



Total Implementation of Management Information Systems on Organizational Performance Improvement

Rudy Usman^{1*}, Andi Indriani Ibrahim², Yutika Kamerili³, Rahmadani Inem Sucakni⁴, Elvira Febriana⁵, Nini Andriani⁶, Moh Fauzan Basalamah⁷

^{1,3,4,5,7} Accounting Program, Faculty of Economics and Business, Tadulako University

^{2,6} Management Program, Faculty of Economics and Business, Tadulako University

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ABSTRACT

The development of information technology has encouraged organizations to adopt Management Information Systems (MIS) to support decision-making and data management. Effective data management is crucial for producing valuable information for both internal and external organizational purposes. This requires a reliable, integrated, and responsive information system that meets managerial needs. This study aims to evaluate the effect of MIS implementation on organizational performance improvement. Using a qualitative method through a literature review approach, this article analyzes ten relevant scientific journals in the last five years. The results show that the implementation of management information systems contributes positively to operational effectiveness, work efficiency, and organizational productivity. Additionally, supporting factors such as human resource competence, system quality, organizational structure, and user satisfaction also play a crucial role in the success of MIS implementation. Therefore, this study emphasizes the importance of strategic planning and continuous training programs to ensure that MIS can be optimized in enhancing overall organizational performance.

Corresponding author:

Main author

Accounting Program, Faculty of Economics and Business, Tadulako University

Email: rudyusman77@gmail.com

INTRODUCTION

The rapid development of information technology has prompted various organizations to transform their information management and decision-making systems. In response to this, organizations are required to be able to present information quickly, accurately, and relevantly. One way to achieve this is through the implementation of a management information system (MIS). A management information system is a system or process that delivers the information needed to effectively manage an organization (Prasetya et al., 2023). This system is different from a regular information system because it analyzes other information systems implemented in the organization's operational activities, thereby supporting managerial processes, from planning, organizing, and implementing to evaluating performance.

The implementation of MIS is believed to improve organizational performance through ease of data management, provision of necessary information, and support for more effective decision making. An effective management information system can facilitate organizations in obtaining relevant information quickly and easily, thereby strengthening accuracy and efficiency in the operational decision-making process. Additionally, this system contributes to comprehensive monitoring of organizational performance, supports strategic

planning, and improves the efficiency of resource management (Siregar & Nasution, 2024) . With the implementation of MIS, an organization can achieve optimal performance, where performance serves as a measure of an organization's success in achieving its goals effectively and efficiently (Mahyadi, 2023) .

Through an integrated system, organizations can reduce manual errors and increase work productivity. However, the success of SIM implementation does not only depend on the availability of technology, but is also influenced by the readiness of human resources, lack of training for users in operating the system, and minimal support from management. This situation results in the MIS not being utilized optimally, so that the organization's objectives of improving work efficiency and effectiveness have not been fully achieved. Therefore, it is important to examine the understanding of the MIS implementation process and its contribution to organizational performance. This study was conducted to analyze the extent to which the system is able to support work effectiveness and improve coordination within the organization. Additionally, this study aims to identify factors that influence the success of management information system implementation.

Literature review

Management Information System

Management information is a system designed to provide information to support decision-making in the management activities of an organization. According to Arivetullatif et al., (2024) , a management information system is a computer-based information system that processes data into high-quality reports from various functional divisions within an organization. These reports can be used by all levels of management to support the decision-making process in achieving organizational goals. The purpose of a management information system is to provide information that will be needed in calculating the cost of services or products, as well as supporting various other needs. Additionally, this system is beneficial in providing relevant information for planning, control, evaluation, and continuous improvement activities (Ichsan et al., 2024) . It can be understood that an information system functions to process raw data so that it can be transformed into useful information.

Management information systems are not merely technology, but rather a system that supports management functions and plays a significant role in various aspects of organizational management. According to Erwin et al., (2024) , there are several functions of management information systems in supporting aspects of organizational management, namely as follows:

- a. As a provider of information for managerial decision-making.
- b. Supporting strategic and operational planning.
- c. Playing a role in control by providing performance monitoring mechanisms.
- d. Supporting organizational strategy development.

However, in its implementation, management information systems do not always run smoothly. This can be influenced by several factors (Aziz & Iskandar, 2024) . The following factors can be obstacles in the implementation of management information systems:

- a. Inadequate organizational support.
- b. Inadequate planning.
- c. Lack of management involvement.
- d. Quality data and human resources. A well-designed management information system will not be able to produce valuable information if it is not supported by quality data and adequate human resource competencies.

Performance

Performance is a key aspect in assessing the extent to which an organization's long-term, medium-term, and short-term goals have been achieved. According to Hamzali & Arwin (2022) , performance is the ability to carry out organizational tasks in order to achieve goals with the capabilities, programs or policies, and vision and mission that have been established. In line with this view, Nandhita et al., (2025)) emphasize that performance reflects an individual's personal and professional qualities in fulfilling their duties, demonstrated through a sense of responsibility, attention to the realization of the organization's vision and mission, and motivation to continuously improve the quality of public services. Furthermore, Junaidi (2021) emphasizes that performance is influenced by various factors, including: (1) ability, (2) motivation, (3) supporting facilities, (4) education, and (5) responsibility and cooperation. All these factors play a crucial role in supporting the optimization of performance, both individually and organizationally. In a broader context, organizational performance not only reflects the final outcome but also demonstrates the organization's ability to manage resources effectively and efficiently to achieve predetermined goals (Le & Le, 2021).

METHODOLOGY

This study employs a qualitative method with a literature review approach aimed at examining various relevant literature sources. The results of the literature review are derived from scientific articles, books, and other official publications. The literature used was selected based on criteria including relevance to the topic,

relevance within the last five years, and the quality of the sources.

RESULTS

Analysis of relevant articles:

Table 1. Article analysis

No	Title, Author, Year	Results
1	Implementation of the Personnel Management Information System (Simpeg) in Improving the Performance of Civil Servants at the Ministry of Religious Affairs Office in Bulungan Regency. AKUNTANSI 45, 2(2), 81-89. Hamzah et al. (2021).	The SIMPEG system at the Ministry of Religious Affairs Office in Bulungan District is functioning well. The role of SIMPEG is very important and has significant benefits for the advancement of the institution. Employees have good skills and knowledge in using SIMPEG. This supports employees' performance in carrying out their duties, as they do not encounter any difficulties in using SIMPEG at the Ministry of Religious Affairs Office in Bulungan.
2.	The effectiveness of SIM in improving the performance of tourism managers in Riau. Aziz & Iskandar (2024).	The results of the study indicate that the implementation of SIM has a positive and significant effect on improving the performance of tourism managers. In addition, work initiatives are strongly related to the formation of organizational environmental performance. Initiatives shown by individuals and groups contribute to increased productivity, encourage innovation, and build a dynamic work atmosphere. Furthermore, work initiatives also encourage individuals to take responsibility for tasks and projects within their authority.
3.	The impact of individual performance on the relationship between management information systems and organizational performance. Meirina & Dewi (2024)	Research findings indicate that system quality, information quality, system utilization, user satisfaction levels, and organizational structure are the main determinants of the successful implementation of the Hospital Management Information System (SMRS). Optimizing the implementation of SIMRS has implications for improving overall organizational performance.
4.	Review of the Implementation of Management Information Systems in Human Resource Management in Modern Organizations. Mintawati et al. (2024).	Management Information Systems (MIS) have been widely implemented by various organizations and have proven to contribute significantly to improving operational efficiency, ease of access to information, and user satisfaction. Through a thematic analysis and survey approach, the study also identified several challenges in MIS implementation, such as difficulties in integrating with existing systems () and resistance to organizational cultural change. However, these challenges can be minimized through the implementation of appropriate strategies, thereby optimizing the benefits of MIS in human resource management.

No	Title, Author, Year	Results
5.	The Impact of Management Information Systems on Employee Performance. Sitorus, E. (2021).	The implementation of a management information system has proven to have a positive and significant impact on employee performance at the Communication and Information Technology Department of Toba Regency. This means that the implementation of a management information system is capable of improving employee performance quality in a more optimal manner.
6.	The Influence of Human Resource Competence, Management Information Systems, and Work Skills on Employee Performance at the Communication and Information Technology Department of Labuhanbatu Utara. Hasibuan & Khair (2021).	Based on the results of the study, it can be seen that human resource competence (X1) has a positive and significant effect on employee performance (Y). The same applies to the management information system (X2), which has been proven to contribute positively and significantly to employee performance (Y). Furthermore, work skills (X3) also show a positive and significant influence on employee performance (Y). Simultaneously, these three variables together have a positive and significant influence on improving employee performance.
7.	Management Information Systems on Organizational Performance (a literature review). Mahyadi (2023).	The implementation of an effective Management Information System is essential to improve organizational performance. Proper implementation of MIS not only provides competitive advantages but also improves efficiency, product or service quality, and employee productivity. Therefore, organizations need to prioritize proper planning and management to ensure that MIS functions properly and has a positive impact on overall performance.
8.	The Importance of Integrating Management Information Systems into Business Processes to Improve Organizational Efficiency and Effectiveness. Yulwanda & Firdaus (2024)	This study shows that the integrated implementation of Management Information Systems (MIS) plays an important role in improving operational efficiency, decision-making effectiveness, and customer satisfaction. MIS is capable of automating processes, reducing costs and time, and providing accurate information in real time. Despite facing challenges such as technical complexity and resistance to change, these obstacles can be overcome through effective training and communication. The success of MIS implementation heavily depends on management support and the involvement of all organizational members.
9.	The Role of Management Information Systems in Improving Organizational Performance. Siregar & Nasution (2024).	This study shows that MIS has a significant effect on improving organizational performance. Effective implementation of MIS enables efficient data and information management, thereby supporting accurate and timely decision making. This has an impact on increased productivity, operational cost efficiency, and

No	Title, Author, Year	Results
		adaptability to market dynamics. In addition, MIS also plays a role in human resource management, inventory, projects, and performance evaluation.
10.	Analysis of the Effectiveness of Management Information Systems in Improving Company Performance. Hardianti et al. (2025).	This study shows that the implementation of Management Information Systems (MIS) contributes positively to improving company performance. Data analysis results indicate that MIS supports the availability of more accurate and timely information, improves the efficiency and effectiveness of business processes, and reduces employee workload. Additionally, Wilcoxon test results also prove that there is a significant difference in company performance before and after MIS implementation.

DISCUSSION

Management Information Systems (MIS) play a crucial role in supporting organizational performance. Based on an analysis of several articles, the implementation of MIS has proven to enhance work efficiency, promote initiative, and boost productivity. On the other hand, supporting factors such as human resource competence, system quality, organizational structure, and user satisfaction also determine the success of MIS implementation. Management information systems have a significant contribution to performance improvement, as demonstrated by Hamzah et al., (2021) , which states that SIMPEG helps employees perform their tasks more effectively. This aligns with the findings of Mintawati et al., (2024) , which highlights the importance of system quality, information, and user satisfaction in MIS implementation. Additionally, the management information provided by SIM enables organizations to access accurate and real-time information. This strengthens the strategic decision-making process (Yulwanda & Firdaus, 2024) . In line with this, a study conducted by Hardianti et al., (2025) quantitatively confirms that there is a significant difference in company performance before and after SIM implementation. The Wilcoxon test results showed a significant value of $0.005 < 0.05$, proving the effectiveness of the SIM in significantly improving company performance. The SIM contributes to providing accurate and timely information, improving business process efficiency, and reducing employee workload, thereby enhancing productivity and the quality of decision-making.

The success of implementing a Management Information System (MIS) does not only depend on the sophistication of the technology used, but is also determined by non-technical factors such as the competence of human resources and adequate work skills (Khair, 2021; Sitorus, 2021) . In the context of human resource management, MIS plays a crucial role in providing accurate and timely information to support effective decision-making processes. Ridwan et al., (2025) highlight the role of management information systems in improving operational efficiency across various types and sizes of organizations. This enables organizations to automate a series of processes that were previously done manually, thereby reducing reliance on human labor and minimizing the potential for human error. However, these benefits can only be optimized if supported by human resources with the appropriate job skills. Work skills play a crucial role as a bridge between strategic planning and operational implementation. Management Information Systems are a critical stage that enables projects to proceed according to plan, within available budgets, and on schedule. This process involves identifying and allocating resources, scheduling tasks, and determining cost estimates (Gunawan et al., 2023) . Therefore, MIS is not only a tool to support operational efficiency but also can significantly contribute to improving organizational performance when accompanied by proper planning, training, and supervision of human resources.

CONCLUSION

The implementation of a Management Information System (MIS) has a significant contribution to improving organizational performance. MIS not only plays a role in providing accurate, fast, and relevant information but also promotes efficiency and effectiveness in managerial processes and more precise decision-making. The success of MIS implementation is influenced by the readiness of human resources, system quality, and adequate managerial support. With the support of these factors, MIS can strengthen productivity, coordination, and organizational competitiveness in facing the demands of a dynamic environment.

The implications of this study indicate that Management Information Systems (MIS) not only function as administrative tools, but also as strategic instruments in strengthening competitiveness and driving digital transformation within organizations. In practical terms, organizations need to integrate MIS comprehensively

through investment, training, and system development tailored to organizational needs in order to optimize its benefits.

RECOMMENDATION

It is recommended that every organization conduct an internal readiness assessment before implementing MIS, particularly in relation to human resources, infrastructure, and existing business processes. All levels of the organization, from top management to operational staff, need to be actively involved in the implementation and adaptation of the system to create a sense of ownership and increase the effectiveness of its use. It is also important to provide ongoing training and technical assistance to minimize resistance and maximize system utilization. On the other hand, further empirical studies should be conducted to test the causal relationship between MIS implementation and organizational performance, as well as to explore the influence of moderating factors such as organizational culture, leadership style, and the adoption of advanced technologies like artificial intelligence or big data on the success of MIS implementation.

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