

THE IMPACT OF DIGITALIZATION ON MANAGEMENT ACCOUNTING AND BUSINESS DECISION QUALITY

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Abstract

Companies and MSMEs must increase their capacity to make more adaptive and effective strategic and tactical decisions in response to developments in the digital world. This study examines how management accounting and management information systems (MIS) work together to make good business decisions in the digital age. The method used is a literature study, or literature review, conducted by searching for relevant scientific articles using a qualitative approach. The results of the review show that management accounting not only serves to record and control costs but also serves as a strategic tool that provides relevant, timely, and accurate information for decision makers. It has been proven that high-quality MIS can accelerate processes, improve data accuracy, reduce operational costs, and increase company competitiveness. The synergy between digital technology and management accounting enables more logical, effective, and responsive decision-making in response to changes in the business environment. However, its implementation is highly dependent on ready infrastructure, qualified human resources, and a supportive corporate culture. This study shows that digital transformation enhances the contribution of management accounting in strategic and tactical decision-making, although issues such as fear of change and system problems still need to be addressed.

Keywords: Management Accounting, Information Systems Management, Strategic Decision Making, Digital era

INTRODUCTION

Companies must have information because it is vital for businesses to survive and grow. However, existing information systems often do not work well. The main problem is that the system produces meaningless information due to the large amount of irrelevant or insignificant data. It is very important to have accurate and reliable sources of information for decision makers so that companies can make and implement strategic decisions to achieve their business objectives. Large companies and SMEs must improve their efficiency and competitiveness amid the increasing trend of digitalization. Management accounting has the ability to solve problems and provide relevant, timely, and strategic information for management decision-making, making it an important strategic tool. Studies show that management accounting is vital for increasing organizational value, especially when combined with the adoption of digital technology and the improvement of human resource capabilities.

Recent studies show that management information systems are very important for improving the quality of decision making in the digital age. Along with advances in information technology, the implementation of information systems in various industries has become an urgent need around the world. More and more companies in Indonesia are using Management Information Systems (MIS) as a result of advances in information technology. Wijaya's research (2024) found that Drs. H. Abu Hanifah Regional General Hospital, Central Bangka Regency, has implemented a Hospital Management Information System (SIMRS) to help speed up work processes. However, the system still faces several technical and functional problems. Because SIMRS has not completely replaced manual methods in terms of performance, patients complain about delays. From an information perspective, SIMRS has the ability to generate accurate data, but it does not yet meet the needs of all users. The financial aspect shows that SIMRS works well in this situation, but it needs to improve its infrastructure and employee training. The system is considered secure in terms of control, but there is a possibility that unauthorized parties could access it. The ease of use of SIMRS is considered adequate; however, error handling requires IT support. The service aspect requires system updates and network infrastructure improvements, including the integration of e-prescriptions to enhance accuracy and practicality.

Understanding the benefits of Management Information Systems is very important for improving company performance. Businesses that do not keep up with current advances in information technology are potentially losing their position in the market. As explained by Suhendar (2021), because computer technology has improved management information systems, MIS is also very important for organizational or company leaders to make the right decisions. Without a good system, coordination and communication will become increasingly difficult as the complexity of activities increases and the number of units and departments within an organization grows. Computers in MIS help managers make the decision-making process more reliable and accountable. Companies always need information about relevant costs to make the right decisions. One of the main components of a company's failure is management errors in decision-making, which is essentially the act of choosing between various available options.

According to Ketut Sulantari's research (2023), there are similarities in the business decision-making process among the five informants, but the methods used differ. It begins with gathering information from various internal and external sources to identify the main

problem, then analyzing the causes and effects. After identifying the problem, each department in the organization is given the opportunity to formulate alternative solutions to the problem. The alternative development process includes understanding the problem, searching for solutions, and evaluating alternatives, before finally selecting the best alternative. After identifying the problem, each department within the organization is given the opportunity to formulate alternative solutions to the problem. The process of developing alternatives includes understanding the problem, searching for solutions, and evaluating alternatives, before finally selecting the best alternative. In reality, successful female entrepreneurs in Bali still have time to talk with the management team and consider alternatives before finally making business decisions. This happens even though they have many tasks and busy schedules as owners or company leaders. Every management decision will determine the future success of a company. According to computer-based management information systems, computers play an important role in running the system. Theoretically, a management information system does not always require computers for all tasks. However, in current practice, computer technology is needed to operate highly complex management information systems. In reality, the concept of computer-based data processing is always associated with a good and efficient management information system.

According to Bancin (2025), in his research, management accounting is not only used as a tool for recording and controlling costs, but has evolved into a strategic instrument that greatly determines the direction and success of organizational decision-making. Management accounting allows managers to access information that is more comprehensive, relevant, and timely, so that decisions made are more accurate and in line with the dynamics of the ever-changing business environment. Digital transformation strengthens the contribution of management accounting by accelerating data processing, making it more accurate and in line with the dynamics of the ever-changing business environment. Digital transformation strengthens the contribution of management accounting by accelerating data processing, making it more accurate and in line with the dynamics of the ever-changing business environment, comprehensive, relevant, and timely information, so that decisions made are more accurate and in line with the dynamics of the ever-changing business environment. Digital transformation strengthens the contribution of management accounting by accelerating data processing, minimizing manual errors, and increasing transparency. The adoption of technology in accounting also promotes cost efficiency, especially in the Micro, Small, and Medium Enterprises (MSME) sector (MSMEs) sector, which previously experienced limitations in reporting and financial management. However, research shows that digitization is highly dependent on organizational readiness, especially in terms of technological infrastructure and human resource skills.

The application of management accounting and management information systems has been proven to have a positive impact on improving the quality of strategic decision-making and strengthening organizational competitiveness in the digital age. Research conducted by Siagian (2025) found that management information systems can improve the quality of strategic decisions by providing organizations with relevant, accurate, and timely information about strategic decisions. In line with this, research by Novelina & Sasmita (2025) states that the quality of Management Information Systems (MIS), which includes aspects of technological infrastructure, human resource competencies, and corporate culture, is very important for the effectiveness and efficiency of strategic decision-making in organizations.

However, there are a number of challenges that must be considered, such as organizational readiness to adopt technology, the need for user training, and resistance to change. Several studies mention that even though organizations have implemented Management Information Systems (MIS) and management accounting, their implementation has not reached an optimal level, particularly in terms of system integration and meeting the information needs of all stakeholders. Therefore, based on this background, this study focuses more on the main question: "How does the application of management accounting and management information systems impact the improvement of strategic decision-making quality in the digital era?"

REVIEW OF LITERATURE

Management Accounting Concepts

According to Setyadi (2023), management accounting is a type of accounting that presents financial information for internal parties within a company. Internal parties within a company include top managers, middle managers, lower managers, employees, and other internal groups. The definition of management accounting refers to financial information compiled by the management of a procedure or activity of an entity or organization to be used in economic decision-making to carry out managerial functions.

The Role of Management Accounting in Companies

According to Hansen and Mowen (2009), as cited by Setyadi (2023), Management accounting is an approach that includes steps to find, collect, measure, combine, and report information that is useful to people within the company, such as managers, boards of directors, and employees. This information is used by internal users in planning, control, and decision-making activities. The three main roles of management accountants, according to Haris (1997) in Setyadi (2023), and based on the opinions of several academic associates at the Indian Institute of Management, are:

1. As an accounting information system designer, a management accountant must have the ability to organize various internal company processes and create accounting information systems that are in line with the company's business environment.
2. Overseeing and controlling quality, costs, and services. A management accountant must understand technical operational elements and be able to communicate well so that each department is aware of matters related to controlling the company's business costs.
3. Management accountants who work as internal consultants to companies must have strong analytical skills, strategic abilities, strong relationships, cross-functional knowledge, and a broad understanding of the internal and external environment of the company.

The Role of Information in Decision Making

As stated by Setyadi (2023), the inability to distinguish important information from unimportant information when making decisions and setting prices is a factor that often determines the success or failure of modern businesses. Often, considerations about costs arise during the business decision-making process, particularly regarding whether to use a marginal cost basis or an absorption cost basis. Decision-makers need cost information to distinguish fixed costs from variable costs. With this information, they can eliminate fixed costs from profit and loss calculations.

RESEARCH METHOD

This study uses a qualitative approach with a literature review method and data collection using Publish Or Perish. According to Johnny Saldana (2011) in Sugiyono (2022), qualitative research is a general term for various approaches and methods used to study social life in a natural context. The information collected and analyzed is generally (but not exclusively) non-quantitative, consisting of textual material such as interview transcripts, field notes, and documents, and/or visual material such as photographs, videos, and drawings. The information collected and analyzed is generally (but not exclusively) non-quantitative, consisting of textual materials such as interview transcripts, field notes, and documents, as well as/or visual materials such as artifacts, photographs, video recordings, and websites, which describe human experiences of others and themselves in social actions and reflective situations. Rowley and Slack (2004) and according to Bettany and Saltikov (2012) in Cahyono (2019), a literature review is a type of scientific research that investigates a specific topic. A literature review allows researchers to provide an overview of how the topic has developed, identify available theories or methods, develop new theories or methods, and reveal the gaps between theory and practice that occur between a theory and its relevance in the field and to a research result. In this study, data were obtained from scientific articles that examined the role of management accounting in decision-making in the era of digitalization. Here are 10 main studies reviewed based on our article selection criteria.

Author & Year	Tittle	Research Results
Jusuf Sugiarto Bancin, Yohanes Warawuru, Rahel Oktavia Sinaga, Indah Putri Sari Pardosi (2025)	Akuntansi Manajemen sebagai Pilar Pengambilan Keputusan dan Daya Saing Bisnis di Tengah Tantangan Digitalisasi	The results of the study show that management accounting plays a very strategic role in supporting effective decision-making and increasing the competitiveness of companies in the digital age. The information generated from management accounting has been proven to contribute significantly in helping management formulate operational and strategic policies. In several studies, the effectiveness of decision-making even reached a contribution of more than 90% when companies implemented management accounting systems optimally.
Benny Suhendar (2021)	Analisa Sistem Informasi Manajemen Berbasis Komputer	The results of this study confirm that the value of information is determined

	Dalam Proses Sistem Pengambilan Keputusan (Spk)	by its effectiveness and usefulness in decision-making, not just by the cost of acquiring it. Thus, organizations need to ensure that the MIS they use is capable of producing high-quality information so that they can respond more adaptively and responsively to internal and external changes.
Umi Roikhatulah Zanah, Mar'atus Solikah, Badrus Zaman (2025)	Analisis Biaya Diferensial dan Variable Costing dalam Pengambilan Keputusan Pesanan Khusus pada UMKM Batik Jumentara	Based on the results of research conducted on Batik Jumentara MSMEs, it can be concluded that the application of differential cost analysis and variable costing methods plays an important role in supporting decision-making related to special orders. Through the process of identifying and separating fixed, variable, and semi-variable costs, this study shows that business owners obtain a much more accurate picture of costs compared to the intuitive assessments that have been used so far.
Ulfi Salsabila Azzahra, Achmad Fauzi, Haswan Yunaz, Syaifuddin Nashrulloh, Muhammad Risqi, Muhammad Thariq Ramadhan, Muhammad Rizki Bintang Irawan	Analisis Biaya Relevan Dalam Pengambilan Keputusan Jangka Pendek Pasca Pandemi Covid 19	The results of this study indicate that short-term decisions made after the pandemic are a decisive factor in the long-term sustainability of a business. Incorrect decisions can reduce operational efficiency and harm the company, while decisions made based on relevant cost considerations can increase business flexibility and resilience to change.

<p>Gabriel Michele Margaretha Raap, David P.E Saerang, Rudy J. Pusung</p>	<p>Analisis Biaya Relevan Dalam Pengambilan Keputusan Menerima Atau Menolak Pesanan Khusus Pada Cv. Manguni Perkasa</p>	<p>Overall, this study confirms that the use of relevant cost analysis is very important in making managerial decisions, especially those related to special orders. This method provides a more accurate picture of costs and potential profits, thereby helping companies make more rational and profitable decisions.</p>
<p>Kevin Sulay Wijaya, Endang Komara, Kahar Mulyani (2024)</p>	<p>Analisis Dampak Penerapan Sistem Informasi Manajemen Rumah Sakit dalam Pengambilan Keputusan Manajemen</p>	<p>The results of the study indicate that although SIMRS has been implemented well, there are still several obstacles such as incomplete data that affect employee performance. However, in general, SIMRS has a positive impact on the quality of information and operational efficiency in management decision-making.</p>
<p>Royhan Zaki Ramadhana, Muhammad Irwan Padli Nasution (2024)</p>	<p>Analisis Dampak Penerapan Teknologi AI pada Pengambilan Keputusan Strategis dalam Sistem Informasi Manajemen</p>	<p>This study concludes that the application of artificial intelligence (AI) technology in Management Information Systems (MIS) has a significant impact on the effectiveness of strategic decision-making in organizations. AI is capable of automating various routine tasks, accelerating data processing, and improving the accuracy of analysis through machine learning, deep learning, and natural language processing capabilities. With these capabilities, managers can obtain more in-depth,</p>

		comprehensive, and data-driven information, enabling them to make strategic decisions more quickly, objectively, and accurately.
Ketut Sulantari, I Putu Sudana, Anak Agung Gde Putu Widanaputra, Ni Putu Sri Harta Mimba (2023)	A phenomenological study: The role of management accounting information in the business decision-making process on successful female Balinese entrepreneurs	Overall, this study concludes that the success of Balinese women entrepreneurs is not only determined by their ability to manage accounting information as a basis for decision making, but also by their inherent feminist characteristics and the dual roles they play in their daily lives. The combination of utilizing management accounting information and feminine intuition enables them to survive, thrive, and achieve success in the various types of businesses they run.
Fatemeh Ghasemzadeh, Babak Ghahremanasab (2025)	A Queuing Approach to Pricing Strategy in B2B Markets	The results show that pricing that takes into account temporal preferences and operational efficiency reduces conflicts between service speed and profitability and offers insights into tiered pricing and resource allocation.
Paul Eduard Sudjiman, Lorina Siregar Sudjiman (2020)	Analisis Sistem Informasi Manajemen Berbasis Komputer Dalam Proses Pengambilan Keputusan	This study concludes that computer-based Management Information Systems (MIS) play a crucial role in supporting decision-making processes at various management levels. In this era of rapid technological development, computers have become an integral part of information

		systems. The existence of an accurate, timely, and relevant MIS is capable of providing the quality information needed by organizations to compete, adapt, and respond to the dynamics of both internal and external environments.
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RESULTS AND DISCUSSION

The discussion presents interpretations of the results, develops arguments by linking the results, theories, and opinions, including comparisons with previous research results. It is also important to increase the likelihood that the research results will contribute to the development of science. This section does not rewrite the research results data. This discussion section includes a discussion of the research findings, the development of arguments by linking empirical findings with theory, expert opinions, and research results. It also includes comparisons with previous studies. In addition, it is very important that the research findings have a high probability of contributing to the development of science. This section is not permitted to directly repeat words from previous research data. Information technology is technology that is used to generate information, including computing technology and communication technology, which are used to process and disseminate information, both financial and non-financial. According to Suhendar (2021), this discussion highlights how Management Accounting has undergone transformation and plays a fundamental synergistic role in supporting strategic and tactical decision-making in companies amid the turmoil of the digital era.

Management accounting information plays a major role in supporting the business decision-making process. Ketut Sulantari (2023) found that there are three main categories of management accounting information, namely comprehensive (complex) accounting information, differential accounting information, and accountability accounting information. All three provide qualitative and quantitative data covering past periods to future projections, relating to revenue, costs, assets, and accountability reports of company divisions. All three provide qualitative and quantitative data covering past periods to future projections, relating to revenue, costs, assets, and accountability reports of company divisions. Its main function is to assist management in identifying problems, sorting out decision alternatives, explaining the impact of each option, and assessing the effectiveness of the selected action. Regarding decision-making, this study emphasizes three types of decisions: strategic, tactical, and operational. These three types of decisions cannot be separated because they complement each other, although the difference lies in the decision maker and the objectives to be achieved. Novelina and Sasmita (2025) emphasize that a high-quality management information system is capable of overcoming internal weaknesses while taking advantage of external opportunities. Data generated by MIS contributes significantly to the formulation of more comprehensive organizational strategies, enabling decisions that enhance competitiveness, reduce operational costs, and improve productivity. Conversely, low-quality MIS risks producing inaccurate decisions, increasing the likelihood of errors, and

slowing the organization's response to changes in the business environment. Management accounting information systems have proven to be a key element in strengthening the quality of strategic decision-making in companies. Siagian (2025) found that a determination coefficient value of 56.2 percent for strategic decision quality indicates the contribution of management accounting information systems to strategic decision quality. In other words, the use of SIAM influences more than 50% of different strategic decisions. The results show that MIS not only functions as an administrative tool, but also as a strategic component that enables quick, honest, and data-driven decision-making.

Overall, the results of this literature review show that information technology strengthens the effectiveness of management accounting information in facing the dynamics of the modern business environment. For this reason, companies must pay special attention to quality in the implementation of information systems, including strengthening technological infrastructure. In addition, improving the competence of human resources is also a crucial aspect in ensuring that information systems can function optimally. Furthermore, an organizational culture that supports the utilization of information as the primary basis for every strategic step needs to be developed seriously. The synergy between a reliable information system and the utilization of management accounting information enables companies to make decisions that are faster, more rational, adaptive, and strategically valuable. Thus, the results of this discussion not only emphasize the conceptual relevance of the concepts of management accounting and information technology but also contribute to the understanding of how both support successful decision-making at various levels of the organization.

CONCLUSION

Based on the synthesis and analysis of related articles, it can be concluded that management accounting plays a strategic role in supporting effective decision-making and increasing the competitiveness of companies, especially in conditions of change and the challenges of digitalization. The information generated by management accounting systems has proven to be an important basis for managers in formulating strategic and operational policies. High-quality management information systems have proven effective in overcoming internal weaknesses such as data and coordination limitations, while taking advantage of external opportunities arising from market dynamics and the business environment. Conversely, the quality of management information systems can pose serious risks to companies. Inaccurate or delayed data can lead to incorrect decision-making, increase the potential for strategic errors, and slow down the company's ability to adapt to an increasingly fast-paced business environment. Digital transformation through the digitization of accounting systems and the use of information technology further strengthens this role by supporting process efficiency, cost reduction, and improved reporting accuracy. However, the success of implementing a modern management accounting system heavily depends on the organization's readiness, particularly in terms of human resource competencies and clear business strategies. Without competent human resources and a well-defined corporate strategy, the potential of the management accounting system cannot be fully realized.

REFERENCES

- Bancin, J. S., Yohanes Waruwu, Rahel Oktavia Sinaga, & Indah Putri Sari Pardosi. (2025). *Akuntansi Manajemen sebagai Pilar Pengambilan Keputusan dan Daya Saing Bisnis di Tengah Tantangan Digitalisasi*. **Jurnal Ilmiah Ekonomi dan Manajemen**, 3(7), 468–475. <https://doi.org/10.61722/jiem.v3i7.6098>
- Cahyono, E. A., Sutomo, & Hartono, A. (2019). *Jurnal Keperawatan 2019*, 2, 1–6.
- Ketut Sulantari, I. Putu Sudana, Anak Agung Gde Putu Widanaputra, & Ni Putu Sri Harta Mimba. (2023). *A phenomenological study: The role of management accounting information in the business decision-making process on successful female Balinese entrepreneurs*. **World Journal of Advanced Research and Reviews**, 20(3), 709–714. <https://doi.org/10.30574/wjarr.2023.20.3.2551>
- Novelina, R. R., & Sasmita, T. P. (2025). *Analisis Pengaruh Kualitas Sistem Informasi Manajemen Terhadap Pengambilan Keputusan Strategis Dalam Organisasi*. **EKOMA: Jurnal Ekonomi, Manajemen, Akuntansi**, 4(2), 3610–3619. <https://doi.org/10.56799/ekoma.v4i2.6195>
- Setyadi, B. (2023). *Akuntansi Manajemen*. In Fachrurazi (Ed.), *Jejak Pustaka (Pertama, Issue 1)*. Eureka Media Aksara. <https://digilib.iainptk.ac.id/xmlui/bitstream/handle/123456789/2758/23-01-125-EBOOKAkuntansi%20Manajemen.pdf?sequence=1>
- Siagian, W., Sinaga, A., Tambunan, E., Manik, A., & Siallagan, H. (2025). *Analisis Peran Akuntansi Manajemen dalam Pengambilan Keputusan Strategis*. **Journal of Social Science Research**, 5(1), 24–30. <https://jinnovative.org/index.php/Innovative%0AAAnalisis>
- Sugiyono. (2022). *Penelitian Kualitatif: Metode Penelitian Kualitatif*. **Jurnal EQUILIBRIUM**, 5(January), 1–7.
- Suhendar, B. (2021). *Analisa Sistem Informasi Manajemen Berbasis Komputer Dalam Proses Sistem Pengambilan Keputusan (SPK)*. **Jurnal Ilmiah Sistem Informasi**, 1(1), 46–56. <https://doi.org/10.46306/sm.v1i1.7>
- Wijaya, K. S., Komara, E., & Mulyani, K. (2024). *Analisis Dampak Penerapan Sistem Informasi Manajemen Rumah Sakit dalam Pengambilan Keputusan Manajemen*. **Jurnal Syntax Admiration**, 5(11), 4656–4666. <https://doi.org/10.46799/jsa.v5i11.1551>
- Zuana, M. M. M., Toha, M., & Isbahi, M. B. (2024). *Exploration of Community Empowerment in a Village as the Entrance to a Lake in East Java*. *Malacca: Journal of Management and Business Development*, 1(1), 47–55. <https://doi.org/10.69965/malacca.v1i1.52>