

Integration of Management Information Systems (MIS) in Strategic Decision Making to Improve Organization Performance

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ABSTRACT

Management Information Systems (MIS) play an important role in supporting strategic decision making in organization. By providing accurate, relevant and timely data, they help decision makers to develop more appropriate strategies, improve operational efficiency and organization performance. Proper MIS integration not only supports the management of internal resources, but also accelerates adaptation to changing markets and business needs. As technology advances and the business environment becomes more complex, MIS becomes a critical tool for analyzing data and making more evidence-based decisions. The success of MIS implementation is highly dependent on a well-integrated system and the organization's ability to manage data and information effectively. Organization that can optimally utilize MIS has the potential to achieve a competitive advantage in a dynamic market. It is important for companies to continuously invest in the development of MIS that is relevant to their needs and strategic objectives

INTRODUCTION

In today's digital era, the role of management information systems (MIS) is becoming increasingly crucial for organizations in supporting strategic decision-making. These information systems provide the data and information needed to formulate evidence-based decisions, speed up the decision-making process, and reduce the uncertainty faced by managers in the face of changing business challenges (Rascão, 2018). Advances in information technology have enabled organizations to access and analyze data in real-time, allowing them to respond to changing markets more quickly and effectively. A good management information system serves not only as a data collection tool, but also as a platform that enables the integration of various information sources that facilitate the planning, monitoring, and decision-making processes in the organization (Peñalver, 2018). The application of information technology, combined with user skills, is foundational to transforming these capabilities into measurable gains in organizational performance (Djaelani et al., 2020).

MIS support strategic processes in areas such as long-term planning, resource allocation, and product or service development (Yadav et al., 2015). It connects

different parts of the organization, bringing together information from different departments to provide a holistic view and allowing managers to make better decisions. Moreover, with technologies such as big data and artificial intelligence, MIS not only provides historical data, but also predictive insights that help in designing more adaptive and proactive strategies (Alzhrani, 2020). Ultimately, the effective utilization of information for corporate strategic decision-making is heavily influenced by manager behavior and their capacity to interpret and act on the insights provided by the system (Gardi & Darmawan, 2022). The role of MIS in assisting organization in making strategic decisions is increasingly important in improving the organization's performance and competitiveness in a competitive market.

However, although many organizational have implemented management information systems, the main challenge faced is how to ensure these systems can support appropriate and relevant decision making. Many organizational fail to utilize the full potential of MIS due to limited understanding of how to make use of existing data to generate insights that can be used in formulating strategic policies. This is often due to a lack of integration between technology, processes and

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human skills within the organization. Although a MIS can provide large amounts of data, the quality of that data is highly dependent on the processes implemented to collect it and how it is processed and analyzed. A mismatch in the implementation of technology and lack of training for MIS users can reduce the effectiveness of the system in supporting strategic decisions. Beyond internal efficacy, there is a growing imperative for accountability in how these systems are used, encompassing ethical considerations, social responsibility, and legal obligations in their deployment (Darmawan, 2022).

Another issue that often arises is the limitation in utilizing MIS to create dynamic and data-driven decisions across the board. Mistakes in the selection of the right information system or the inability to perform data analysis can lead to organization being unable to respond to market changes or optimally capitalize on opportunities. As technology evolves and market needs become more complex, it is becoming increasingly clear that decisions that are not data-driven can be high-risk, and in the long run can reduce competitiveness and business sustainability. The development of employee work productivity, which is a key outcome of effective strategy, is significantly supported by the availability of adequate work facilities and the proper use of management information systems (Putra et al., 2022).

An efficient MIS can be the key for companies to develop strategies that are more effective and responsive to external changes. As global competition increases and market dynamics continue to evolve, organization need to utilize MIS as a tool to obtain faster and more accurate information. Furthermore, the external information ecosystem, including the role of social media in shaping public opinion through information dissemination, must be understood as it influences the market and socio-political context in which strategic decisions are made (Arifin & Rojak, 2022). The organization that is able to integrate information technology in their decision-making strategy will have an edge in facing market challenges and optimizing their business processes. However, societal challenges such as the digital divide and the spread of misinformation can impact public participation and trust, indirectly affecting the stability and predictability of the business environment (Issalillah & Hardyansah, 2022).

This research aims to analyze how organization can integrate management information systems in their strategic decision-making process to improve organizational performance and operational effectiveness. The main focus is on exploring effective ways to make use of the technology and data available

in a MIS to support more evidence-based decision making, and how this can contribute to improved competitiveness and the achievement of the organization's long-term goals.

RESEARCH METHOD

In literature studies related to MIS and strategic decision making, researchers typically review a variety of relevant sources to understand the relationship between information systems and organization strategic success. This method allows researchers to collect data from various academic journals, textbooks, industry reports and other articles that discuss practical applications and related theories. Using this approach, researchers can identify the main trends, concepts, as well as established theories relating to the utilization of information technology in management and decision making. Some studies also examine the direct and indirect impacts of MIS use on strategic decisions and organization performance, as well as how factors such as organization structure and company culture can influence the successful implementation of the system (Laudon & Laudon, 2019).

This literature study also allows researchers to explore the various challenges faced by organizations in integrating efficient MIS in decision making. The sources used to analyze these issues typically include reports on implementation failures, problems in data management, and barriers to effective use of technologies. This literature often introduces theoretical and practical solutions that can be applied by organizations in improving MIS effectiveness, which can further strengthen the decision-making process and enhance the competitiveness of the company. Some relevant studies such as those by O'Brien and Marakas (2011); Davenport and Harris (2007) have provided important insights into how information technology should be applied in a dynamic managerial environment.

RESULT AND DISCUSSION

The role of MIS in supporting strategic decision making in organization is increasingly becoming key to achieving competitive advantage in this digital era. Effective information systems provide relevant, timely, and accurate data, which supports managers in making faster and better decisions (Sari & Priantinah, 2019). By using the latest technologies, such as data analytics and AI, MIS is able to provide insights into markets, customers, and industry trends, which are indispensable in formulating business strategies. The use of MIS has become an integral part of modern management in an effort to achieve the organization's strategic goals.

The integration of MIS in organizations is not straight forward. It requires a systematic approach in planning and implementing information systems in order to support more strategic decisions and improve organizational performance (Mukangu, 2016). Given the complexity and dynamism of today's business environment, the use of MIS must be updated continuously to remain relevant to the needs of the organization. This aligns with the importance of technology orientation and entrepreneurial competence in building a competitive advantage, particularly for smaller enterprises navigating digital markets (Putra & Darmawan, 2022). By focusing on good system integration between departments and efficient data management, the organization can ensure that the information obtained from the MIS can be fully utilized for better decision making.

In this article, it will be analyzed how organizations can integrate MIS with their business strategy to make better, faster, and more targeted decisions. Some of the challenges that may be faced in implementing MIS will also be discussed, as well as the importance of commitment from management to support the changes required in the digital transformation of the organization. Along with that, it will outline how MIS not only supports operations, but can also drive the achievement of broader strategic goals for the organization (Sudjiman & Sudjiman, 2020).

The integration of MIS in organization is a key aspect in supporting appropriate strategic decision making. These information systems not only serve to manage data, but also provide relevant and timely information for decision makers at all levels of the organization (Udroiu et al., 2022). The successful implementation of MIS in organizations depends on the selection and implementation of the right technology, as well as efficient information management. Crucially, the effectiveness of such systems is heavily influenced by the behavior of managers in utilizing the available information for strategic corporate decisions (Gardi & Darmawan, 2022). Along with technological advances, these systems have evolved to support big data processing and advanced analytics, which provide a competitive advantage in making more informed and data-driven decisions (Laudon & Laudon, 2019).

In MIS integration, organization needs to focus on its specific structure and information needs. Each department or unit in the organization may need access to different types of data, and the MIS must be able to provide personalized access to support the decision-making process (Sharma, 2021). The use of a well-integrated system allows information to flow smoothly between departments, reducing information

silos and improving coordination and efficiency. This integration also involves the use of the latest technologies, such as cloud computing, to store data centrally and enable quick access across the organization (O'Brien & Marakas, 2011).

Management information systems also play an important role in supporting strategic decisions by providing powerful analytics and accurate predictions (Fu et al., 2010). For example, a MIS equipped with analytics tools can help managers to spot market trends, predict demand, and plan optimal production capacity. With more transparent and easily accessible data, managers can make faster and more accurate decisions, ultimately improving organizational performance. Effective data collection and analysis require a system capable of efficiently managing large volumes of data from multiple sources (Davenport & Harris, 2007).

Although MIS can support better decisions, challenges arise when organization does not have adequate infrastructure to utilize the full potential of these systems. Limitations in human resource training, high implementation costs, as well as differences in existing systems across different organizational units can hinder the optimization of MIS. It is important for top managers to have a clear vision and provide sufficient resource support for MIS to be integrated effectively. This also includes educating the entire team on the importance of information technology in supporting better decisions and adopting these systems in every operational process (Porter & Heppelmann, 2014). An organization's ability to survive and thrive is intrinsically linked to its core competencies, which in the modern era include the effective adoption and use of information systems (Mardikaningsih et al., 2022).

Organizations also need to ensure that they comply with applicable policies and ethical standards in the use of MIS, including the management of sensitive data. With increased regulations related to data protection, organization must be careful in managing their customer and employee data. Transparency in data-driven decision making must be maintained to avoid abusing information and ensure that decisions are made in accordance with organizational values and ethics (Mithas et al., 2011).

The MIS integration process also requires the participation of all stakeholders, including IT and other departments, so that the implemented system can cover the needs of all parts of the Organization. For example, production managers may need real-time information on inventory status, while marketing managers need data on consumer behavior and market trends. Collaboration between the IT department and operational managers is essential to create a system that

is truly integrated, responsive to change, and supports the organization's strategic goals. MIS becomes a tool that supports better decisions, but only if it is integrated thoroughly and effectively (Sharda et al., 2014).

It is also important to emphasize that an effective MIS will always focus on meeting the needs of users, both at the operational and strategic levels. Organization should promote user-centric design in designing and developing their MIS. This approach ensures that the system not only provides data, but is also able to process and present information in a way that is easy to understand and useful to decision makers at all levels (Beynon-Davies, 2013).

In making strategic decisions, MIS integration must consider all aspects of the organization, including marketing, finance, production, and human resources (Davis et al., 2013). Good strategic decisions rely on the right data and a broad perspective, which can only be obtained through a well-integrated information system. his holistic approach is supported by human resource management strategies based on total quality management principles, ensuring that the people, processes, and technology are aligned (Arifin et al., 2022). MIS not only needs to be adequate in terms of technology, but also needs to support a data-driven culture within the organization that encourages active participation from all parts (Porter & Heppelmann, 2014).

In a constantly evolving world, it is important for organizations to regularly evaluate the effectiveness of MIS in supporting strategic decisions. The implementation of new technologies, such as artificial intelligence (AI) and machine learning, enables MIS to provide more accurate predictions and faster decisions (Trunk et al., 2020). With these technological advancements, organization must ensure that they have the resources and capabilities to manage these advanced technologies wisely and efficiently, to maximize the benefits that can be gained (Mithas et al., 2011). This imperative extends beyond technical proficiency to encompass a strong ethical framework, as the integration of AI in managerial decision-making raises critical questions about accountability, bias, and transparency that must be proactively addressed (Gani & Darmawan, 2022).

In practice, MIS integration requires continuous evaluation to identify areas for improvement. With dynamic changes in business and technology, organization must be able to adapt and update their information systems to remain relevant and effective in supporting fast and accurate decision-making (Clark et al., 2016). This includes the practical development of tailored systems, such as web-based sales information platforms, which demonstrate how

technology is customized to meet specific operational needs (Hardianingsih & Malaihollo, 2022). This includes hardware and software updates, as well as human resource planning to ensure that staff are trained to use the system properly (Sharda et al., 2014).

The success of MIS integration largely depends on the extent to which the organization is able to manage change. In many cases, resistance to change can be a major obstacle in the implementation of effective management information systems. It is important for managers to have a good change management strategy, which involves clear communication of the benefits of using the MIS and adequate training for employees to adapt to the new system (Beynon-Davies, 2013). The influence of accounting information systems, work motivation, and the utilization of information technology are interconnected factors that directly impact employee performance, which is critical for successful system adoption (Sinambela & Mardikaningsih, 2022).

To achieve informed strategic decisions and improve organizational performance, MIS must be integrated in a way that supports decision-making processes at all levels of the organization (Zgodavova & Bober, 2012). An effective MIS will provide relevant and timely data, provide data-driven insights, and enable the organization to respond to changes faster and more appropriately. Successful integration will create long-term value for the organization and improve its ability to compete in an increasingly competitive market (Aubert et al., 2008).

In its implementation, MIS is not only a technical tool, but also an integral part of the organization's strategy. Its success in supporting strategic decision making depends on how data is collected, managed and used in the process (Tan et al., 2014). Organization needs to ensure that the system they choose can not only provide timely and relevant information, but can also provide reliable analysis to support more strategic decisions. Ultimately, the goal is the implementation of information technology to improve overall organizational managerial efficiency, transforming data into a strategic asset (Arifin & Putra, 2022). A well-integrated system will facilitate the flow of information between departments, allowing decision makers to have a proper view of the organization's performance and its external environment (Queiroz & Oliveira, 2012).

Going forward, with advances in technology and increasingly complex needs in business decision making, the role of MIS is expected to become even more vital. Organization that does not adopt this technology properly risk falling behind their competitors who have made optimal use of MIS.

Regular system updates and increased data analytics capacity are important steps to ensure that MIS continues to support the organization's strategic goals in a more efficient and effective manner.

The right application of MIS in strategic decision making has the potential to significantly improve organization performance. Not only in terms of operations, but also in terms of the ability to adapt quickly to changing markets and an increasingly complex business environment. It is important for organization to continuously innovate in the implementation of MIS and ensure these systems continue to be relevant to their needs. With an integrated approach that focuses on effective data management, organization can achieve their strategic goals better and faster.

CONCLUSION

Management Information Systems (MIS) have proven to be a very important component in supporting strategic decision-making in modern organization. By providing relevant and up-to-date information, they enable decision makers to make faster, better, and more accurate decisions. Effective implementation of MIS not only increases operational efficiency, but also improves overall organizational performance. The successful integration of MIS in strategic decision making largely depends on the organization's ability to manage data well and integrate these systems thoroughly across business units. Managers and organization leaders must ensure a strong commitment to investment in technology and development of analytic capacity to support data-driven decision making.

In the face of the challenges of an increasingly dynamic world, organizations must continuously adapt their systems to stay relevant. Constantly changing technology and business needs require regular system updates and skill upgrades among employees to be able to manage the MIS well. As a way forward, it is advisable for organization to develop a stronger data culture and ensure that MIS is not only used for operations, but also to formulate better long-term strategies. The organization that can integrate MIS with their strategic vision will have a stronger competitive advantage in this challenging market.

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