



<https://review.e-siber.org/SIJDB> ✉ siberpublisher.info@gmail.com 📞 +62 812-1046-7572

DOI: <https://doi.org/10.38035/sijdb.v2i2>
<https://creativecommons.org/licenses/by/4.0/>

Management Information System (MIS) for Achieving Work Efficiency and Effectiveness in Maximizing Employee Performance: A Conceptual Study as a Guide for Researchers

Gupron Gupron¹, Andri Yandi², Eko Suprpto³, Ifan Sadewa⁴

¹Universitas Batanghari, Jambi, Indonesia, gupron@unbari.ac.id

²Universitas Batanghari, Jambi, Indonesia, andri.yandi@unbari.ac.id

³Universitas Batanghari, Jambi, Indonesia, eko5ing@gmail.com

⁴Universitas Batanghari, Jambi, Indonesia, ifan.sadewa.81@gmail.com

Corresponding Author: gupron@unbari.ac.id¹

Abstract: Management Information Systems (MIS) play a strategic role in enhancing the efficiency and effectiveness of an organization's operations. The implementation of MIS enables more structured data and information management, thereby supporting more accurate and faster decision-making. This study aims to analyze the concept and benefits of MIS in improving efficiency and effectiveness to achieve optimal work outcomes. The research method employed is a literature review, examining various references related to MIS implementation in different organizations. The findings indicate that a well-designed MIS can enhance both efficiency and effectiveness within an organization, ultimately contributing to optimal work performance. Additionally, MIS plays a crucial role in improving interdepartmental coordination and ensuring the optimal utilization of resources. These findings are expected to serve as a guide for researchers in understanding the role of MIS in modern management and provide valuable insights for organizations in optimizing the use of information technology.

Keyword: Management Information System, Efficiency, Effectiveness, Performance, Conceptual Study

INTRODUCTION

In the rapidly evolving digital era, the use of Management Information Systems (MIS) has become a crucial element in supporting organizational operations. MIS enables organizations to manage and analyze data in a more structured manner, thereby enhancing work efficiency and effectiveness to achieve optimal results (Laudon & Laudon, 2020). High efficiency can be achieved through workflow automation, reduced administrative errors, and better resource utilization, while effectiveness relates to how an organization can achieve its established goals with the support of an integrated information system (Turban et al., 2018). Therefore, research on MIS has become increasingly urgent to understand the extent to which this system contributes to improving organizational productivity.

Moreover, many organizations still face various challenges in effectively implementing MIS, such as a lack of user understanding, resistance to change, and limitations in the technological infrastructure supporting the system (McLeod & Schell, 2017). Without a deep understanding of the factors influencing the successful implementation of MIS, organizations risk failing to utilize information systems effectively, which could ultimately hinder workflow processes. Therefore, this conceptual study is necessary to provide researchers with a guide to understanding the key aspects that must be considered in MIS implementation to achieve optimal work efficiency and effectiveness.

MIS has become an integral part of supporting business processes and decision-making in various organizations. It is designed to enhance work efficiency and effectiveness through faster, more accurate, and integrated information management (Laudon & Laudon, 2020). Numerous studies have shown that MIS can improve work productivity and optimize the allocation of organizational resources (Turban et al., 2018). However, despite extensive research on its benefits, inconsistencies remain in the findings regarding the effectiveness of MIS implementation across different organizational contexts. Some studies indicate that MIS implementation significantly impacts efficiency and effectiveness, while others suggest that its benefits are not always fully realized due to technical and non-technical factors (McLeod & Schell, 2017).

One of the sources of inconsistency in previous research is the variation in the scale and complexity of the organizations being studied. DeLone & McLean (2003) highlighted that the success of MIS heavily depends on organizational environment factors, technological readiness, and human resource competencies. However, other studies have shown that even in organizations with high technological readiness, MIS success is still influenced by organizational culture and resistance to change (Petter et al., 2013). Thus, a research gap remains regarding how MIS can be effectively implemented across different work environments to achieve optimal results.

Additionally, many studies have primarily focused on the technical aspects of MIS, such as data security, interoperability, and software sophistication (Stair & Reynolds, 2021). However, there are still limited studies that deeply analyze how MIS can be optimized to enhance work efficiency and effectiveness from a managerial and organizational behavior perspective. This limitation creates a research gap that needs to be addressed to provide a more comprehensive understanding of the relationship between MIS and organizational performance improvement in a holistic manner.

The urgency of this research is also based on the growing demand for organizations, both in the public and private sectors, to be more adaptive to technological advancements in supporting strategic decision-making. A well-designed and properly implemented MIS can provide accurate and real-time data for management to formulate more targeted policies (Stair & Reynolds, 2021). Thus, this study will offer more comprehensive insights for academics and practitioners in developing more effective MIS implementation strategies tailored to organizational needs.

This study aims to develop a conceptual review that serves as a guide for researchers in understanding how MIS can be effectively implemented to enhance work efficiency and effectiveness. Through this review, researchers are also expected to gain clear references on the concepts, benefits, and challenges of MIS implementation as an effort to improve efficiency and effectiveness. Consequently, this study is not only theoretically relevant but also has practical value that can be applied in various organizational contexts. Thus, it contributes not only to enriching academic literature but also to providing practical insights for organizations in developing and managing more effective management information systems.

METHOD

This study employs a conceptual review method aimed at identifying, analyzing, and synthesizing various theories and previous research findings related to Management Information Systems (MIS) in enhancing work efficiency and effectiveness to achieve optimal results. This conceptual review is conducted by examining literature from various sources, including academic journals, reference books, and research reports relevant to the topic of MIS. This method is essential for developing a deeper understanding of the role of MIS in organizational contexts and identifying existing research gaps (Snyder, 2019).

- **Research Approach.** This study adopts a qualitative approach using the systematic literature review (SLR) method. This approach enables researchers to explore key concepts in MIS implementation and analyze the factors influencing its success in enhancing work efficiency and effectiveness (Xiao & Watson, 2019). Additionally, this review aims to identify the limitations of previous research and provide a conceptual framework for future studies.
- **Data source.** The data sources used in this study come from academic literature obtained through scientific databases such as Scopus, Web of Science, IEEE Xplore, ScienceDirect, and Google Scholar. The criteria for selecting literature include: 1) Articles discussing the implementation of MIS in organizations, both in the public and private sectors; 2) Studies reviewing the impact of MIS on work efficiency and effectiveness; and 3) Literature published in reputable journals or credible academic reference books.
- **Data Analysis Procedure.** Data analysis in this study is conducted using a content analysis approach, a method for identifying patterns and key themes in previous research. The analysis process follows these steps: 1) Data collection – Gathering academic articles and books relevant to the research topic; 2) Literature classification – Grouping literature based on key variables such as efficiency, effectiveness, as well as challenges and success factors of MIS; and 3) Findings synthesis – Analyzing and comparing previous research results to identify major trends and existing research gaps (Tranfield et al., 2003).

RESULTS AND DISCUSSION

Management Information System (MIS)

Management Information Systems (MIS) are essential components in organizational operations and decision-making. Various experts have provided their opinions and perspectives on MIS, highlighting its role in supporting management efficiency and effectiveness. One such perspective is presented by James A.F. Stoner (2012), who stated that MIS is a formal method that provides accurate and timely information to management, enabling effective and efficient decision-making. Furthermore, Stoner (2012) emphasized the importance of reliable information in supporting managerial functions such as planning, supervision, and organizational operations.

McLeod & Schell (2017) describe MIS as a computer-based system that provides information to multiple users with similar needs. This information includes explanations regarding the company's continuity and events that occur, assisting management in understanding operational conditions and making appropriate decisions. Additionally, O'Brien & Marakas (2019) state that MIS is a set of interconnected components that work together to achieve a common goal by receiving inputs and generating outputs in a structured transformation process. This approach highlights the importance of integrating system components to ensure an efficient flow of information.

Davis (2010) describes MIS as an integrated human-machine system that provides information to support operations, management, and decision-making within an organization. This definition emphasizes the integration of human and technological components in an

information system. Meanwhile, Turban et al. (2018) define MIS as a system that provides the necessary information for management to make effective and efficient decisions. They highlight the importance of relevant and timely information in supporting managerial decision-making.

Petter et al. (2013) highlight that the success of MIS heavily depends on system quality, information quality, and user satisfaction, all of which contribute to the net benefits for an organization. They emphasize the importance of evaluating information systems based on these factors to ensure a positive contribution to the organization.

Numerous studies have been conducted to identify the factors contributing to the success of information technology systems. One of the most well-known studies in this area is by DeLone & McLean (1992). Their information system success model quickly gained attention, primarily because it is a simple yet considered valid framework. Another reason for its recognition is the growing need to ensure the successful implementation of information technology systems within organizations.

A good model is one that is both comprehensive and simple. This type of model is referred to as a parsimonious model (Jogiyanto, 2007). Based on previous theories and research findings, DeLone & McLean developed a parsimonious model known as the DeLone and McLean Information System Success Model (D&M IS Success Model) (DeLone & McLean, 1992), as illustrated in Figure 1 below.

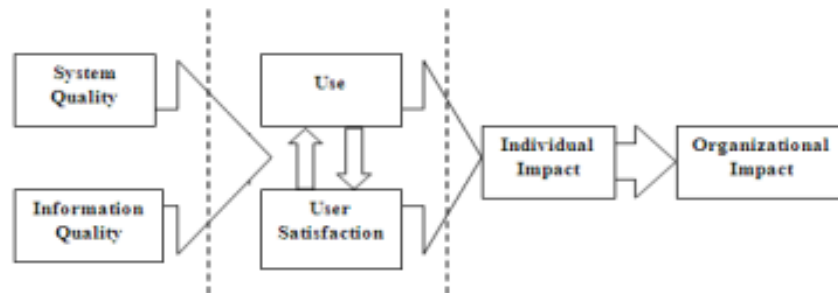


Figure 1. DeLone & McLean (1992) Information Systems Success Model

The proposed model reflects the interdependence of six measures of information system success. These six elements, factors, components, or measurements of the model are: 1) System Quality, 2) Information Quality, 3) Use, 4) User Satisfaction, 5) Individual Impact, and 6) Organizational Impact.

This success model is based on the process and causal relationships among its dimensions. It does not measure the six dimensions of information system success independently but rather assesses them as an interconnected whole, where each dimension influences the others.

Table 1. Measurement of Information System Success

Variable	Indicator	Source
System Quality	System integration	Bailey & Person (1983)
	Reliability	Swanson (1974)
	Online response time	Swanson (1974)
	Ease of use	Hamilton & Chevany (1981)
	Sophistication (use of new technology)	Lehman et al (1986)
	Security	Molla & Licker (2001)
Information Quality	Accuracy of information	Bailey & Person (1983)
	Completeness	Bailey & Person (1983)
	Current	Bailey & Person (1983)
	Clarity	Swanson (1974)
	Form (format)	Bailey & Person (1983)

Variable	Indicator	Source
Use	Use of information	Rivard & Huff (1985)
	Use for decision support	Doll & Torkzadeh (1998)
	Use for job integration	Doll & Torkzadeh (1998)
	Use for public services	Doll & Torkzadeh (1998)
User Satisfaction	Software satisfaction	Lehman et al (1986)
	Hardware satisfaction	Lehman et al (1986)
	The difference between information needed and information received	Olson & Ilves (1981)
Individual Impact	Average time to make a decision	Chevany et al (1972)
	Confidence in decision making	Chevany et al (1972)
	Quality of decision analysis	Aldag & Power (1986)
Organization Impact	Reduction of operating costs	Emery (1971)
	Increase in organizational income	Hamilton & Chevany (1981)
	Increasing organizational effectiveness	Danziger (1977)

Management Information System in Improving Work Efficiency

MIS is a technology-based system used to collect, manage, and analyze information to support decision-making processes within an organization. Its implementation not only enhances work efficiency but also accelerates access to accurate and relevant data. According to Laudon and Laudon (2020), MIS plays a crucial role in improving organizational productivity by automating business processes, reducing manual work, and enhancing coordination between work units.

One of the main benefits of implementing MIS is efficiency in data and information management. With an integrated system, organizations can reduce data duplication, minimize input errors, and accelerate information distribution across departments. O'Brien & Marakas (2019) state that an effective MIS implementation can reduce bureaucracy and speed up decision-making, as all necessary data is available on a single, easily accessible platform.

In addition, MIS also enhances efficiency in the use of organizational resources. With a computerized system, organizations can reduce paper usage, save time in data retrieval, and improve transparency in reporting. According to Stair and Reynolds (2019), the use of MIS in organizational management can optimize resource allocation, thereby reducing operational costs and increasing organizational competitiveness in the digital era.

Another benefit of implementing MIS is the improvement of communication and coordination between work units. With an integrated information system, each department within the organization can easily share information and accelerate work processes. According to Turban et al. (2021), MIS enables organizations to eliminate communication barriers and enhance team collaboration, resulting in greater operational efficiency.

The implementation of MIS also contributes to improving data accuracy and security. With advanced encryption technology and authentication systems, sensitive information is protected from unauthorized access. Laudon and Laudon (2020) explain that one of the key advantages of MIS is its ability to maintain data integrity, which is crucial for accurate and reliable data-driven decision-making.

Overall, the implementation of MIS in an organization provides significant benefits in enhancing work efficiency. From more effective data management and resource savings to improved communication and enhanced information security, all these aspects contribute to accelerating work processes and increasing organizational productivity. Therefore, organizations that aim to remain competitive in the digital era must adopt and develop an MIS that aligns with their needs.

Numerous studies have been conducted to examine the implementation of MIS as an effort to improve work efficiency within organizations. One such study is by Azzahra & Firdaus (2024), which emphasizes the importance of MIS in achieving competitive advantage

through enhanced operational efficiency. The study found that the implementation of MIS can automate business processes, improve the accuracy and speed of decision-making, and facilitate better communication and collaboration between departments.

In addition, another study published in the *Jurnal Ilmiah Sistem Informasi* highlights that information technology can help various types of companies by improving operational efficiency and reducing labor costs (Fahzirah & Nasution, 2024). Furthermore, Rangkuti & Nasution (2025) also demonstrate in their study that the implementation of MIS plays a crucial role in enhancing operational efficiency in the public sector. Consistent with these findings, Fadilla (2021) and Maharani & Aisah (2024) argue that the optimal use of MIS can significantly improve work efficiency in hospitals.

Based on previous studies, it is evident that MIS has a strong correlation with work efficiency. This is because MIS has the capability to manage, store, and distribute information quickly and accurately. With MIS, tasks that were previously performed manually can be automated, reducing the time and effort required to complete them. This allows employees to focus more on the strategic aspects of their work, ultimately enhancing organizational productivity and efficiency (Laudon & Laudon, 2020). Moreover, MIS supports better decision-making by providing real-time and structured data, minimizing errors caused by delays or inaccurate information (O'Brien & Marakas, 2019). Thus, the optimal implementation of MIS can create a more efficient, organized, and responsive work environment in an ever-changing business landscape.

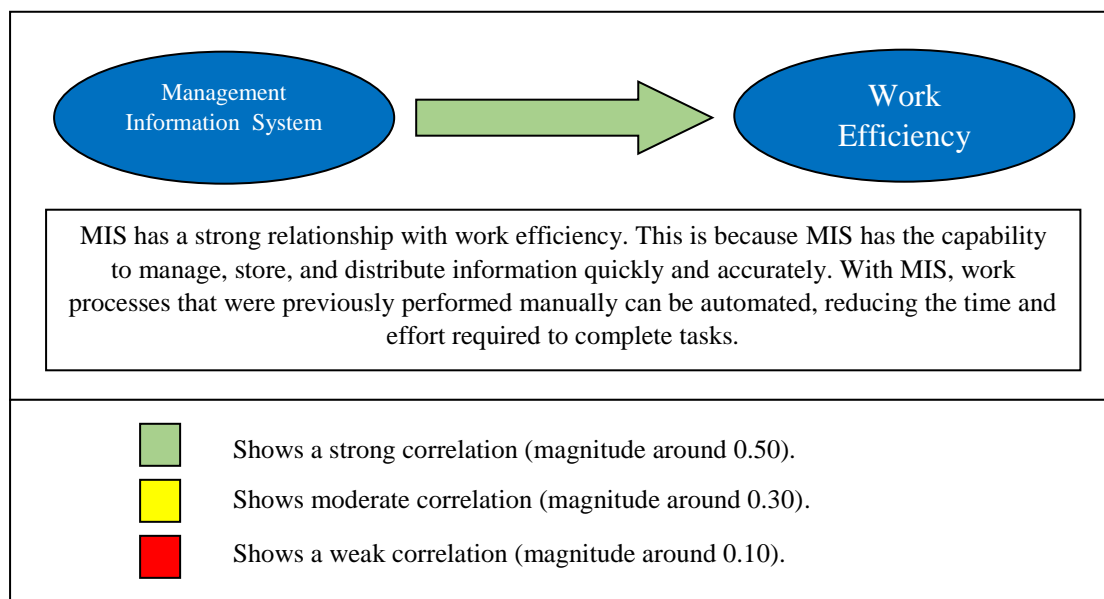


Figure 1. Management Information System in Improving Work Efficiency

Although MIS plays a crucial role in improving work efficiency, its implementation still faces various complex challenges. One of the main challenges is the high implementation cost. Developing and maintaining MIS requires a significant investment, both in technological infrastructure and employee training. This can be a major obstacle for organizations, especially those with budget constraints. Additionally, resistance to change is another challenge in MIS implementation. Not all employees can easily adapt to new technology, making it essential to adopt the right approach to overcome this barrier (Tim UNESA, 2025).

The integration of MIS with existing systems often presents challenges. Difficulties in integrating MIS with legacy systems can hinder information flow and reduce operational

efficiency. Therefore, careful planning and a strategic approach are required to ensure successful integration (Purba & Firdaus, 2024).

Information security is another crucial aspect. Information systems that lack adequate security are vulnerable to threats such as hacking and data breaches. Establishing a robust security framework and control measures requires the ability to balance risks, benefits, and the company's operational capabilities.

Finally, challenges in data management must also be considered. Poor data quality can hinder analysis and effective decision-making. Therefore, organizations must ensure that the data collected is accurate, relevant, and up-to-date to support efficient operations (Indrasari & Miftahuddin, 2024).

Overall, although MIS offers various benefits in improving work efficiency, these challenges need to be addressed through careful planning, appropriate investment, and an effective change management approach.

Management Information Systems in Improving Work Effectiveness

The implementation of MIS plays a significant role in enhancing work effectiveness across various organizations. MIS enables more systematic data and information management, supporting faster and more accurate decision-making. According to Laudon & Laudon (2020), a well-implemented MIS can reduce the time required for information processing, minimize human errors, and improve employee productivity. Consequently, organizations can operate more efficiently in achieving their business objectives.

Additionally, MIS contributes to improving coordination between work units within an organization. O'Brien & Marakas (2019) explain that with an integrated information system, communication and collaboration between departments become more effective. This is because MIS enables real-time data access, allowing each unit within the organization to obtain the necessary information more quickly and accurately. For example, in the public sector, the implementation of MIS has been proven to enhance the effectiveness of public services by streamlining administrative processes and increasing transparency (Turban et al., 2018).

Another benefit is the improvement in employee performance monitoring and evaluation. According to McLeod and Schell (2017), MIS can be used to measure employee productivity based on recorded system data. With clear, data-driven performance indicators, management can conduct more objective performance evaluations and provide more effective feedback to employees. Ultimately, this helps enhance employee motivation and performance.

Overall, the implementation of MIS brings numerous benefits in enhancing work effectiveness, including operational efficiency, internal communication, and performance monitoring. Therefore, organizations must continuously develop and update their information systems to adapt to the increasingly dynamic work environment. By doing so, work effectiveness can be consistently improved, supporting the achievement of organizational goals more optimally.

Numerous studies have been conducted to examine the implementation of MIS as an effort to improve work effectiveness across various sectors. Among them are studies by Sholeh & Wahyudin (2021), Setiawan & Paris (2022), Nabilah & Edward (2019), and Rizki et al. (2024), which suggest that the proper implementation of MIS results in higher work effectiveness compared to conventional work systems. This aligns with the view of Laudon & Laudon (2020), who emphasize that organizations adopting MIS with the right technological infrastructure tend to achieve higher work effectiveness than those still relying on conventional methods.

Additionally, a study conducted by Angraini et al. (2023) in hospitals revealed that MIS plays a crucial role in improving hospital management effectiveness. In line with this,

research by Turban et al. (2021) also highlights the significant role of MIS in enhancing management effectiveness, particularly in monitoring and evaluating employee performance. With a well-structured information system, organizations can implement data-driven reporting mechanisms that enable more transparent and objective employee performance monitoring.

Another study by O'Brien & Marakas (2019) found that integrating MIS within an organization enhances communication and coordination between departments. This study revealed that real-time data access through MIS helps organizations avoid information redundancy and ensures data accuracy in decision-making. This, in turn, contributes to increased employee productivity and work effectiveness.

Furthermore, a study by McLeod & Schell (2018) highlighted the impact of MIS in enhancing work effectiveness in the government sector. The study found that implementing MIS in public services, such as digital administration systems and e-government, can accelerate bureaucratic processes, improve service accessibility, and enhance transparency in public administration management (Puspitasari et al., 2023). Thus, the use of MIS in this sector not only improves employee work effectiveness but also enhances the quality of services provided to the public.

Based on previous studies and expert opinions, it is evident that MIS has a strong correlation with work effectiveness. This is because MIS plays a crucial role in integrating, processing, and presenting accurate and relevant data to support better decision-making. Furthermore, the optimal implementation of MIS is essential in enhancing work effectiveness across various organizations. With adequate technological support and the right implementation strategy, MIS can serve as an effective tool for improving operational efficiency, enhancing internal coordination, and strengthening the quality of decision-making.

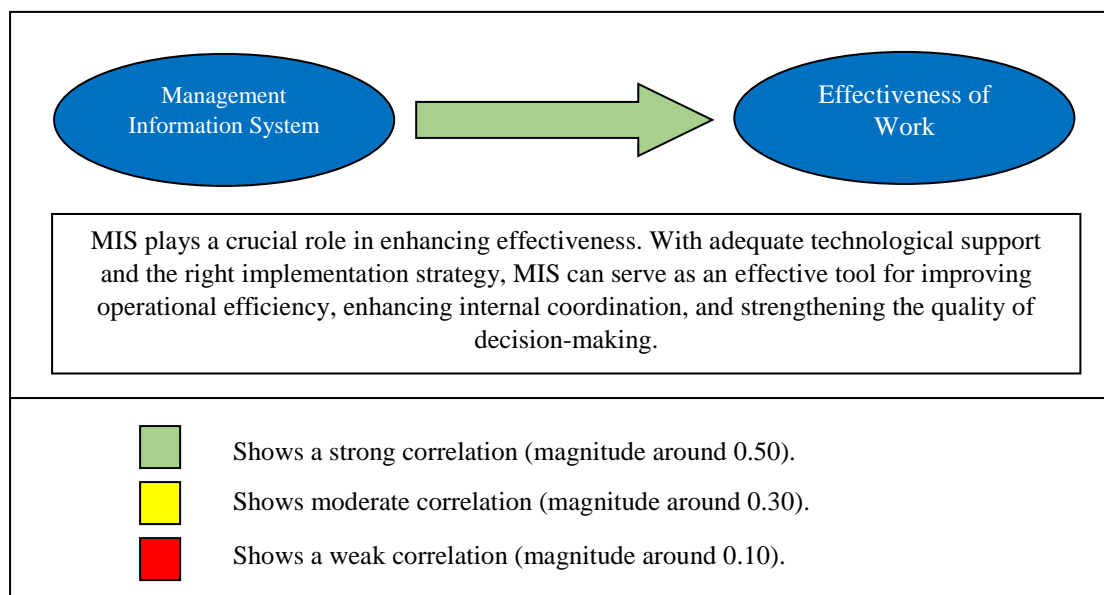


Figure 2. Management Information System in Improving Work Effectiveness

Although MIS plays a crucial role in enhancing work effectiveness, its implementation faces various challenges. One of the main challenges is the readiness of human resources to operate the system. According to Laudon & Laudon (2020), a lack of technical skills among employees can hinder the optimal utilization of MIS. Many organizations still struggle with training and developing employee competencies to adapt to continuously evolving systems. As a result, MIS implementation often fails to be effective and instead encounters resistance from users.

In addition, another common challenge is inadequate technological infrastructure. O'Brien & Marakas (2019) explain that an effective MIS requires advanced hardware and software support, as well as stable connectivity. However, in many organizations, especially in the public sector and small businesses, budget constraints often hinder the acquisition of appropriate infrastructure. A lack of investment in technology can result in slow system performance, technical disruptions, or even the inability to fully utilize the system.

Data security is also a challenge in MIS implementation. As more information is managed within digital systems, the risk of data breaches and cyberattacks continues to rise. According to Turban et al. (2021), many organizations still lack robust security systems to protect their critical data. Cyber threats such as hacking and malware can compromise the integrity and confidentiality of information stored in MIS. Therefore, strict security policies, including data encryption and strong access controls, are essential to ensuring system security.

Another challenge is integrating the system with existing business processes. McLeod & Schell (2018) stated that many organizations struggle to align MIS with long-established structures and work procedures. This adaptation process often requires significant time and costs, as well as organizational culture changes to ensure employees accept and use the system effectively. If not managed properly, MIS implementation may result in misalignment between the system and organizational needs, ultimately hindering work effectiveness.

Thus, although MIS has great potential to enhance work effectiveness, its success largely depends on the organization's readiness to address these challenges. Therefore, a well-planned strategy is needed, including human resource training, infrastructure strengthening, data security enhancement, and better system integration to ensure that MIS truly delivers maximum benefits to the organization.

Management Information Systems in Maximizing Performance

MIS plays a crucial role in maximizing employee performance across various organizations. It enables more efficient work processes by providing quick, accurate, and relevant access to information. According to Laudon & Laudon (2020), optimal use of MIS can enhance employee productivity by reducing the time needed to search for and process information, allowing them to focus more on core tasks that are strategically valuable to the organization. Thus, MIS helps create a more effective work environment and supports improved employee performance.

Additionally, MIS plays a role in enhancing coordination between departments within an organization. With an integrated system, communication and collaboration between divisions become more seamless, reducing the risk of work duplication and administrative errors. According to O'Brien & Marakas (2019), organizations that implement MIS experience improvements in internal communication effectiveness, which directly impacts the quality of employee performance. With transparent and centralized information, employees can work more efficiently as they have access to the necessary data without having to go through complex procedures.

The implementation of MIS also provides benefits in measuring and evaluating employee performance. With a digitized system, management can monitor performance in real time, identify areas for improvement, and provide more accurate feedback. A study conducted by Al-Mamary et al. (2014) found that organizations implementing MIS in employee performance assessment systems experienced increased evaluation effectiveness and data-driven decision-making. This enables organizations to take corrective actions more quickly and appropriately reward high-performing employees.

Furthermore, MIS also contributes to increasing employee satisfaction and motivation. With a more efficient system, administrative workloads can be reduced, allowing employees to focus more on tasks that require skills and creativity. According to Turban et al. (2018),

organizations that adopt information technology in human resource management report increased job satisfaction, as employees feel more supported in carrying out their tasks. In a more supportive work environment, employees become more motivated and contribute more optimally to achieving organizational goals.

With these various benefits, it can be concluded that the implementation of MIS is an effective strategy for maximizing employee performance. With the right technological support, organizations can enhance work efficiency, improve internal communication, and optimize employee evaluation and motivation systems. Therefore, investing in MIS is a crucial step for organizations aiming to achieve a competitive advantage in today's digital era.

Various studies have been conducted to examine the implementation of MIS as an effort to maximize organizational performance. One such study by Azzahra & Firdaus (2024) highlights that the effective implementation of MIS can help companies improve productivity, reduce operational costs, and enhance customer satisfaction. They also discuss the challenges and obstacles that may arise during MIS implementation, as well as strategies to overcome them.

Additionally, Sumaryono (2023), in his study, highlights the transformation of e-HRM in developing human resource quality through information technology to enhance employee performance. These findings indicate that information technology can be utilized as a tool to improve human resource quality and, consequently, employee performance. Furthermore, a study by Taqqia & Anggraeni (2022) explores the impact of implementing the management information system (SiMakmur) on employee performance at PT Petrokimia Gresik. This research reveals that the implementation of MIS can have a positive impact on employee performance by accelerating information access and facilitating better decision-making. Another study by Antoni et al. (2018) examines the role of MIS in improving work productivity at Universitas Muara Bungo. The findings indicate that effective MIS implementation can help enhance operational efficiency and work productivity.

The numerous studies concluding that MIS has a positive and significant impact on employee performance have proven the strong relationship between MIS and employee performance. MIS enables faster and more accurate decision-making processes, thereby enhancing employee productivity and work effectiveness. Additionally, optimal MIS implementation can reduce errors in data processing, improve interdepartmental coordination, and support better strategic planning. With MIS in place, organizations can manage resources more efficiently, respond more effectively to market changes, and accelerate customer service, ultimately leading to overall improved performance.

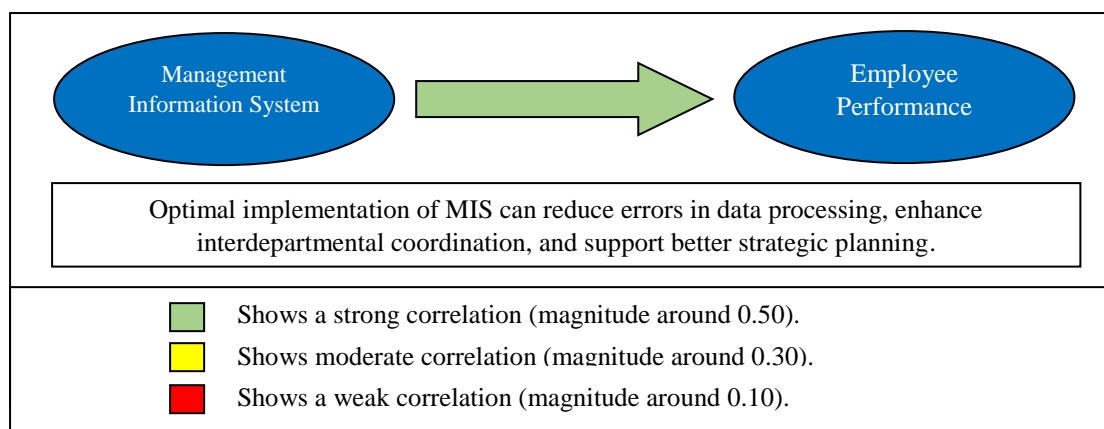


Figure 3. Management Information System in Maximizing Performance

Despite its crucial role in maximizing performance, the implementation of MIS faces various challenges that can affect its effectiveness. One of the main challenges is employee resistance to adopting a new system. According to Laudon & Laudon (2020), changes in

work systems due to MIS implementation often cause discomfort for employees accustomed to manual methods. This can hinder the effectiveness of MIS in improving performance if not accompanied by adequate training and appropriate change management strategies.

Additionally, another challenge is the limitation of infrastructure and technological resources. O'Brien & Marakas (2019) emphasize that the successful implementation of MIS heavily depends on the readiness of adequate information technology infrastructure, including hardware, software, and stable networks. Organizations lacking proper infrastructure may face difficulties in integrating MIS into their business processes, ultimately reducing the system's effectiveness in enhancing productivity and work efficiency.

Data security is also a crucial challenge in the implementation of MIS. According to Turban et al. (2021), the increasing use of information technology in organizational management poses security risks such as data breaches, cyberattacks, and unauthorized access to sensitive information. Therefore, organizations must enforce strict security policies, including data encryption, access authorization, and monitoring systems, to prevent potential security threats that could hinder organizational performance.

Apart from technical aspects, the success of MIS in maximizing performance is also influenced by management commitment. According to Stair & Reynolds (2021), without full support from management, MIS implementation tends to face challenges in budget allocation, policies, and organizational culture adaptation. If management does not give full attention to the system's sustainability, MIS may not be utilized optimally, preventing its full potential in enhancing performance from being realized.

Thus, although MIS has great potential in maximizing performance, challenges such as employee resistance, infrastructure limitations, data security risks, and lack of managerial support must be addressed to ensure effective implementation and achieve optimal positive impact for the organization.

CONCLUSION

Management Information Systems (MIS) play a significant role in enhancing efficiency and effectiveness to maximize employee performance. With MIS, business processes can operate more systematically, quickly, and accurately, reducing time wastage and increasing productivity at both individual and organizational levels. A well-implemented MIS also enables more optimal data and information management, allowing for more precise decision-making based on valid and real-time information.

However, despite its many benefits, the implementation of MIS in an organization is not without challenges. Factors such as infrastructure readiness, human resource competence, and managerial support are crucial elements in determining the success of MIS implementation. Additionally, data security is a primary concern, given the increasing risk of cyber threats in today's digital environment. Therefore, organizations need to adopt the right strategies for MIS implementation, including investing in employee training and enforcing strict data protection policies to ensure the system operates optimally.

However, despite its many benefits, the implementation of MIS in an organization is not without challenges. Factors such as infrastructure readiness, human resource competence, and managerial support are crucial elements in determining the success of MIS implementation. Additionally, data security is a primary concern, given the increasing risk of cyber threats in today's digital environment. Therefore, organizations need to adopt the right strategies for MIS implementation, including investing in employee training and enforcing strict data protection policies to ensure the system operates optimally.

REFERENSI

Aldag, R.J. and Power, D.J. (1986) 'An empirical assessment of computer-aided decision analysis', *Decision Sciences*, 17(4), pp. 572-588.

- Al-Mamary, Y. H., Shamsuddin, A., & Aziati, N. (2014). The role of different types of information systems in business organizations: A review. *International Journal of Research in Business and Social Science* (2147-4478), 3(1), 1-12.
- Angraini, D., Putri, I. S., & Zulfa, Z. (2023). Pengaruh Sistem Informasi Manajemen Terhadap Efektivitas Kerja di Unit Farmasi Rumah Sakit Islam Ibnu Sina Bukittinggi Tahun 2022. *SEHATMAS: Jurnal Ilmiah Kesehatan Masyarakat*, 2(3), 500-510.
- Antoni, A., & Novriasyah, Y. (2018). Peranan Sistem Informasi Manajemen Dalam Meningkatkan Produktivitas Kerja Pada Universitas Muara Bungo. *Jurnal Administrasi Sosial dan Humaniora*, 2(2), 197-204.
- Azzahra, I., & Firdaus, R. (2024). Penerapan Sistem Informasi Manajemen dalam Meningkatkan Efisiensi Perusahaan. *Jurnal Manuhara: Pusat Penelitian Ilmu Manajemen Dan Bisnis*, 2(3), 239-242.
- Bailey, J. E., & Pearson, S. W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. *Management Science*, 29(5), 530–545.
- Danziger, J. N. (1977). *Computers and the frustrated chief executive*. *MIS Quarterly*, 1(1), 43–47.
- Davis, G. B. (2010). *Management Information Systems: Conceptual Foundations, Structure, and Development*. McGraw-Hill.
- DeLone, W.H & McLean, E.R., (1992). Information systems success: the quest for the dependent variable. *Information System Research* 3 (1), 60-95.
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9-30.
- Doll, W. J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, 12(2), 259–274.
- Emery, R. C. (1971). Existentialism in the classroom. *Journal of Teacher Education*, 22(1), 9–14.
- Fadilla, N. M. (2021). Sistem informasi manajemen rumah sakit dalam meningkatkan efisiensi: mini literature review. *JATISI (Jurnal Teknik Informatika dan Sistem Informasi)*, 8(1), 357-374.
- Fahzirah, I., & Nasution, M. I. P. (2024). Penerapan Sistem Informasi Manajemen Untuk Meningkatkan Efisiensi Bisnis Di Perusahaan. *JURNAL ILMIAH RESEARCH AND DEVELOPMENT STUDENT*, 2(1), 145-151.
- Indrasari, B. N., & Miftahuddin, A. (2024). *Peran dan Tantangan Sistem Informasi Manajemen dalam Meningkatkan Kinerja Organisasi di Era Digital*. Bandung: Universitas Pendidikan Indonesia
- Jogiyanto, H.M. (2007). *Model Kesuksesan Sistem Teknologi Informasi*. Yogyakarta: ANDI.
- Laudon, K. C., & Laudon, J. P. (2020). *Management Information Systems: Managing the Digital Firm* (16th ed.). Pearson.
- Lehman, J. A., Van Wetering, J., & Vogel, D. (1986). Mainframe and microcomputer-based business graphics: What satisfies users? *Information & Management*, 10(3), 133–140. [https://doi.org/10.1016/0378-7206\(86\)90022-4](https://doi.org/10.1016/0378-7206(86)90022-4)
- Maharani, L., & Aisah, S. (2024). Peran Sistem Informasi Manajemen Dalam Meningkatkan Efisiensi Rumah Sakit. *Jurnal Sistem Informasi, Akuntansi Dan Manajemen*, 4(2), 274-283.
- McLeod, R., & Schell, G. (2017). *Management Information Systems* (12th ed.). Pearson.
- Molla, A., & Licker, P. S. (2001). E-commerce systems success: An attempt to extend and respecify the DeLone and McLean model of IS success. *Journal of Electronic Commerce Research*, 2(4), 131–141.

- Nabilah, A., & Edward, Y. (2019). Peranan Penerapan Teknologi Sistem Informasi Manajemen BAZNAS (SIMBA) terhadap Efektivitas Kerja Pegawai. *Al-Amwal*, 8(2), 99-110.
- O'Brien, J. A., & Marakas, G. M. (2019). *Management Information Systems* (11th ed.). McGraw-Hill Education.
- Petter, S., DeLone, W., & McLean, E. (2013). Information Systems Success: The Quest for the Independent Variables. *Journal of Management Information Systems*, 29(4), 7-62.
- Purba, M. A. F., & Firdaus, R. (2024). Peran dan Tantangan Sistem Informasi Manajemen dalam Era Digital: Tinjauan Literatur. *Jurnal Intelek Dan Cendekiawan Nusantara*, 1(3), 4302-4309.
- Puspitasari, E., Nursolih, E., & Rustendi, E. (2023). Pengaruh Sistem Informasi Manajemen Terhadap Efektifitas Kerja (Suatu Studi Pada Pegawai Kecamatan Rajadesa). *Jurnal Industrial Galuh*, 5(2), 106-114.
- Rangkuti, Z. S., & Nasution, M. I. P. (2025). Pengaruh Sistem Informasi Manajemen Terhadap Efisiensi Operasional Di Sektor Publik. *JURNAL ILMIAH NUSANTARA*, 2(1), 180-184.
- Rivard, S., & Huff, S. L. (1985). An empirical study of users as application developers. *Information & Management*, 8(2), 89-102. [https://doi.org/10.1016/0378-7206\(85\)90037-0](https://doi.org/10.1016/0378-7206(85)90037-0)
- Rizki, A. P., Hendri, E., & Darmawati, T. (2024). Pengaruh Sistem Informasi Manajemen dan Kompetensi Terhadap Efektifitas kerja pegawai di Dinas Pendidikan Kabupaten Ogan Komering Ilir. *Jurnal Ilmiah Wahana Pendidikan*, 10(2), 202-210.
- Setiawan, L., & Paris, Y. (2022). Kajian Sistem Informasi Manajemen Terhadap Kinerja Pegawai Melalui Efektivitas Kerja Pada Dinas Perumahan, Kawasan Permukiman Dan Pertanahan Provinsi Sulawesi Selatan. *Jurnal Ilmiah Ecosystem*, 22(2), 286-294.
- Sholeh, M., & Wahyudin, D. (2021). Pengaruh Sistem Informasi Manajemen dan Kompetensi Terhadap Efektifitas Kerja di PT Citra Solusi Informatika. *Abiwarra: Jurnal Vokasi Administrasi Bisnis*, 3(1), 28-41.
- Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines. *Journal of Business Research*, 104, 333-339.
- Stair, R., & Reynolds, G. (2021). *Principles of Information Systems* (14th ed.). Cengage Learning.
- Stoner, J. A. F. (2012). *Management*. Prentice Hall.
- Sumaryono, S. (2023). Transformasi e-HRM (Electronic Human Resource Management) dalam Pengembangan Kualitas SDM (Sumber Daya Manusia) Berbasis Teknologi Informasi Terhadap Kinerja Karyawan. *Jurnal Ekonomi Manajemen Sistem Informasi*, 5(1), 50-63.
- Swanson, E. B. (1974). Management information systems: Appreciation and involvement. *Management Science*, 21(2), 178-188.
- Taqqia, I., & Anggraeni, R. (2022). Pengaruh Penerapan Sistem Informasi Manajemen Terhadap Kinerja Karyawapengguna Sistem Informasi Makmur (Simakmur) Pt Petrokimia Gresik. *Jurnal Kewirausahaan dan Inovasi*, 1(3), 338-345.
- Tim Unesa. (2025). *Sistem Informasi Manajemen adalah Kunci Efisiensi dan Kesuksesan Bisnis: Pengertian, Fungsi, Manfaat, dan Tantangan*. Surabaya: Universitas Negeri Surabaya. https://si.ft.unesa.ac.id/post/sistem-informasi-manajemen-adalah-kunci-efisiensi-dan-kesuksesan-bisnis-pengertian-fungsi-manfaat-dan-tantangan?utm_source=chatgpt.com
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 14(3), 207-222.

Turban, E., Pollard, C., & Wood, G. (2018). *Information Technology for Management: On-Demand Strategies for Performance, Growth and Sustainability* (11th ed.). Wiley.