotheses Testing Result and Discussion

Table 1: Hypotheses Testing Result

Hypotheses	Estimation (β)	ρ value	Decision
Green Intellectual Capital \square Green Supply Chains Management	1.020	0.000	Supported
Green Supply Chains Management \square Operational Performance	3.842	0.872	Not Supported
Green Intellectual Capital \square Operational Performance	-3.095	-0.128	Not Supported
Green Intellectual Capital \square Green Supply Chain Management \square Operational Performance	24.754	0.898	Not Supported

Source: Data processed (2023)

Green Intellectual Capital has an estimated value of 1,020, meaning the higher the perceived value of Green Intellectual Capital. So, this can increase the percentage of Green Supply Chains Management, namely by 1,020. Based on the p-value results, a value of 0.000 is obtained, so H₀ is rejected or H_a is accepted. It can be concluded that there is a significant positive influence between Green Intellectual Capital on Green Supply Chains Management. In the context of research conducted on coffee shops in the West Jakarta area, it has succeeded in proving success in implementing Environmentally Friendly Intellectual Capital effectively. This success can be explained by a good level of understanding between the capabilities of environmentally friendly resources in coffee shops and their application to their business. In addition, it is proven that the implementation of human resources in green intellectual capital has succeeded in achieving efficiency which has an impact on environmental sustainability. These results directly explain that an green intellectual capital approach has a strong positive impact on green supply chains management. And succeeded in achieving optimal environmentally friendly improvements.

All levels in the coffee shop company hierarchy, starting from managers, supervisors, and coffee masters, have responded well to the important role produced by environmentally friendly intellectual capital in supporting the improvement of green supply chains management in companies. Awareness of the importance of cooperation in order to achieve common goals has permeated all levels of the organization. Providing strong support for the successful implementation of green intellectual capital. Through the application of green intellectual capital, coffee shops in the West Jakarta area have succeeded in achieving a better level of efficiency in managing their supply chain.

The application of green intellectual capital improves knowledge about the importance of being environmentally friendly in coffee shops in the West Jakarta area, this can be seen from productivity standards, more environmentally friendly production processes, and managers fully supporting employees to carry out work that pays attention to environmentally friendly factors. In the hypothesis results it can also be seen that the application of Green Intellectual Capital in companies has a stable relationship with consumers regarding environmental protection, so that companies have the ability to compete and can achieve the expected goals.

The results of this research are supported by research conducted by (Abdul Mohd et al., 2021) which has also proven that Green Intellectual Capital influences Green Supply Chains Management.

Can explain that the results of the second hypothesis test show a p-value of 0.872, which is greater than 0.05 and an estimated value of 3.842. Thus, it can be concluded that H_a is rejected and H₀ is accepted, which means that Green Supply Chains Management has no

effect on Operational Performance. This means that the higher the perceived value of Green Supply Chains Management, the lower the perception of Operational Performance, namely 3,842 units. Based on the results of the test above, a p-value of 0.872 was obtained. So, H₀ is accepted or H_a is rejected and it can be concluded that statistically there is no significant effect between Green Supply Chains Management on Operational Performance.

Testing the hypothesis with quantitative data shows that the hypothesis is rejected. There are several factors that make the hypothesis rejected. The items on the scale created by researchers are less focused and less defined, especially on the Operational Performance scale. This is because the Operational Performance variable itself has not been widely studied. Operational Performance is still a variable that is rarely found in research in Indonesia. In research conducted by Mohd Abdul Mueqet in India with the object of the food industry in 2021. Explains that the Green Supply Chains Management variable has a positive effect on the Operational Performance variable. In research conducted in Indonesia in 2023 with the object of coffee shops in the West Jakarta area, the results obtained by green supply chains management had no effect on operational performance. Which means, H₀ is accepted and H_a is rejected.

The company does not optimize the use of collaborative transportation and warehouses, which results in the company not maximizing the use of existing storage space. Therefore, green supply chains management does not affect operational performance. Companies also pay less attention to the quality of the products produced. This happens because the product is designed to be stored at cold temperatures. Meanwhile, the company has not been able to provide sufficient refrigerators according to the standards of the goods produced. This means that the indicators of the green supply chains management variable do not support the operational performance variable indicators.

The company also has not collaborated with vendors to standardize product packaging, which has an impact on loading and unloading times which require more time. This causes the goods to be delivered not to arrive on time. It can be said that the green supply chains management variable indicators do not support the operational performance variable indicators.

Green Intellectual Capital has an estimated value of -3,095, meaning the higher the perceived value of green intellectual capital. So, this can reduce the perception of operational performance, namely -3,095. Based on the test results above, a p-value of 0.899 is obtained so that H₀ is accepted or H_a is rejected and it can be concluded that statistically it has a significant negative effect. Between green intellectual capital and operational performance. Coffee shop companies do not have employees with productivity and positive contributions. This causes companies to be unable to fulfill the number of orders that consumers want and this makes it difficult for them to send their products to consumers on time. So, green intellectual capital has no effect on operational performance.

The company does not invest in environmentally friendly product storage areas. This causes employees to be unable to optimize existing storage space. This means that the indicators of the green intellectual capital variable do not support operational performance indicators. Employees at coffee shop companies in the West Jakarta area pay less attention to the quality of the products produced, which causes employees at the company not to provide high quality and service towards environmental protection. This can be said, the indicators of the green intellectual capital variable do not support the indicators of the operational performance variable.

Based on the results of the Sobel Test, it's known that Green Intellectual Capital has no effects with Operational Performance mediated by Green Supply Chains Management of 24.757, meaning it has a high background values. Based on the p-value results, a value of more than 0.000 is obtained. So, H_a is rejected and it can be concluded that there is no significant effects between Green Intellectual Capital on Operational Performance through Green Supply Chains Management. The results of this research prove that there is no influence of green intellectual capital on operational performance. Coffee outlets in the West Jakarta area are currently not implementing green intellectual capital optimally. Thus, green intellectual capital cannot improve operational performance. For example, coffee shops in the West Jakarta area have not yet formed a committee to handle environmental protection issues, cooperative relations between companies and their clients are not yet stable enough regarding environmental protection, and coffee shop managers in the West Jakarta area have not fully supported their employees to achieve their work efficiently. environmental protection purposes.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Based on research that has been conducted regarding the effects of Green Intellectual Capital on Operational Performance mediated by Green Supply Chains Management in coffee shops. There are several things can be concluded as follows here:

1. The results of this research prove that there is a positive effects of Green Intellectual Capital on Green Supply Chains Management.
2. The results of this research prove that there is not effects from Green Supply Chains Management on Operational Performance
3. The results of this research prove that there is not effects of Green Intellectual Capital on Operational Performance
4. The results of this research prove that there is not effects of Green Intellectual Capital on Operational Performance by Mediation Green Supply Chains Management

5.2 Recommendations

1. For further research, can expand more area for research to get better results
2. Further research can increased sample size to make it convincing and unbiased
3. For further research, can include more variables such as employee job satisfaction, knowledge management and organizational performance

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CHAPTER 11

Analysis of The Effect of Implementation of Psak 73 Regarding Financial Performance

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ABSTRACT

The application of accounting for lessees (lessees) underwent a significant change from what was originally PSAK 30 based on US GAAP before January 1, 2012, then changed to PSAK 30 which became effective starting January 1, 2012 based on IFRS and finally PSAK 73 based on IFRS which will become effective January 1, 2020. The application of PSAK 73 itself is a challenge for companies to implement in their business activities. This study aims to analyze the impact of implementing PSAK 73 on the financial performance of Consumers Good companies listed on the Indonesian Stock Exchange for the 2019-2021 period. Financial performance will be measured by Profitability, Liquidity and Solvency Ratios. The result is that the implementation of PSAK 73 has a significant effect on Sovability and does not have a significant effect on profitability and liquidity.

Keywords: PSAK 73, Profitability, and Liquidity.

INTRODUCTION

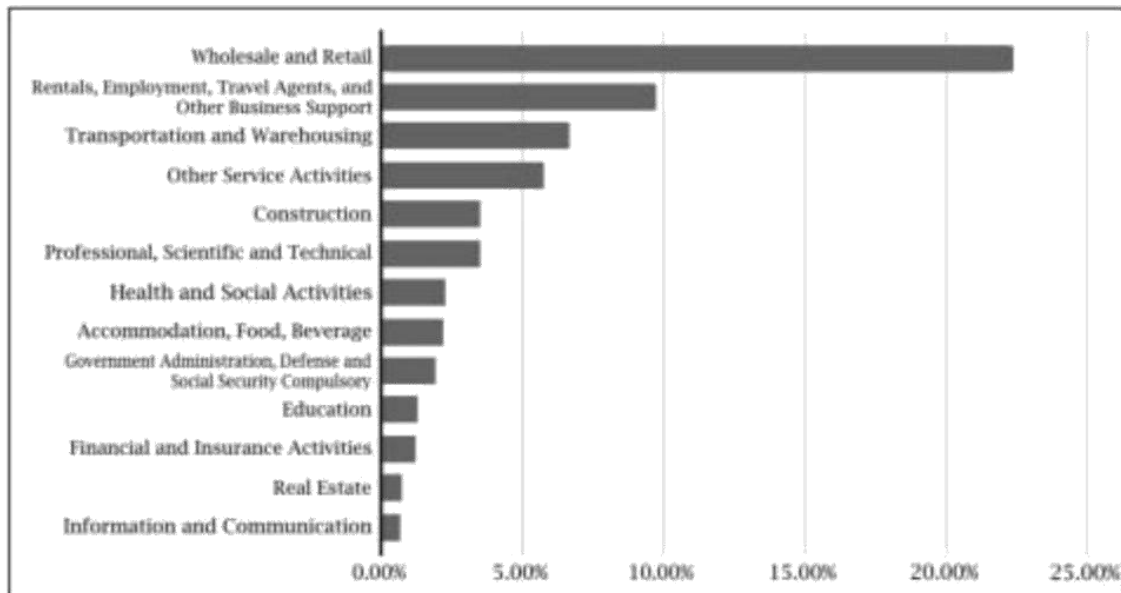
Rental transactions in all business lines are very diverse and quite helpful for operations, because leasing really helps companies to own operational assets without having to spend large amounts of funds, because of this the accounting regulations are regulated in this way in PSAK.

The main topic in this paper is related to the implementation of PSAK 73, the author analyzes the impact on financial performance. PSAK 73 concerning rent, which was adopted from IFRS 16 concerning Leasing. The Indonesian Accountants Association created PSAK 73 rules to define the principles, measurement and disclosure of leases (IAI 2022). Objective

The implementation of PSAK 73 is to ensure that tenants provide information that is relevant to valid transactions. Information may be used by users of financial reports and stakeholders to evaluate the impact of implementing PSAK 73 on users of financial reports. Kieso (2010) stated that tenants will obtain rental returns such as fixed interest financing, protection against risk and asset obsolescence, economy and flexibility. Apart from that, leasing can also be a way for related entities to manage off-balance sheet financing. So far, the entity records the lease as an operating lease, while in an operating lease the entity uses the asset without needing to include the asset in the entity's financial balance sheet. Temporary In PSAK 73 finance leases require financing assets and liabilities to be capitalized in the lease. This of course makes the financial statements inaccurate. In PSAK 30, entities are given the choice of whether to recognize it as an operating lease or as a finance lease.

Choosing the rental option itself can actually help the company meet its needs for assets that will be used to support operations company. Because the company does not need to spend large amounts of money so it can minimize the costs incurred, in terms of maintenance costs, the rental option also provides the benefit of guaranteed maintenance from the vendor. These things are the question for this research, whether the implementation of PSAK 73 will have a significant direct effect on the financial performance of food and beverage companies listed on the Indonesian Stock Exchange.

The 2021 Indonesian Financing Companies Association (APPI) report explains that there are 161 financing companies that have permits from The financial services authority (OJK), this has decreased from 176 in 2020, this is because many finance companies have had their licenses revoked by the OJK. Company food and beverage itself in 2020 according to the Indonesian Finance Companies Association (APPI) report ranked 8th in the statistics of the most rental users. This is quite a challenge for writers, because to explore the influence of PSAK 73 on financial performance, the author must collect statistical data which must go through a calculation and analysis process. For our APPI data can see in the diagram below:



Gambar 1. Frekuensi distribusi

THE ORETICAL BASES

Signaling Theory

Signaling theory put forward by Ross (1977), states that management highest who has more information about his company will be motivated to share it with potential investors to increase share prices company. In other words, the company will choose to list good information about his company in his financial statements for more stimulate the interest of potential investors. Investors need information about something company to be able to move to the next stage, namely retrieval Investment decision. The more information investors can receive, the more the greater its influence in determining investment. Proper signaling external parties, especially investors, can help the company increase the value of the company. Based on this, the organization trusts that positive data is provided, regardless of whether financials can build a premium from financial backers to be able to invest resources into the organization.

Literature Review

The rental capitalization that occurs can affect the company's financial performance. research from Rudy Winata and Elizabeth Sugiarto D entitled Analysis of the impact of implementing PSAK 73 on the financial performance of state-owned companies listed on LQ 45 shares (2022) concluded that lease capitalization has a significant effect on solvency ratios, profitability and activity ratios. Company value also changes as a result of changes in financial performance company because company value is an indicator of how investors view the company's financial performance, which can be seen in research previously, for example by Donny et al (2022) and also research by Rini Susiani and Bintang Purnomo Adji entitled Review of International Geographical implementation of PSAK 73 Leases and its Impact on Company and financial Performance (2021). Then based on research by Altintas & Sari (2016) which said "After implementing this standard, companies with operating leases will likely

experience an increase in assets, an increase in liabilities, and a decrease in equity, which can affect their financial ratios. significant".

So the capitalization of rental value based on PSAK 73 which gives rise to right-of-use assets and lease liabilities can especially affect the company's financial ratios in the leverage and activity sections, also supported by the results of previous research from Öztürk. (2016), Pardo & Giner (2018), Morales-Díaz & Zamora Ramírez (2018), Safitri et al., (2019), Suzuki Tofanelo et al., (2021), Rahmawati (2021), and Putri (2021).

So this research will look at the influence of the company's financial performance on company value after the implementation of PSAK 73 concerning lease capitalization in Consumer Goods subsector service companies in Indonesia. Because no one has researched this subsector, researchers will take samples from this subsector as well. Researchers took the research for 3 years, namely 2019, 2020 and 2021. The author also added the Return On Investment (ROI) variable as a variable study.

PSAK 73 AND FINANCIAL PERFORMANCE

PSAK 73 is a financial accounting standard approved by the Board Financial Accounting Standards (DSAK) in 2017 which is the adoption of IFRS 16. The leases came into force on January 1 2020, but the implementation was early allowed if applying PSAK 72: income from contracts with customers. PSAK 73 replaces PSAK 30: Leases, ISAK 8: Determining whether an agreement contains a lease, ISAK 23: Operating incentive leases, ISAK 24: Evaluation of the substance of transactions involving the legal form of lease, and ISAK 25: Land rights. PSAK 73 substantially changes the accounting for lessees and almost all leases are treated as finance leases. This is because the previous concept was deemed unable to meet the needs of financial report users because it did not always show the accuracy of rental transactions if the lessee was not required to recognize assets and liabilities arising from operating leases. (IAI, 2017).

PSAK 73 aims to regulate the principles of recognition, measurement, presentation and disclosure of leases by introducing a single accounting model, especially for lessees. Lessees are required to recognize Right of Use Assets and lease liabilities, except when short-term leases have a lease term of 12 months or less and lease low-value assets (IFRS US\$5000) without regard to materiality, when the new asset is material. assessment of new assets, if the assets are rented out then it does not cover low value assets such as laptops, cellphones, and furniture.

According to Irham Fahmi (2012), financial performance is an analysis used to determine the extent to which a company can implement financial procedures well. In this research, financial performance is measured by several financial ratios such as Profitability Ratios (ROA and ROI), Solvency Ratios (DER), and Liquidity Ratios (Current Ratio). ROA is used to measure how well a company utilizes its assets to achieve profits. ROE is used to measure the extent to which a company utilizes capital capital to gain profits, ROI is used to measure how much profit is obtained from the company's investment, DER is used to measure how much capital comes from debt, then Current Ratio is used to measure how much the company is able to carry out or fulfill its current obligations with the current

assets it owns. Based on related information, the conceptual framework that the author created is as follows.

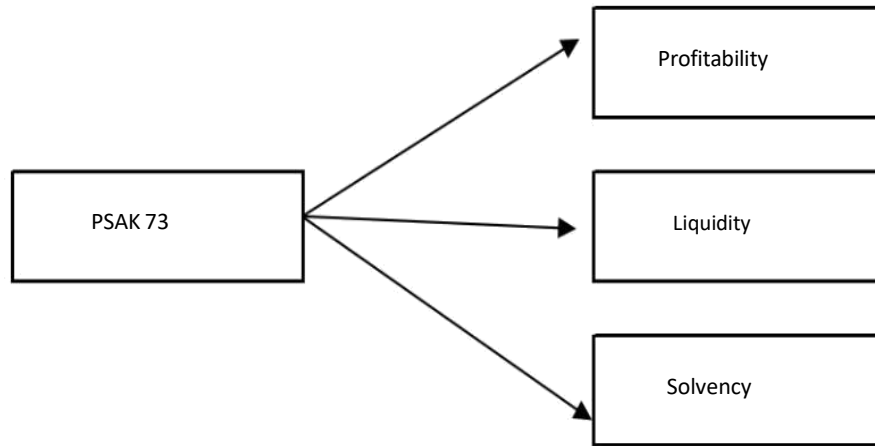


Figure 2.

Conceptual framework

HYPOTHESIS Profitability in this research uses the ROA (Return on Asset) and ROI (Return on investment) ratios. Return On Assets (ROA) is used to measure a company's capabilities create profits by utilizing its assets. ROA itself is calculated by: Compare net profit with total assets owned. According to Kashmir (2019) ROA can show the return on use of company assets. Financing assets will appear in the asset post on the balance sheet so that according to the author,

Kashmir (2019) revealed that ROI is a ratio for find out how much net profit is obtained from the company's net capital. Investors also often take into account ROI when they want to invest in a company to find out and predict how much profit can potentially be generated from a given investment. According to the author,

H1: Implementation of PSAK 73 has a significant effect on Profitability values A high Solvency ratio value indicates that the debt value is not

proportional or has a higher difference than the company's equity value, which shows the company's dependence on funds from outside the company in this research for solvency using the DER Ratio (Debt to Equity Ratio). Related to this, it can be a problem for the continuity of the company in paying off the amount of debt it has due to the low value of the company's equity which is usually used as a benchmark for guaranteeing the ability to pay debts. that is owed. based on previous research showing the influence of Debt to Equity Ratio (DER) to company value by Dwimulyani (2017), Mawardi (2018), and Hidayat (2018) if after capitalization the lease is carried out and creates value the company's disproportionate debt then indicates excess use of the lease option exercised. This impact can certainly make it difficult for the company to pay off debt and affect investors' assessment of the company's value. years as a finance lease. Based on this, according to the author

H2: Implementation of PSAK 73 has a significant effect on Solvency

The current ratio or current ratio is one of the liquidity ratios used to measure a company's ability to fulfill its short-term obligations using its current assets. Finance lease assets themselves are usually included in right-of-use assets and lease obligations, so according to the author

H3: Implementation of PSAK 73 will not have a significant impact on liquidity

RESEARCH METHODOLOGY

This research uses the probit regression method with SPSS 24 software. The population in this research are companies operating in the Consumer Goods sector which are listed on the Indonesian stock exchange during 2019 - 2021, the criteria for

The sample is that the company is active and has never been delisted during the research period. At the moment. There are a total of 50 companies in the Consumer Goods sector on the Indonesian Stock Exchange, and for this research the author will use the entire population of these companies. This research uses data from the Indonesian Stock Exchange website (Secondary), 50 Companies operating in the Consumer Goods sector.

Table 1
Research Population and Sample

No	Information	Amount
1.	Number of Consumer Goods Companies listed on the Stock Exchange Indonesia during 2019-2021	118
2.	Companies that do not publish their reports consistently and incompletely	(18)
3.	New companies listed above in 2019	(50)
4.	Number of companies studied	50

PSAK 73

PSAK 73 is a standard that regulates the recognition of leased assets where the focus is on the lessee's side. In this research, the author uses a dummy variable to measure the implementation of PSAK 73, where 1 is for companies that include information related to PSAK 73 in their financial reports or Right of Use accounts, and 0 for companies that do not include this information.

Return On Assets

Return on Assets is a ratio used to measure the amount of assets used in a company to generate profits. The ROA formula according to Kasmir (2019) is:

$$\text{ROA} = \left(\frac{\text{Net Profit}}{\text{Total Assets}} \right) \times 100\%$$

Return On Investment

Return On Investment is a ratio to measure the value or return on the amount of

investment used in the company. The ROI formula according to Kasmir (2019) is.

$$\text{ROI} = \left(\frac{\text{Total Sales/Investment}}{\text{Investment}} \right) \times 100\%$$

Debt to Equity Ratio

Debt to Equity Ratio is the ratio used to measure how much capital comes from debt. ROE formula according to cashmere (2019)

$$\text{Current Ratio} = \left(\frac{\text{Total Current Assets}}{\text{Total Current Liabilities}} \right) \times 100\%$$

Research plan

The author plans to complete this research in approximately 3 years month, it is hoped that within three months the author can maximize this research to produce a paper that is ready

for publication. In these 3 months the author will carry out the process starting from preparing the research proposal, revising, collecting data, testing the data to producing a paper that is ready for publication as in the timeline below.

Funding

For this research, the author used his own funds. Because the required data can be easily accessed on the Indonesian stock exchange website, the costs required are still affordable

RESULTS AND DISCUSSION

This research was carried out using SPSS Version 24 software, with the Probit regression method, this is because variable Y in this study uses a dummy variable as a measurement.

Chi-Square Tests

		Chi-Square	df	Sig.
PROBIT	Pearson Goodness-of-Fit Test	245,165	145	0,091

a. Statistics based on individual cases differ from statistics based on aggregated cases.

Figure 2:
Chi Square test

In the picture above we can see that the sig value in the Chi Square Test is 0.091, which means the sig value is > 0.05, which means that the data in this research is confirmed to be fit and can be used, which also means the data is normally distributed.

		Parameter Estimates					95% Confidence Interval	
Parameter		Estimate	Std. Error	Z	Sig.	Lower Bound	Upper Bound	
PROFIT	ROA	0.014	0.026	0.563	0.573	-0.036	0.065	
	ROI	-0.041	0.026	-1.555	0.120	-0.093	0.011	
	DER	0.080	0.030	2.713	0.007	0.022	0.138	
	CR	-0.038	0.023	-1.663	0.096	-0.082	0.007	
	Intercept	-2.342	0.067	-26.948	0.000	-2.429	-2.255	

**Figure 3:
Parameter Estimates**

From the data above in the estimate column, it can be seen that ROA has a positive value of 0.014, which means that if ROA increases then variable Y, in this case the Implementation of PSAK 73, will also increase, then ROI has a value of -0.014, indicating that there is an opposite trend if ROI increases then PSAK Implementation 73 will decrease and vice versa, then the DER value of 0.080 is Positive, which means that if DER increases, the Implementation of PSAK 73 will also increase and vice versa, then the CR value is Negative, which means that if CR increases, then the Implementation of PSAK 73 will experience decline and vice versa.

In the sig column we can see that the ROA value is 0.0573, this means the Sig ROA value is greater than 0.05, meaning ROA does not have a significant effect on the implementation of PSAK 73. Then the sig value for ROI is 0.120, which means the Sig ROI value is greater than 0.05, which means H1 is rejected. where the implementation of PSAK 73 does not significantly affect the profitability value. In DER, the Sig value appears to be 0.002, which means the DER sig value is smaller than 0.05, meaning H1 is accepted, where the implementation of PSAK 73 has a significant effect on the DER value, in column Z there is a value of 2.713, which means DER has a positive effect, which means if the DER value increases, then the value of implementing PSAK 73 will also increase, and vice versa. In the CR value, there is a value of 0.096, which means above 0.05, meaning H1 is rejected, which means the CR implementation of PSAK 73 has no significant effect on the Liquidity value.

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The conclusion in this research is that the implementation of PSAK 73 has no effect on profitability and liquidity which in this research are represented by ROA, ROE and CR, this is because the implementation of PSAK 73 in the financial statements will be included in the non-current assets and non-current liabilities, while the profitability value, is a measure of the overall value of assets so in this case it will not have a significant impact. Meanwhile, liquidity values which only involve current assets and current liabilities are also not touched by the implementation of PSAK 73. The solvency value of PSAK 73 has a significant effect, this is because in the financial statements the solvency value, which is represented by the Debt to Equity ratio, will be in direct contact

with Long-term debt, in this case the Usufructuary Liabilities, this is the point where the Implementation of PSAK 73 will have significant impact on the DER value.

The limitation in this paper is that the author uses variables that have not had much direct contact with the implementation of PSAK 73, and also the sample used is quite limited, only covering 50 companies. Also in this research model it seems less suitable for the regression method. Suggestions for future research using the same theme, you could use a sample of companies that have a lot of rental transactions, such as logistics companies or transportation companies that use a lot of rental assets in operations, you could also use variables that are directly related to PSAK 73 is like Fixed asset turnover where right-of-use assets are recorded in fixed assets.

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Dr. Muhammad Ali Tarar joined University of Agriculture, Faisalabad- Pakistan as Teaching Assistant in 2005, later as, Lecturer Rural Sociology in November 2007 and presently serving the Department of Sociology, Ghazi University, Dera Ghazi Khan-Pakistan as Associate Professor / Chairman Sociology. Additionally, also serving as Director Purchase & Store (DP&S) at Ghazi University w.e.f 01-01-2024 to purchase all good & services to facilitate all academic & Research departments to contribute for quality education in institution. Previously served Ghazi University D.G. Khan, Punjab Pakistan as Director, Financial Assistance & Development (FAD) since 05-07-2023 to 29-12-2023 to provide Financial Support in the form of Merit & Need based Scholarships/ paid Internships and Financial Assistance to talented, deserving & needy students to continue their

academics & Education as well as since

18-11-2015 to 24-10-2022 served as Director Office of Research, Innovation & Commercialization (ORIC) and awarded a “Certificate of Appreciation” from Vice Chancellor, Ghazi University, Dera Ghazi Khan for excellent services (15-09-2022). As Chief Editor, Kisht-e-Nau (student Magazine, University of Agriculture, Faisalabad) published Centennial Number in 2006 and was awarded UNIVERSITY GOLD MEDAL from Chancellor of University/ Governor of Punjab-Pakistan as well-as UNIVERSITY ROLE OF HONOR, UNIVERSITY COLOUR & UNIVERSITY CERTIFICATE OF EXCELLENCE was awarded from Worthy Vice Chancellor for publishing the Centennial Number of “ Kisht-e-Nau “ as Chief Editor on the eve of centenary celebrations of University of Agriculture, Faisalabad (14th to 16th March 2006). He has vast experience in teaching & research. Being Researcher published more than 40 research articles on different social & behavioral issues in National & International high-quality indexes/ impact factor journals that are recognized by Higher Education of Pakistan and at postgraduate level supervised more than one hundred research students and completed their research. He is also coauthor/ Editor of books (i)“Introduction to Sociology; (ii) “Accounting Inquiries with New Approaches in the Post-Pandemic Era Volume I”; (iii) “Accounting Inquiries with New Approaches in the Post-Pandemic Era Volume II”; (iv) “Abstract E-Book” 5th International CEO Social Sciences Congress (CEOSSC 2022)”;(v) CEO Abstract E-Book” 8th International CEO Social Sciences Congress (CEOSSC 2023)”;(vi) CEO Proceedings E-Book” 8th International CEO Social Sciences Congress (CEOSSC 2023)”. He is also external examiner of research / paper setter of many universities for postgraduate level as well as examination supervisor of Punjab Public Service Commission, Pakistan. Being Director ORIC made collaboration with sister universities and industries to develop academia to academia & Academia-Industry linkages for better knowledge and research sharing and signed more than 20 MOUs and strengthen the external linkages, developed a Business Incubation Center (Regional Plan9) & Women Development Center at Ghazi University with collaboration of Govt. of Punjab, Pakistan. He is Member selection/ recommendation Committee of Ghazi University to recommend BS-1 to BS-16 candidates to the Vice Chancellor for Approval of Appointment, Terms, and conditions of Services); Member Board of Faculty for a period of three years for faculty of Arts; Member Consultative Committee; Member Convocation Organizing Committee for 1st & 2nd

Convocation of the Ghazi University; Convener University Disciplinary Committee; Convener University Disciplinary Advisory Committee; Member Compliance Implementation Plan Committee (CIPC) to prepare Compliance Implementation Plan (CIP) in coordination with respective offices; Nominated as Focal Person to collaborate with QEC regarding IPE Review visit at Ghazi University; Member Affiliation Committee (to affiliate & Disaffiliate Govt. & Private Educational Institutes / colleges with Ghazi University); Member University Grievance Redress Committee; Member University Monitoring, Evaluation and Learning Committee; Member University Scrutiny Committee for Administration Posts; Member Standing Committee for vetting of non-schedule items with the term of Reference (TORs); Member Surveillance committee of Ghazi University; Member Online Quality Assurance (OQA) Task Force of Ghazi University; Members University General Purchase Committee; Member University Semester Rules Committee; Member Inquire committee about matter/ issue regarding allegations on social & print media against employees, Member University Prospectus Committee to prepare prospectus and Member University Admission Committee year 2019, 2020 & 2021; Focal Person Kamyab Jawan Innovation League; Member Plagiarism Standing Committee (PSC) Ghazi University; Member Self Institutional Performance Evaluation (IPE) Committee and Focal person to conduct quantitative research on Beggary in Punjab with collaboration of Department of Social Welfare, UCDDP, D. G. Khan (December 2016 to To-date).

Dr. Muhammad Ali Tarar, Department of Sociology, Ghazi University, Dera Ghazi Khan

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PhD, MBA, PDG, GD- TESOL, GD- Management, BSc & Diplomas

PROJECTS HISTORY

Co-Editor for 8th CEO (Communication Economics Organization) Abstract E-book

Co-Editor for Onomazein Journal as article title Exploring Socio-Economic and Political Discrimination Against Christian Community In Punjab, Pakistan: A Comprehensive Analysis

Hydroponic Sardar Farm (Agriculture (Drip,

Sprinkler and Reel systems) in desert, Fish, Biodiesel, Algae, Import, Petrol Stations)

ST Adam College, Keyboard Concepts, Community College of Australia, Australian Information Technology College as Admin director

Australian Agri Resources Pty Ltd, Australian Green Environment Pty Ltd

Tomato grows in Hydroponic system and achieve 25-30 kg per plant in three months and set hydroponic fertilizer solutions formula and set formula according to plant growth, flowing time and harvesting time. Changing household bulk to energy saving LEDs for two years, House roof Installation for saving energy heat and cooling of the house.

Coupar Angus Institute of Technology, Pioneer College, McCarthy Learning, Angel Institute, Linx Institute (Empower College), PSL Group, VCTD, International Institute for Professional Development, iVET Australia, Australian Tourism college, as assessor and trainer

Skilled Migration Services

Connect small Business, Analysis their Financials, establish their new branches in Regional Area, Recruit suitable employee, Establish 11 Salons, Six Restaurants, Three Bakeries, Three Auto Repairer Shops, Two Printing Press within a year

The Corporate Financial Centre Pty Ltd

Find International Project for international funding & onshore client with onshore funding, Govt. of Sri Lanka's Health project valued US\$80 Millions, Complete Feasibility study of the information technology, Requirements and efficient courier mailing system, Design and implement the setup of mailing database for Education Board, Implementation of mail system in Bank Customer Confirmation Statements, Pak Telecom, Pak Northern Sui Gas

International Project Syndicate

Completed planning and organizational assessments for businesses.

Analyzed financial statements during business loan-seeking process, interviewed principals, conducted business research, and issued action plans and financial/business reports. Installed financial software and resolved systems problems for investment clients.

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PERSONAL ATTRIBUTES

- An analytically-minded international relations specialist who has a strong focus on strategic analysis of foreign markets to help realize company goals. Ability to accurately assess foreign laws, regulations, sociopolitical factors and their potential impact on company goals. Experience with designing public relations strategies in foreign markets for true global involvement.
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University of South Africa

Masters in International Politics 2023 – 2024 (currently under study)

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Financial Management N6 Diploma (2012 – 2014)

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Public Management N6 Diploma (2014 – 2016)

Southern Africa Association of Accountants (SAAA)

Higher National Diploma in Accounting (2000 – 2003)

RESEARCH INTERESTS

- International political economy
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- Conflict and conflict resolution
- International political theory
- Democracy and other forms of regimes
- Decoloniality
- International Organizations

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**T.C.
KÜLTÜR VE TURİZM BAKANLIĞI**

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VERİLİŞ NEDENİ - TARİHİ : Yeni Sertifika Başvurusu - 30.07.2021

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GEÇERLİLİK TARİHİ : 30.07.2021 - 30.07.2025

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Vali a.
İl Müdürü

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