

COMPARATIVE STUDY OF MANAGEMENT ACCOUNTING SYSTEM MODELS ON COMPANY PERFORMANCE IN INDONESIA AND MALAYSIA FINANCIAL INSTITUTIONS

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1 COMPARATIVE STUDY OF MANAGEMENT ACCOUNTING SYSTEM MODELS ON COMPANY PERFORMANCE IN INDONESIA AND MALAYSIA FINANCIAL INSTITUTIONS

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ABSTRACT

This study compares the management accounting system (MAS) model used by financial institutions registered with the Financial Services Authority in Malaysia and Indonesia to ascertain how each affects company performance and identify any differences. A comparative study was used to compare the MAS models in the two nations. A quantitative study of 313 accounting and finance managers in financial firms from 160 firms registered with the Financial Services Authority (OJK) in Indonesia was obtained using a simple random technique. The Covariance Base Structural Equation Model (CB-SEM) was used for data analysis using Lisrel. In addition, a literature review of model comparisons was conducted using prior research findings on the MAS model at financial institutions listed on the Central Bank of Malaysia website. The results of the research in Malaysia demonstrate the impact of the MAS model, which was developed through the three variables of market competition intensity, technological advancement, and innovation on the company's non-financial performance. The research results in Indonesia also demonstrate the impact of the MAS model, which was developed through the three variables of management strategy, support, and competence on the company's financial performance. This study demonstrates how the variables created by the two models are used differently.

Keywords: MAS models; business strategy; management supports; manager competence; technological advancement

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INTRODUCTION

The implementation of information and communication technology (ICT) is necessary for the management accounting system to anticipate current business developments (Puspitawati et al., 2021). A successful management accounting system (MAS) is a core

38 requirement for achieving a competitive advantage in the current era of the fourth industrial revolution (Stair & Reynolds, 2010). Companies that effectively utilize MAS can efficiently and effectively handle their daily business activities, enabling various tasks to be carried out smoothly (Hall, 2011). According to Romney and Steinbart (2015), applying MAS in

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organizations provides financial and non-financial information to users for planning, controlling, and decision-making activities, ultimately enhancing overall company performance. MAS consists of several components, including people, information technology (hardware, software, communication networks, and databases), and procedures, all working harmoniously to collect, process, generate, and disseminate information to various users (O'Brien & Marakas, 2014).

For MAS to function effectively within an organization, good organizational management to ensure successful implementation is crucial (Puspitawati, 2022). The philosophy of user-oriented design emphasizes the importance of considering the entire organizational context during application design and 16 development (Bodnard & Hapwood, 2014). The quality of organizational management is closely linked to the managerial capabilities possessed by the management team. Managerial skills, or properly managing the various aspects of an organization, is both an art and a science (Susanto, 2013). The managerial model, as it is applied to facilitate efficient functioning, represents this combination of art and science. In practice, art can be demonstrated through the management's leadership style, as reflected in strategic decision-making and support for the organization's operations. At the same time, science pertains to the competence of managers in fulfilling their roles (Alkhafahi, 2003). The collaboration among these three components is crucial for successfully implementing MAS (O'Hagan, 2007).

The performance of implementing a MAS is highly dependent on a manager's ability to determine the right strategy. The system's success relies on the company's capacity to align with changes in the organizational environment (Hadid W & Al-Sayed, M: 2021). Strategic management is an effective approach that enables companies to control and adapt to environmental changes (Kaasboll & Sandvand, 2010). The successful implementation of a MAS is also linked to the competence of managers in operating the application (Bodnard & Hapwood, 2014). Competence refers to the capability of employees to carry out various tasks as instructed in their jobs (Robbins & Judge, 2014).

In the context of this research, the users referred to are managers who play a direct role

in planning, designing, and managing accounting information systems, specifically financial applications. Furthermore, the involvement and support of top managers emerge as crucial factors for achieving high performance in financial applications. Sustained support and commitment from organizational leaders serve as key elements for successfully designing and implementing such critical financial applications. The support of management act 29; a determining factor for the performance of the implementation of information systems, directly influencing the effectiveness of financial applications. Top management's responsibility is to engage in the accounting system's long-term planning, control, and management (O'Brien & Marakas, 2014).

Management accounting practice is a significant and highly researched topic encompassing various organizational aspects, including cost control, strategic planning, resource management, and operational activities (Nain et al., 2022). Some researchers have conducted comprehensive studies on the concept of the managerial model, while others have focused on specific aspects of the model. Previous research conducted by Darma et al. (2018), Tamar and Pontoh (2021), and Puspitawati and Wisdayanti (2020) demonstrated that acceptance and support from company management positively contribute to the successful implementation of financial applications. Management commitment represents long-term dedication, encompassing goals, collaboration, and project implementation responsibility. Furthermore, Griffin and Moorehead (2014) examined how management contributes to enhancing organizational performance by effectively utilizing accounting systems. This implies that top management's acceptance and support influence organizational performance achievement.

Subsequent research conducted by Galliers 18 and Leidner (2014) successfully demonstrated that top management support is the primary variable that determines the performance of business projects and the utilization of MAS within the company environment. Commitment and support from executive management ensure that the information system is allocated sufficient funds and resources for its successful implementation. A study by Afrizon et al. (2019), however, revealed that executive management

support acts as an intervening variable in the successful adoption of accounting systems within companies. Acceptance from executive management influences organizational owners to continually generate solid finances, infrastructure, and resources to effectively use MAS at all levels of the organization.

Previous researchers have also explored the impact of strategy on performance when using accounting systems, but the findings have been varied. The research conducted by Chong and Chong (1997) demonstrates that both management strategy and system design influence the system's quality. Ebrahimi and Sadeghi (2013) establish a relationship between management strategies and improving information system quality, leading to the enhanced performance of accounting information. On the other hand, Kearns and Lederer (2000) confirm that strategic management significantly impacts the successful use of accounting systems or financial applications, contributing to gaining a competitive advantage. Studies conducted by Xiaoying et al. (2008), Ghasemi et al. (2015), and Puspitawati (2021), however, indicate that the results were not optimal. These studies suggest that while strategic management does contribute to the success of accounting systems in various organizations, it may not be the dominant variable affecting the implementation of accounting systems across the organizations studied.

The relationship between competence and the successful use of MAS has been investigated by Puspitawati (2022), whose research shows that increasing manager competence has been proven to enhance the success of MAS, even if that effect is small. Additionally, the research conducted by Olaleke, Foluso and Olamide (2018) reveals a positive coefficient value of 0.565 between the variables of resource competence and financial applications. Based on these findings, this study suggests that companies should transparently invest in developing competent human resources to enhance productivity. The results of the research by Kaasboll and Sandvand (2010), however, indicate that financial application users require three specific competencies, namely knowledge in business, accounting, and computers. Work competencies should be prioritized based on practical experience, while domain knowledge

and computer literacy should be prioritized to align with current concepts in science and technology.

The number of research studies examining managerial models for successful MAS remains limited, highlighting the need for further research to test a comprehensive conceptual model that incorporates variables such as manager competence, management strategy, and management support. This research variation aims to develop a more complete and accurate conceptual model that can effectively predict the successful use of MAS and assess the magnitude of influence that competency, management strategies, and management support have on the successful utilization of financial applications. To gather data, the researchers distributed questionnaires to accounting and finance managers working in insurance companies registered with the Indonesian Financial Services Authority (*Otoritas Jasa Keuangan*, abbreviated as "OJK" in Indonesia). A quantitative approach using the Covariance-Based Structural Equation Model to confirm the proposed model and predict the magnitude of the effects among the variables under study (Hair et al., 2021).

This research offers the following novel contributions: 1) a comparative study of MAS, elaborating on current research findings; 2) the development of MAS models incorporating managerial factors such as strategy, management support, and organizational competence; and 3) the generation of valuable research findings aimed at implementing a more effective MAS within companies.

This research has significant relevance for financial institutions as it aids in determining the appropriate type of MAS model to be aligned with the company's strategy. This alignment is crucial for improving both financial and non-financial performance. This research emphasizes its contribution to enhancing specific aspects of company performance. If the company aims to enhance its financial performance, the MAS should encompass elements of management strategy, top management support, and management competence. Conversely, suppose the focus is on improving non-financial performance. In that case, the adopted MAS should address market competition, innovation, and advancements in information technology, all

of which impact the company's overall achievement.

LITERATURE REVIEW

Strategic management encompasses a series of sustainable activities that enable a company to adapt to internal and external environmental changes while ensuring its long-term growth and survival (Heidmann, 2008). The strategic management model comprises four key dimensions. The first is environmental scanning, which involves monitoring and evaluating the flow of information from the external environment to the internal environment. The second is strategy formulation, which entails the development of long-term plans to effectively manage the environment by considering the company's opportunities, threats, strengths, and weaknesses (Hoque, 2004). The third is strategy implementation, which involves the execution of strategies and policies by developing programs, budgets, and procedures. Finally, the strategic management process concludes with evaluation and control, wherein performance is measured using a balanced scorecard system (Greve, H.R., 2021).

In addition to competenc⁴ and effective management strategies, the successful implementation of a quality management accounting system (MAS) relies on support from top management. Top management support entails a long-term commitment that encompasses goals, forms of cooperation, and responsibility for project implementation. Top management's acceptance and endorsement is crucial in achieving a work team's success within a company, as highlighted by Griffin and Moorehead (2014). It is the primary factor determining the critical juncture between success and failure in developing and implementing project management and information continuity within organizations, as Galliers and Leidner (2014) emphasized.

Management acceptance is crucial for ensuring the alloc⁴on of sufficient funds and resources to achieve the success of an information system (Afrizon et al., 2019). When implementing ³⁵ financial applications, management acceptance is not limited to financial support, but extends to continuous efforts. Management support can manifest in various forms, including providing and allocating human resources and disseminating improvement objectives

throughout all levels of the organization (Laudon & Laudon, 2016).

The effectiveness of plans devised by managers can be hindered when faced with high environmental uncertainty, as managers may have limited information for predicting future conditions. Furthermore, the ability to utilize the MAS can be impeded if managers lack the necessa⁹ expertise and computer application skills (O'Brien & Marakas, 2014).

Managerial competence encompasses the information, skills, and experience necessary for executing strategic and competitive activities. Users of information system applications within a company require adequate business and management knowledge and proficiency in information and communication technology (El-Mousawi & Kanso, 2019). This knowledge tends to diminish when not utilized or updated regularly, yet it serves as the binding force for the business (Robbins & Judge, 2014).

The quality of competence increases with frequent usage, in contrast to physical assets that undergo higher depreciation and decreased economic value over time. Therefore, it is essential to continuously enhance absolute competence to enable managers to fulfill their functions effectively. The success of implementing MAS relies on managers' proficiency in utilizing it (Laudon & Laudon, 2016).

METHODS

¹ A comparative study was conducted to compare the models of management accounting systems (MAS) in two countries, namely Indonesia and Malaysia. ¹¹ The research conducted in Indonesia employed a quantitative descriptive method, which aims to describe the condition of the variables under study. Quantitative methods allow for the extent of influence between ² variables to be determined. This study collected data from the respondents using an ordinal scale (Sekaran & Bougie, 2016).

The ordinal scale categorizes variables and ranks the measured constructs, providing information as values in the responses. The Likert scale, which is a method used to measure attitudes toward specific subjects, objects, or events, was utilized as the measurement method for each variable.

The research instrument underwent validity and reliability testing, followed by an analysis of the influence between variables using the second-order approach with CB-SEM. According to Hair et al. (2014), CB-SEM combines multiple unobserved variables indirectly measured by indicators. This approach can also calculate variable measurement errors and validate or test theories.

Operationalization of Research Variables

- **Strategic Management** is a continuous process by management to achieve long-term goals while considering environmental changes. It is operationalized through the X1 variable, which includes the dimensions of environmental scanning, strategy formulation, and strategy implementation and evaluation.
- **Top Management Support** involves activities carried out by management to facilitate successful collaboration between teams and other stakeholders and ensure adequate resources are available to achieve desired goals. It is operationalized through the X2 variable, which includes the dimensions of support in the planning process, organizational support, directional support, and supervisory support.
- **Manager Competence** refers to the ability of managers to effectively manage and complete various tasks based on their expertise. It is operationalized through the X3 variable, which includes the dimensions of knowledge and skill.
- **The Successful Use of Management Accounting Systems** refers to the performance of the system in collecting and processing financial data/transactions to provide financial information for decision-making. It is operationalized through the Y variable, which includes the dimensions of flexibility, integration, accessibility, and usability.

11 **The Data, Population, and Sample.**

This study collected data by distributing questionnaires to respondents, including leaders, accounting managers, and staff members of the accounting departments in insurance companies in Indonesia. These questionnaires were compiled using a Likert scale. The target

population consisted of 160 insurance companies registered with OJK Indonesia. A structural equation model was employed to test the research model, and a sample size of 100 was selected using a simple random sampling technique, following the minimum sample criteria recommended by Hair et al. (2021).

RESULTS AND DISCUSSION

Questionnaires were distributed to 318 units of analysis in 160 insurance companies in Indonesia, with the following breakdown: 80 life insurance companies, 53 general insurance companies, 19 state-owned insurance companies, and eight reinsurance companies. Out of the distributed questionnaires, 98 insurance companies (166 units of analysis) responded, while 62 companies (152 units of analysis) did not, resulting in a response rate of 52.2% (Sekaran & Bougie, 2016). Nevertheless, a response rate of at least 30% is considered acceptable.

The Fit Model Test

The fit model test is conducted to assess the accuracy of the relationship between studied models and their inclusion in the fit model. The results of the fit model test in this study indicate that the model meets the suitability criteria and is deemed acceptable. This implies that the obtained empirical model aligns with the theoretical model.

Structural Model

The structural model illustrates the relationships between the independent variables and other independent variables. In this study, the structural model is formulated in equation 1.

$$\eta = \gamma 1.1 * \xi 1 + \gamma 1.2 * \xi 2 + \gamma 1.3 * \xi 3 + \zeta \tag{1}$$

Description:

- γ : Path coefficient of Y variable
- B : Path coefficient between X variable
- ξ1 : Strategic Management (MS) variable
- ξ2 : Top management support (DMP) variable
- ξ3 : Manager Competency variable (KP)
- η : The successful use of Management Accounting Systems (KSIA) variable
- ζ : Measurement error η variable

The model testing involved assessing the

validity and reliability of each indicator within the studied variable dimensions. Strategic management was measured by considering the environment, strategy formulation, strategy implementation, and evaluation and control. These four dimensions were operationalized into ten indicators.

The relationship between the indicators and dimensions was reflective, while the relationship between the dimensions and variables was formative. The confirmatory factor analysis results indicated that the factor weight value for each indicator exceeded 0.40, indicating that all indicators were valid for measuring the dimensions of strategic management. Additionally, the construct reliability (CR) value for each of the dimensions of strategic management was not less than 0.70, indicating that the indicators consistently measured each dimension of strategic management.

Management support is measured through four process dimensions: planning, organizing, directing, and controlling. These dimensions are operationalized using eight indicators. The relationship between the indicators and dimensions, and the relationship between the dimensions and variables, is reflective. The confirmatory factor analysis results indicate that the factor weight value for each dimension exceeds 0.40, indicating that all four dimensions are valid for measuring top management support. Furthermore, the CR value for the four dimensions is 0.954, which suggests that the indicators consistently measure the dimensions of the top management support variable.

Manager competency is measured through two dimensions: knowledge and expertise. These dimensions are operationalized using five indicators. The relationship between the indicators and dimensions, and the relationship between the dimensions and variables, is reflective. The confirmatory factor analysis results show that each indicator's factor weight exceeds 0.40, indicating that all valid indicators measure the dimensions of knowledge and skills. Additionally, the construct CR value is greater than 0.70, indicating that the indicators consistently measure each dimension.

The successful use of the management accounting system (MAS) is measured through four dimensions: flexibility, integration, ease of access, and ease of use. These dimensions are operationalized using eight indicators. The

relationship between the indicators and dimensions is reflective, while the relationship between the dimensions and variables is formative. The confirmatory factor analysis results indicate that the factor weight values are greater than 0.40 for all indicators, meaning that they are valid for measuring the dimension of a successful financial system. Furthermore, the CR values are greater than 0.70, indicating consistency in measuring the dimensions. The results of the structural model testing are depicted in Figure 1.

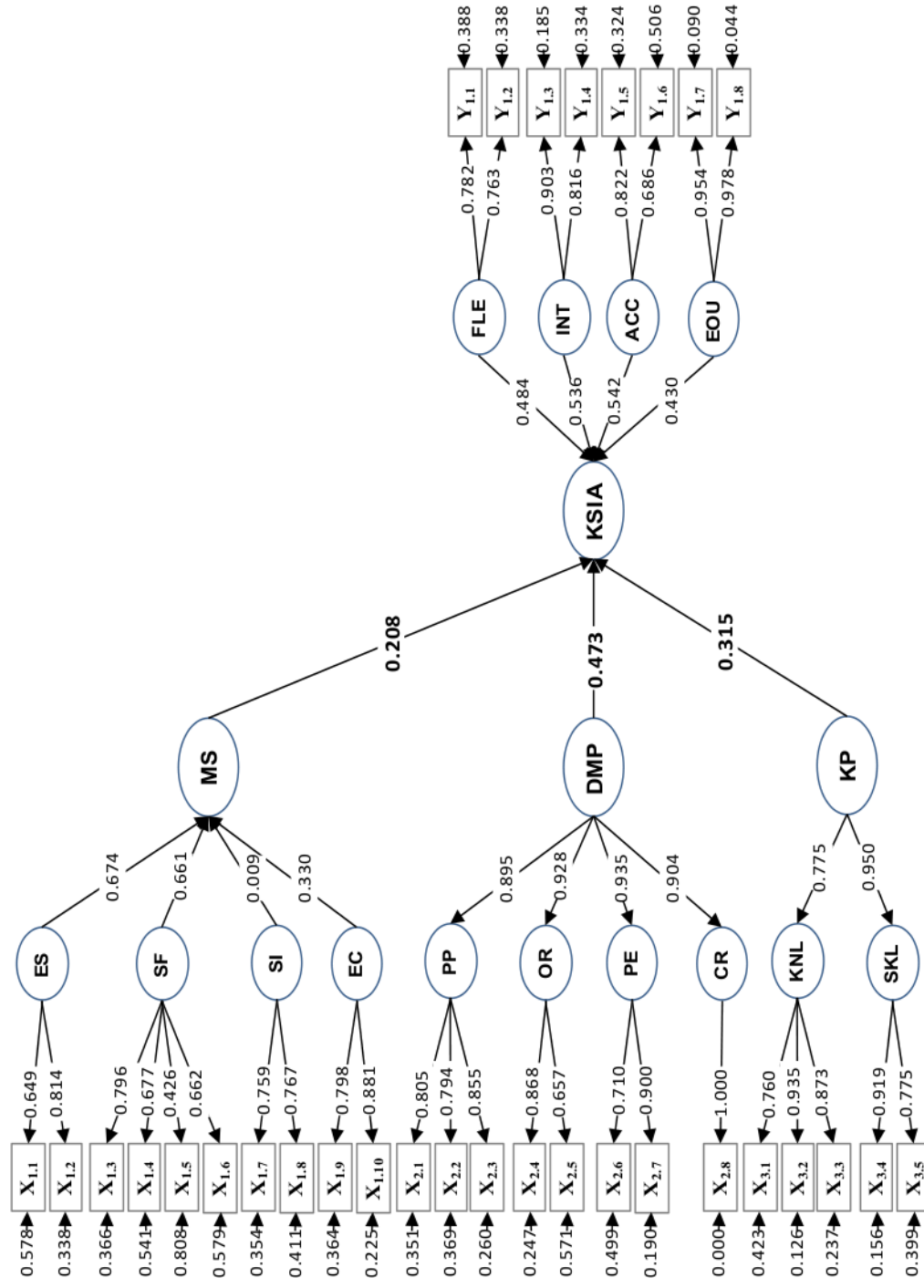


Figure 1 Structural Model Equation.

10 based on the path coefficient values in Figure 1, the influence of strategic management, support, and manager competence on the success of MAS can be calculated. Table 1 provides an overview of the variables in terms of their level of influence. Management support greatly influences the successful MAS, followed by manager

competence and strategic management. This sequence indicates that management support is more significant in determining the system's success, while strategic management has a relatively lesser impact.

Table 1. The Effect of Each Exogenous Variable on The Successful Use of MAS

Exogenous Variable	Path Coefficient	Direct Effect	Indirect Effect				Total	count	critical
			MS	DMP	KP	Sub-Total			
MS	0,208	4,3%		6,8%	4,7%	11,5%	15,8%	2,039	1,96
DMP	0,473	22,3%	6,8%		10,4%	17,2%	39,5%	4,451	1,96
KP	0,315	9,9%	4,7%	10,4%		15,1%	25,0%	2,703	1,96
Simultaneous Effect							80,3%		

Source: SEM results.

Among the three exogenous variables in Table 1, management acceptance has the greatest influence on the successful MAS. On the other hand, strategic management has the least influence on the successful use of MAS.

use of MAS. This means 9 that if the competence of managers increases, the success of using financial applications in an organization will also increase.

Hypothesis Testing Results. 2

1. The hypothesis testing shows a t value of 2.039 for strategic management, which is greater than the critical t-value of 1.96. A 5% error rate indicates that strategic management significantly contributes to the successful use of financial applications. This means that management's better utilization of its strategy leads to increased success in using MAS in the company.
2. The hypothesis testing shows a t-value of 4.451 for the management support variable, which is greater than the critical t-value of 1.96. Therefore, at a 5% error rate, it suggests that the acceptance of management support significantly contributes to the successful use of financial applications. This implies that the provision of greater support from top management results in increased success in using MAS in the organization.
3. The hypothesis testing shows a count value of 2.703 for the manager's competency variable, which is greater than the critical t-value of 1.96. At a 5% error rate, it indicates that the competence of managers has a significant contribution to the successful

Management strategy and its relation to the Management Accounting System (MAS).

This study provides empirical evidence that the adoption of effective management strategies leads to greater success in using the MAS. It supports the theories proposed by Ward and Peppard (2002) and Alkhafahi (2003), highlighting the contribution of strategic management to the successful use of MAS. This finding is consistent with the viewpoint of Romney and Steinbart (2015), who emphasized that IT, organizational structure, and strategy are critical factors for successfully utilizing MAS.

This study is also consistent with 30 brahimi and Sadeghi (2013), showing a significant relationship between strategic management and the successful use of MAS. It is also consistent with the research of Kearns and Lederer (2000), demonstrating a significant influence between strategic management and the success of using MAS.

This study further aligns with the research conducted by Ebrahimi and Sadeghi (2013) and Kearns and Lederer (2000) in that there is a significant relationship between strategic management and the successful use of MAS. Strategic management plays a vital role in

generating effective strategies through a top-down approach (Ward and Peppard: 2002). Based on the observed data, formulating and implementing the right strategies impact the MAS's ability to produce accounting information, analyze information to make informed strategic decisions, and assess and disseminate information from the environment (Wheelen et al., 2015).

Monitoring and evaluating information systems is essential to encourage organizations to improve the quality of information for decision-making processes, enabling them to achieve organizational goals effectively (Mohammed, 2022). Adopting a generic strategy, which aims to establish a competitive advantage and become a market leader, requires the information system to adapt to changes. For example, an accounting information system can transition from a low-cost leadership strategy to a differentiation strategy. Companies should focus on enhancing the quality and maintenance of their MAS to improve their effectiveness in utilizing such systems within the organization.

Top Management Support and its Relation to Management Accounting System.

This study has provided substantial evidence that management support significantly contributes to the successful use of the MAS, implying that the more support is provided by top management at all levels, the more effective the MAS is within the company. This finding aligns with the theories proposed by Olson (2003) and Griffin and Moorehead (2014), which highlight the role of top management support in motivating all organizational elements to adopt and utilize the MAS, thereby aiding in achieving shared goals and strategies.

Furthermore, this study is in line with the research conducted by Sharma and Yetton (2003), Puspitawati and Wisdayanti (2020), and Griffin and Moorehead (2014), which emphasize the influence of various organizational factors on the successful use of financial applications. These factors include management acceptance, decision-making structure, management style, IT managerial knowledge, goal alignment, and resource allocation as those that significantly impacting the successful use of financial applications. Additionally, research by Namazi and Rezaei (2023) provides sufficient evidence that top managers' active involvement in budget

formation enhances the effectiveness of the strategic MAS.

Some indicators that contribute to the poor quality of information systems include a lack of support for formulating organizational goals, a lack of awareness regarding the information system's needs, and an imprecise selection of resources related to accounting information systems. These indicators are supported by respondents' average scores below 4, suggesting room for improvement. Furthermore, inadequate support for resources and insufficient training for information system users hinders human resource development. The limited involvement of management in the improvement process and a lack of support in problem-solving also contribute to the poor quality of the accounting system.

Several actions need to be taken based on the problems identified above in the dimensions of management support, which include the planning, organizing, directing, and controlling processes. Top management should reassess the type of information required (defining needs) and plan for future accounting information systems based on those needs. This could help determine the suitable hardware, software, and resources that are able to meet the company's future needs, thereby aiding in achieving organizational goals. Accurate identification of information requirements and appropriate selection of hardware, software, and resources in line with those requirements are crucial forms of support from management for the success of the MAS.

Top management support is a vital factor that influences information systems and can determine the success and continuity of the company's business. Providing support from top-level management involves aspects such as allocating sufficient funding, defining the necessary information requirements, offering guidance on available financial application alternatives, and establishing a schedule for the development process of financial applications. These actions contribute to creating a supportive environment for the successful implementation and utilization of the MAS.

Manager Competence and Its Relation to The Management Accounting System.

This study has successfully provided evidence that managers' competency significantly impacts

the success of the MAS. It indicates that the greater the competencies possessed by managers, the more successful the implementation of the MAS be. These findings are consistent with the works of O'Brien and Marakas (2014) and Bodnard and Hapwood (2014), which emphasize the importance of user competence and understanding for the successful use of MAS.

Similarly, Wanyama and Zheng (2010) argue that users' personal capabilities and levels of involvement greatly influence the success of using financial applications. Susanto (2013) suggests several reasons for information system application failures, including the lack of sufficient knowledge that hampers managers' ability to make decisions or provide appropriate perspectives due to a limited understanding of their decisions. The lack of experience in decision-making, unsupportive organizational culture, and insufficient support from the organization in decision-making processes also contribute to failures.

Several studies have consistently shown a positive correlation between the successful implementation of the MAS and user involvement, the competence of system personnel, information availability, and organizational size (Davis et al., 2009; Choe, 1996; Dehghanzade, 2011). These results highlight that ineffective use of MAS can occur when application users lack basic computer skills, lack knowledge in the business (accounting/management) field, and lack background knowledge in MAS. Other factors that can contribute to inefficiencies are a lack of technical expertise in performing daily tasks as an accountant, limited involvement in problem-

solving, a lack of decision-making authority about their main tasks, and an inability of the MAS to accommodate users' ideas and suggestions, thus hindering the provision of rational considerations.

Suggestions for addressing these issues include various activities that company managers can undertake to enhance the intellectual abilities of their employees. This involves improving thinking skills, argumentation skills, and problem-solving skills. These abilities can be developed by reevaluating the competencies of information system users through job analysis, which ensures that individuals are placed in suitable positions. Furthermore, the quality of the recruitment process should be enhanced to align with the required competencies. This ensures that employees do not encounter difficulties performing their tasks, enabling them to enhance their knowledge as suits their career aspirations. Providing opportunities for employees to pursue further education and participate in relevant training programs is crucial in cultivating user competencies that positively impact MAS.

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Indirect Effect of Strategic Management, Top Management Support, Manager Competence on The Quality of Management Accounting System Through Company's Financial Performance.

The second model tested involves examining the contribution of the MAS to the company's financial performance. The path diagram illustrating this model is presented in Table 2 below.

Table 2. Results of the Indirect Influence Test of the MAS Model on the Company's Financial Performance

No	Exogenous Variables	Indirect effect	t-count	p-value	Test Results
1	KO	0,142	1,961	0,0499	Significant
2	ESPI	0,324	3,783	0,0001	Significant
3	KP	0,215	2,519	0,0118	Significant

Source: SEM results.

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 Figure 2 shows that all the indicators utilized in constructing the MAS model have a p-value less than 0.05. Based on these results, considering a 5% error rate, the MAS model provides sufficient evidence to moderate the

relationship between the management strategy variables, management support, manager competency, and the company's financial performance.

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Literature Study of The Management

Accounting System (MAS) Model Developed by Previous Research.

The comparative model draws on the literature study researched by Rasid et al. (2011). This study examines the mediation of the MAS on the relationship between variables such as market competition, innovation, and IT progress and company performance in 106 financial companies listed on the Central Bank of Malaysia's website. The data were analyzed using path analysis and the Sobel test. The findings reveal that the MAS mediates the relationship between competition variables and IT advances on the performance of non-financial companies; however, the study does not provide sufficient evidence to conclude that the MAS model mediates the relationship between market competition pressure, innovation, and technology variables on company financial performance.

In essence, the results of this study indicate that the MAS plays a mediating role between the intensity of market competition and IT progress on organizational performance, resulting in an indirect effect on non-financial performance. Regardless, no empirical evidence supports the conclusion that the MAS model mediates the relationship between financial performance and market competition pressures, technological progress, and innovation.

In a broader sense, Rasid et al. (2011) demonstrate that the MAS influences company performance through non-financial performance, mediated by the impact of market competition pressure variables and technological advances. The findings of this study also suggest that as competition intensifies and technology advances, financial service institutions rely more on the information generated by the MAS. Managers utilize this information in formulating, implementing, and monitoring corporate strategies, leading to indirect improvements in the company's performance through non-financial indicators.

The advent of digital business implementation has brought about a landscape of increased freedom for customers, enabling them to easily switch to other service providers. This, in turn, has triggered intense competition and rapid technological changes. The MAS plays a crucial role in addressing these challenges by providing information to tackle the exceptions brought about by digital business implementation. The

MAS offers valuable insights for customers, enabling companies to provide excellent customer service. The non-financial information generated by the MAS encompasses a wide range of areas. For instance, data on new internet banking users and the time required for online processes can assist companies in enhancing the quality of their customer service. Benchmarking also plays a pivotal role in making services more appealing than what competitors offer. In essence, fast-paced technological changes must be balanced by a company's ability to leverage sophisticated technology to deliver products and services that cater to user needs. System integration is crucial in meeting customers' expectations for swift service.

In this study, the MAS only contributes as a mediating factor in the relationship between competitive market pressures and IT advances, specifically within non-financial organizations. The study aims to develop an effective MAS model that enhances organizational performance through the variables of market competition intensity and technological advances. By adopting a market competition and technology-driven approach, the MAS model is a key indicator for improving non-financial performance within financial institutions. These findings align with previous studies by Ittner and Larcker (1998) and Hussain et al. (2002), highlighting customer satisfaction as a key indicator of financial performance. Increased customer satisfaction leads to higher sales and profits.

This research, however, does not empirically establish the role of the MAS in mediating the relationship between innovation and organizational performance. Innovation as a conceptually viable solution for companies to adapt to environmental developments requires further investigation. Including innovation in the MAS is essential for generating relevant information to drive strategic decision-making and improve overall performance. More precise and accurate measurements of innovation are needed to produce empirical evidence that is more aligned with the specific conditions of companies, thereby enhancing the relevance of future research.

Comparative Analysis of Two Models

Both of these studies aim to examine the effect of the MAS model on company performance and

determine whether there are fundamental differences between the two tested models. The research conducted on financial institutions in Indonesia has successfully proven that the MAS model contributes to a company's financial performance, specifically in terms of maintaining good financial conditions.

1 The MAS model used in Indonesia moderates management strategy, management support, and manager competence, influencing the company's financial performance. The researchers conducted a literature review of studies in Malaysia with the same model to compare this MAS model. The results from Rasid et al. (2011) in Malaysia indicate that the MAS model is based on the intensity of market competition, IT progress, and innovation. Their study provides sufficient 1 evidence that the MAS can mediate the influence of market competition intensity and innovation on the performance of non-financial companies. It does, however, partially fa 4 to provide sufficient evidence for mediating the relationship between innovation and both financial and non-financial company performance.

4 This situation arises because the intensity of market competition and innovation are integral parts of the business strategy within organizations. Theoretically, the business strategy greatly contributes to the effectiveness of the MAS th 32 companies employ in terms of generating financial and non-financial information for strategic decision-making.

The research results by Rasid et al. (2011) provide sufficient evidence that the MAS can moderate the relationship between business strategy, technological advancements, and the intensity of market competition, resulting 1 in non-financial information that improves the company's non-financial performance. On the other hand, the research conducted in Indonesia provides sufficient evidence that the MAS can moderate the relationship between managerial factors, including management strategy, top management support, and manager competence, thereby producing strategic information that improves financial performance.

In many companies, managerial factors play a crucial role in successfully utilizing MAS. These systems are instrumental in generating strategic financial information that enhances the effectiveness of various operational activities to maximize company profits. The findings of the

two studies lead to the conclusion that the MAS model, when approached from both a business strategy and managerial 19 performance perspective, significantly impacts the company's financial performance.

This research contributes to identifying the MAS model most appropriate for a company's use. The use of a sui 16 the MAS has the potential to generate relevant information that meets the needs of various users. Harnessing such relevant information can enhance the effectiveness and efficiency of busine 4 processes, ultimately resulting in improved financial and non-financial performance for the organization.

CONCLUSION

This stu 1 successfully demonstrates the impact of the management accounting system (MAS) model on non-financial Performance in 4 alaysian financial institutions through variables such as market competition and advanced information technology. The study also reveals that the 13 he model affects the financial performance of insurance companies registered with the Indonesian Financial Services Authority (OJK) when considering variables like management strategy, support, and competence.

Effective managerial performance, characterized by strategic management and management support, signifies that company executives possess strong abilities and skills in organizational management. The competence of managers is crucial in developing appropriate policies for implementing relevant financial applications across all organizational levels. The utilization of effective financial applications significantly influences the organization's financial performance.

The effectiveness of market competition, innovation, and advanced information technology serves as valuable support for a company's MAS in generating non-financial information that aids strategic decision-making by managers. Implementing a sound strategy is a key indicator of a company's success in achieving its non-financial performance goals.

Moving forward, expanding the scope of the MAS model to enhance overall company performance, encompassing both financial and non-financial aspects, is essential. Therefore, further model development should incorporate variables such as market competition,

innovation, information technology sophistication, management strategy, management support, and managerial competence.

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