

Building Competitive Advantage through Management Information Systems: A Managerial Perspective in the Digital Era

Gautama Sastra Waskita ⁽¹⁾, Denny Rakhmad Widi Ashari ⁽²⁾

¹ Universitas Tulungagung, Indonesia

² Universitas Nahdlatul Ulama Blitar, Indonesia

Email: ¹ sastrawaskita@unita.ac.id, ² drwashari@unublitar.ac.id

Informasi artikel	ABSTRACT
Sejarah artikel: Diterima Revisi Dipublikasikan DOI Keyword: Management Information System, Competitive Advantage, Business, Digital Transformation	In the digital era, Management Information Systems (MIS) have become essential for business competitiveness, yet their strategic role remains underexplored. While existing research focuses on MIS functionality and efficiency, its contribution to sustainable competitive advantage from a managerial perspective is less understood. This study aims to investigate how managers leverage MIS to enhance strategic agility, decision-making, and market differentiation. Employing a qualitative multiple-case study approach, data were collected through semi-structured interviews and document analysis across organizations utilizing MIS for strategic purposes. The findings reveal that firms integrating MIS into their business strategy achieve superior agility, innovation, and competitive positioning, whereas misalignment leads to suboptimal outcomes. This study contributes to strategic information systems research by offering a managerial framework for MIS-driven competitive advantage. The findings provide valuable implications for business leaders, policymakers, and future research on digital transformation strategies
ABSTRAK	
Kata kunci: Sistem Informasi Manajemen, Daya Saing, Bisnis, Transformasi Digital	Di era digital, Sistem Informasi Manajemen (SIM) telah menjadi elemen krusial dalam meningkatkan daya saing bisnis, namun perannya sebagai alat strategis masih belum banyak dieksplorasi. Penelitian sebelumnya lebih banyak berfokus pada fungsionalitas dan efisiensi SIM, sedangkan kontribusinya terhadap keunggulan bersaing yang berkelanjutan dari perspektif manajerial masih kurang dipahami. Penelitian ini bertujuan untuk menginvestigasi bagaimana manajer memanfaatkan SIM dalam meningkatkan ketangkasan strategis, pengambilan keputusan, dan diferensiasi pasar. Dengan menggunakan pendekatan studi kasus kualitatif, data dikumpulkan melalui wawancara semi-terstruktur dan analisis dokumen pada organisasi yang mengadopsi SIM sebagai alat strategis. Hasil penelitian menunjukkan bahwa perusahaan yang mengintegrasikan SIM dalam strategi bisnis mereka memiliki ketangkasan, inovasi, dan posisi kompetitif yang lebih unggul, sementara perusahaan yang tidak menyelaraskan SIM dengan strategi bisnis mengalami hasil yang kurang optimal. Studi ini memberikan kontribusi pada penelitian sistem informasi strategis dengan menawarkan kerangka manajerial dalam membangun keunggulan bersaing berbasis SIM, serta implikasi praktis bagi pemimpin bisnis, pembuat kebijakan, dan penelitian di masa depan mengenai strategi transformasi digital.

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INTRODUCTION

In the digital era, businesses are increasingly relying on Management Information Systems (MIS) not only as operational tools but as strategic enablers of competitive advantage (Solano & Cruz, 2024). The rapid advancement of digital technologies has reshaped market dynamics, requiring firms to integrate data-driven decision-making, agility, and innovation into their core strategies (Zhu & Li, 2023). MIS plays a pivotal role in enhancing organizational efficiency, optimizing resource allocation, and fostering customer-centric approaches (Peppard & Ward, 2016). However, despite widespread adoption, many organizations struggle to harness MIS effectively to sustain long-term competitive differentiation.

The challenge lies not in the availability of technology but in how managers strategically align MIS with business objectives (Jing, 2018). Without proper integration, MIS remains an underutilized asset, failing to generate the intended competitive edge. While existing research extensively explores the technological aspects of MIS, there is a critical gap in understanding its strategic application from a managerial perspective (Thomas, 2024). Addressing this gap, this study aims to explore how businesses leverage MIS as a strategic tool, examining managerial insights on its implementation, barriers, and success factors. By providing a nuanced understanding of MIS-driven competitive advantage, this research contributes to the evolving discourse on digital transformation and offers valuable implications for business leaders navigating an increasingly complex digital landscape.

PROBLEM STATEMENT

Despite the increasing adoption of Management Information Systems (MIS) in modern businesses, their role in sustaining competitive advantage remains inadequately understood from a managerial perspective (Issa et al., 2023). While MIS is

designed to enhance operational efficiency, its strategic potential is often underutilized due to misalignment with business objectives, fragmented implementation, and a lack of managerial insight into its full capabilities (Matlala et al., 2023). Many organizations invest heavily in MIS infrastructure but fail to translate its functionalities into long-term competitive differentiation (Ng et al., 2023).

Existing research predominantly focuses on the technical and functional aspects of MIS, overlooking how managers perceive, implement, and optimize these systems for strategic advantage (Bawack et al., 2022). This gap is particularly significant in the digital era, where rapid technological advancements demand not only the adoption of digital tools but also their seamless integration into decision-making and business strategy (Attah et al., 2023). Without a clear understanding of how MIS contributes to strategic agility and organizational performance, businesses risk failing to leverage its full potential (Alyahya et al., 2023). Therefore, this study seeks to address the critical question: How do managers strategically utilize MIS to build and sustain competitive advantage? By exploring this issue, the research aims to provide valuable insights into the managerial dimensions of MIS implementation, bridging the divide between technology adoption and strategic business outcomes.

RESEARCH OBJECTIVES

This study aims to explore how businesses strategically leverage Management Information Systems (MIS) to build and sustain competitive advantage. While MIS is widely recognized for its role in enhancing efficiency, its strategic implications remain underexplored, particularly from a managerial perspective. Understanding how decision-makers integrate MIS into their business strategy is crucial for organizations seeking to navigate an increasingly complex and digital-driven competitive landscape.

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Specifically, this research seeks to examine the ways in which managers perceive and implement MIS to strengthen organizational performance, enhance agility, and foster innovation. By identifying key success factors and barriers in MIS adoption, the study aims to uncover the managerial frameworks that maximize its strategic value. Additionally, this research seeks to bridge the gap between technological capability and competitive strategy, offering insights into how organizations can align MIS with long-term business objectives.

Through a qualitative approach, this study will provide a deeper understanding of how MIS contributes beyond operational functions, highlighting its role in shaping decision-making, optimizing resources, and sustaining a firm's market position. The findings will offer valuable implications for both academic discourse and business practitioners striving to enhance their digital transformation strategies.

RESEARCH METHOD

This study employs a qualitative research design to explore how businesses leverage Management Information Systems (MIS) to build and sustain competitive advantage. Given the complexity of strategic decision-making in the digital era, a multiple-case study approach is adopted, allowing for an in-depth examination of managerial perspectives across different organizational contexts. This approach provides rich insights into how MIS is integrated into business strategy, enhancing agility, innovation, and market positioning.

The research follows a systematic procedure (Daneshvar Kakhki & Gargeya, 2019), beginning with case selection based on firms that have successfully or unsuccessfully utilized MIS for competitive differentiation. Semi-structured interviews with senior managers, IT executives, and strategy leaders serve as the primary data source, capturing firsthand experiences on MIS implementation, challenges, and strategic outcomes. To ensure data

triangulation, document analysis and industry reports are also incorporated.

A comprehensive literature review is conducted, synthesizing recent advancements in strategic MIS research, competitive dynamics, and digital transformation frameworks. The study further applies thematic analysis to identify key patterns and managerial strategies. By integrating empirical findings with theoretical insights, this research offers a robust framework for organizations seeking to optimize MIS as a driver of sustained competitive advantage.

FINDINGS AND DISCUSSION

The findings of this study reveal that Management Information Systems (MIS) serve as more than just operational tools; they function as strategic enablers of competitive advantage when effectively integrated into managerial decision-making. The results indicate that firms leveraging MIS strategically exhibit greater organizational agility, enhanced data-driven decision-making, and superior market responsiveness, aligning with the principles of Dynamic Capabilities Theory and Resource-Based View (RBV). However, the extent to which MIS contributes to sustainable competitive advantage depends on managerial ability to align technological capabilities with business objectives. This study finds that firms with proactive leadership, adaptive digital strategies, and robust data governance frameworks successfully transform MIS into a source of differentiation, while others struggle due to fragmented implementation and lack of strategic alignment. These findings challenge traditional perspectives that view MIS merely as an operational support

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system, underscoring its strategic imperative in the digital era.

CONCLUSION AND RECOMMENDATION

This study underscores the strategic role of Management Information Systems (MIS) in building and sustaining competitive advantage. Beyond operational efficiency, MIS serves as a critical enabler of organizational agility, data-driven decision-making, and digital innovation. However, its effectiveness depends on managerial capability, strategic alignment, and robust digital governance. Firms that integrate MIS into their competitive strategy achieve greater market responsiveness and long-term differentiation, while those lacking strategic foresight fail to capitalize on its full potential.

To maximize MIS-driven competitive advantage, organizations should develop adaptive digital strategies, invest in managerial training, and foster cross-functional collaboration. Future research should explore longitudinal impacts of MIS on firm performance, industry-specific adoption patterns, and the interplay between digital transformation and strategic agility. As digital ecosystems evolve, businesses must continuously redefine their MIS strategies to remain resilient and competitive in an increasingly volatile market landscape.

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