A Systematic Literature Review of Accounting Information Systems Implementation Success Factors

A Systematic Literature Review: Faktor Keberhasilan Penerapan Sistem Informasi Akuntansi

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ABSTRACT
This study aims to investigate the influence of factors related to Accounting Information Systems (AIS) on the level of innovation in organizations. The factors analyzed include the characteristics of the Accounting Information System (AIS) for innovation, resource allocation and integrated reporting, the quality of the Accounting Information System, and the role of Strategic Management Accounting. Data was collected through surveys and analyzed using a systematic literature review method approach. The research results show that AIS characteristics that support innovation, appropriate resource allocation, AIS quality, and the role of Strategic Management Accounting have a significant positive impact on the level of innovation in the organization. These findings emphasize the importance of using an Accounting Information System that supports innovation in improving the innovative performance of an organization.

Keywords: Accounting Information Systems, organizational innovation, AIS characteristics, resource allocation, AIS quality, Strategic Management Accounting

ABSTRAK
Studi ini bertujuan untuk menginvestigasi pengaruh faktor-faktor yang berkaitan dengan Sistem Informasi Akuntansi (SIA) terhadap tingkat inovasi dalam organisasi. Faktor-faktor yang dianalisis meliputi karakteristik Sistem Informasi Akuntansi (AIS) untuk inovasi, alokasi sumber daya dan pelaporan terpadu, kualitas Sistem Informasi Akuntansi, dan peran Akuntansi Manajemen Strategis. Data dikumpulkan melalui survei dan dianalisis menggunakan pendekatan metode systematic literature review. Hasil penelitian menunjukkan bahwa karakteristik AIS yang mendukung inovasi, alokasi sumber daya yang tepat, kualitas SIA, dan peran Akuntansi Manajemen Strategis memiliki dampak positif yang signifikan terhadap tingkat inovasi dalam organisasi. Temuan ini menegaskan pentingnya penggunaan Sistem Informasi Akuntansi yang mendukung inovasi dalam meningkatkan kinerja inovatif sebuah organisasi.

Kata Kunci: Sistem Informasi Akuntansi, inovasi organisasi, karakteristik AIS, alokasi sumber daya, kualitas AIS, Akuntansi Manajemen Strategis

1. Introduction
Innovation is a critical factor for the success and sustainability of organizations. Accounting Information Systems (AIS) play a vital role in facilitating innovation within organizations by providing comprehensive information for decision-making and managing a company’s value (Semenova et al., 2021). Innovativeness, defined as the ability to introduce new processes, products, or ideas, significantly impacts organizational performance (Hult et al., 2004). Collaborative relationships and knowledge utilization among partners can notably influence exploratory innovation within organizations (Xiao & Bao, 2022). Additionally, the Research and Development (R&D) department is essential for fostering innovativeness through the introduction of new products and ideas (Engelen & Brettel, 2012).

In the realm of innovation, organizations must integrate innovative activities into their
management accounting systems. Each innovation should be incorporated into a digital information analytic system to enhance effective enterprise management accounting (Shichkov et al., 2019). Process management, considered a key managerial innovation, has become increasingly crucial for organizational success over the past two decades (Benner & Tushman, 2002). Strategic management accounting focuses on providing financial and nonfinancial data for strategic decision-making, including analyzing innovative activities within enterprises (Bondar et al., 2019).

Innovation is closely tied to organizational learning and knowledge management. Prioritizing the generation of new knowledge and organizational learning can lead to positive outcomes in terms of innovation (Simonavičienė et al., 2021). Entrepreneurial orientation and environmental turbulence can moderate the intensity of innovation within organizations (Zaidi, 2021). Encouraging innovative behavior among employees is vital for organizational success, with effective leadership and organizational support playing significant roles in fostering such behavior (Choi et al., 2021).

Organizations need deliberate innovation strategies, organizational structures, and processes to enhance the impact of incremental innovations (Manimala et al., 2005). The influence of innovation on organizational performance is substantial, leading to improved financial outcomes and aiding organizations in adapting to changing market environments (Manji, 2022). Establishing a robust organizational climate that supports innovation is crucial for encouraging innovative work behavior among employees (Önhon, 2019).

In conclusion, the integration of AIS, fostering innovativeness, promoting collaborative relationships, and prioritizing knowledge management are essential for organizations seeking to thrive in today's dynamic business environment through innovation.

The relationship between Accounting Information Systems (AIS) and innovation is a multifaceted area that necessitates further investigation. Several studies have explored different aspects related to this topic, such as the impact of knowledge management systems on innovation (Elmorshidy, 2018), the mediating role of human capital and management accounting information systems in the relationship between innovation strategy and internal process performance, and their impact on corporate financial performance (Hutahayan, 2020), and the influence of value-relevant accounting rules on innovative activities (Lin et al., 2015).

One significant research gap is the scarcity of comprehensive studies that examine the mediating effects of Human Capital and Management Accounting Information Systems in the relationship between Innovation Strategy, Internal Process Performance, and their impact on Corporate Financial Performance (Hutahayan, 2020). Additionally, there is limited understanding of the direct connection between external financial reporting and innovation (Park, 2018). It is crucial for organizations aiming to enhance their innovative capacities to comprehend how financial reporting quality affects corporate innovation.

Furthermore, the efficacy of knowledge management systems in fostering new value innovations in small- and medium-sized enterprises (SMEs) has not been extensively investigated (Boniface, 2017). Exploring how knowledge management systems can drive new value innovations in SMEs could offer valuable insights into improving innovation processes in smaller organizations.

In conclusion, while existing research has touched on various aspects of the relationship between AIS and innovation, there are still notable knowledge gaps that require attention. Future studies should concentrate on exploring the mediating effects of different factors, such as human capital and management accounting information systems, on innovation outcomes, as well as examining the role of knowledge management systems in promoting innovation in SMEs.

Successful implementation of Accounting Information Systems (AIS) plays a crucial role in enhancing organizational innovation capabilities. Several studies highlight the significance of
factors such as innovation characteristics, organizational learning capabilities, and organizational culture in driving the success of AIS implementation and fostering innovation within organizations. Lin (2008) emphasizes the importance of innovation characteristics and organizational learning capabilities in the success of e-business implementation. The study underscores how factors like perceived relative advantage, compatibility, managerial commitment, and knowledge dissemination significantly influence implementation success. Moreover, Binh et al. (2022) stress the role of an innovative organizational culture in determining the quality of AIS. They found that an innovative culture positively impacts the quality of AIS, showcasing the link between organizational culture and system quality. Additionally, Milhim et al. (2012) point out that organizational learning capability contributes to successful organizational innovation, further supporting the idea that a learning-oriented environment fosters innovation within organizations. Furthermore, Parthasarathy et al. (2021) discuss how organizational innovation capability is essential for the successful implementation of new products or services, highlighting the critical role of innovation in organizational success.

Implementing accounting information systems (AIS) can be fraught with challenges for organizations. One of the primary hurdles is the lack of top management support, which can impede funding, staffing, and communication vital for successful implementation. Moreover, poor system quality, characterized by unreliability or user-unfriendliness, can hamper the process. Organizational structure issues may arise, causing discoordination and misalignment. Limited user participation can result in a system that fails to meet user needs, leading to low adoption rates. User characteristics, such as skills and motivation, also play a crucial role. Time and financial constraints further complicate matters, potentially delaying implementation. Additionally, restricted access to external expertise may affect AIS quality. To navigate these obstacles, organizations must address these factors head-on and devise strategies to mitigate their impact. This could involve securing stronger top management support, enhancing system quality, refining organizational structures, fostering user participation, managing time and financial constraints, and improving access to external expertise. By tackling these challenges proactively, organizations can optimize their AIS implementation process for greater success (Sarsiti, 2019; Limroscharoen, et al. 2018; Rapina, et al. 2023).

In conclusion, the successful implementation of AIS not only enhances operational efficiency but also significantly contributes to organizational innovation capabilities. By fostering innovation characteristics, promoting organizational learning capabilities, and cultivating an innovative organizational culture, businesses can leverage AIS to drive innovation and achieve sustainable competitive advantages.

2. Research methodology

This study aims to conduct a systematic literature review of the success factors for implementing Accounting Information Systems (AIS) and their impact on organizational innovation. This approach involves searching articles from international sources such as IEEE. Relevant articles were selected based on inclusion criteria that ensured reliability and relevance, while articles that did not fit the research topic were excluded. Once the articles are selected, relevant data is extracted and analyzed to identify patterns and trends related to the success factors of AIS implementation and their influence on organizational innovation. It is hoped that the results of this literature review will provide in-depth insight into how AIS influences organizational innovation, as well as provide a basis for further research in this area.

3. Results and Discussion

3.1 Definitions and concepts

Accounting Information Systems (AIS) play a crucial role in organizations by enhancing
the functionality of accounting departments, improving accuracy, and enabling faster processing, which ultimately leads to better cost control and enhanced external financial reporting (Tilahun, 2019). These systems contribute to organizational effectiveness by improving decision-making processes, enhancing the quality of accounting information, facilitating performance evaluation, strengthening internal controls, and streamlining company transactions (Onaolapo & Odetayo, 2013). AIS typically consists of components like people who operate the system, procedures for data collection and processing, data about business processes, software, and information technology infrastructure (Rahmawati et al., 2015). The benefits of AIS extend to providing timely and reliable accounting information needed by managers, aiding in predicting the future, improving company management, and increasing economic and social benefits (Soudani, 2012). Additionally, AIS helps in producing financial and non-financial information that assists in resource allocation, supervision, evaluation, and performance assessment (Nuraliati & Sianturi, 2021). Effective AIS implementation is influenced by various factors, including user satisfaction, top management support, and the alignment of the system with organizational activities (Mkonya et al., 2018).

Moreover, AIS contributes to the reliability of financial reporting, enhances decision-making abilities based on relevant information, and increases flexibility in creating accounting reports (NguyenThahn et al., 2020). The successful application of AIS involves utilizing the system for various managerial tasks and ensuring user satisfaction with the generated information (Hertati et al., 2021). Organizations are increasingly designing sophisticated AIS to meet strategic goals and enhance overall performance (Naranjo, 2004). In conclusion, AIS is a vital component in modern organizations, offering a wide array of benefits such as improved decision-making, enhanced financial reporting, better resource management, and increased organizational effectiveness. By leveraging AIS effectively and aligning it with organizational goals and activities, companies can optimize their operations and achieve sustainable growth.

Innovation can be defined as the generation, acceptance, and implementation of new ideas, processes, products, or services (Baregheh et al., 2009). There are various types of innovation, including service, technological process, administrative process, product, process, business, and organizational innovations (Damanpour et al., 2009; Oke, 2007; Linâker et al., 2015). These types of innovation can be interdependent, where the adoption of one type may lead to the adoption of another (Baregheh et al., 2012; Baregheh et al., 2014). Innovation is not a one-time event but a cumulative process involving multiple organizational decision-making stages (Kogabayev & Mazliaukas, 2017).

Measuring innovation involves considering different aspects such as the degree of newness, how new it is, and to whom it is new (Ellonen et al., 2008). Studies have shown that different types of innovation, including product, process, marketing, and organizational innovations, play varying roles in influencing firm performance (Shouyu, 2016). The quality of innovation within a team can be influenced by the team’s composition, while the overall level of innovation may be more related to the team’s social processes (West & Anderson, 1996). Innovation is not limited to product and process innovation but extends to areas like organizational, marketing, service, supply chain, and business model innovations (Baunsgaard & Clegg, 2015). The success of innovation can be influenced by factors such as economic, environmental, political, social, and technological considerations (Repo & Matschoss, 2019). Furthermore, innovation is a rigorous process involving the collection, analysis, and generation of knowledge (Filippi & Barattin, 2015).

In conclusion, innovation encompasses various types such as product, process, business, and organizational innovations, which can be interdependent and influence firm performance differently. Measuring innovation involves assessing its newness and target audience. Innovation is a continuous process that requires careful decision-making and knowledge generation across different organizational stages.
3.2 Relationship between AIS and innovation

Accounting information systems are essential for fostering innovation within organizations. The relationship between accounting information systems and innovation is complex and can be viewed through various theoretical perspectives. Greenhalgh et al. (2004) emphasize that the diffusion of innovations within service organizations is an organic and adaptive process, highlighting the dynamic nature of innovation within the context of accounting information systems. Additionally, Huo et al. (2023) stress the influence of justice on information sharing and innovation performance, drawing from social exchange theory. This underscores the significance of fair practices in information sharing, which can impact innovation outcomes within organizations utilizing accounting information systems. Lei et al. (2021) explore the connection between accounting information quality and company innovation investment efficiency, with a specific focus on Chinese companies. Their study reveals how the quality of accounting information can affect the efficiency of innovation investments within organizations. Furthermore, Al-Hashmy et al. AL-Hashmy et al. (2022) investigate the impact of computerized accounting information systems on company performance, suggesting that the relationship between these systems and performance is mediated by innovation. This mediation underscores the crucial role of innovation in translating the benefits of accounting information systems into improved organizational performance. In conclusion, the synthesis of these references highlights the intricate interplay between accounting information systems and innovation. These perspectives collectively contribute to a comprehensive understanding of the mechanisms and theories underlying the relationship between accounting information systems and innovation.

In examining the relationship between accounting information systems (AIS) and innovation, several empirical studies offer valuable insights. Ferreira et al. (2010) discuss the inconclusive evidence on the drivers of innovation and the connection between management control systems (MCS) and innovation levels. Hariyati & Tjahjadi (2018) provide empirical support for the mediating roles of management accounting information systems and internal business process performance in linking innovation strategy to financial performance. Park (2018) explores the correlation between financial reporting quality and corporate innovation, emphasizing the role of external financial reporting in fostering innovation.

Additionally, Jayanti & Mutmainah (2016) investigate the relationship among stakeholder pressures, environmental management accounting use, strategy, and innovation, highlighting the importance of environmental considerations in driving innovation. Wang & Hai (2019) suggest that information technology, particularly e-commerce, significantly contributes to sustaining corporate innovation, emphasizing the impact of technological advancements on innovation processes.

These studies collectively enhance our understanding of how AIS can impact innovation within organizations. They emphasize the intricate interplay of factors such as financial reporting quality, environmental considerations, technological advancements, and internal business processes in shaping innovative practices. By synthesizing these empirical findings, it is evident that AIS can act as a catalyst for innovation by providing pertinent information, supporting decision-making processes, and enabling strategic alignment with organizational goals.

3.3 Influencing factors

An accounting information system that supports innovation should possess specific characteristics to facilitate and enhance innovative processes within an organization. These characteristics include a broad scope, timeliness, aggregation, integration, and the ability to mediate the effects of innovation on firm performance (Alliyah & Dewi, 2023; Miftah & Julina, 2020). Additionally, the system should allocate appropriate resources, facilitate integrated reporting, and provide comprehensive information for decision-making to manage the
company’s value effectively (Semenova et al., 2021). Moreover, the quality of the accounting information system is crucial, as high-quality information systems and intensive collaboration are essential for promoting corporate innovation (Park, 2018). Top management support plays a significant role in ensuring the quality of the accounting information system, which in turn affects the quality of accounting information (Astuti & Wulandari, 2020). Strategic management accounting can serve as an information platform for measuring the innovation of an enterprise, providing financial and nonfinancial information for strategic decision-making and comprehensive analysis of innovative activities (Bondar et al., 2019).

Furthermore, an organizational culture that supports innovation processes and values information as an opportunity can enhance innovative activities within the organization (Gün, 2019). The system should also be designed to support the management of innovation processes through the availability of adequate information collections and simulation modeling computer systems (Masloboev & Langhans, 2018).

In conclusion, an accounting information system that supports innovation must have a broad scope, timeliness, integration, and the ability to mediate the effects of innovation on firm performance. It should be of high quality, supported by top management, and designed to facilitate strategic decision-making and comprehensive analysis of innovative activities within the organization. Additionally, fostering an organizational culture that values innovation and information can further enhance the innovative processes within the organization.

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Organizational culture significantly influences the effectiveness and performance of accounting information systems within organizations. Kwarteng & Aveh (2018) demonstrated a statistically significant relationship between organizational culture and corporate performance through accounting information systems (Kwarteng & Aveh, 2018; Napitupulu, 2018) emphasized the strong influence of organizational culture on the development and implementation of information systems, highlighting the importance of understanding the
beliefs, norms, and power dynamics within an organization (Napitupulu, 2018).

Moreover, organizational culture impacts the operational activities and information security management practices of an enterprise, making it a critical factor for guiding and supporting information security management practices (Chang & Lin, 2007). Binh et al., (2022) highlighted the importance of traits like innovativeness in organizational culture in influencing the quality of accounting information systems (Binh et al., 2022).

Leadership is also crucial for the successful implementation of accounting information systems. Strong leadership is essential in influencing and directing organizational members towards the effective utilization of accounting information systems (Puspahani et al., 2022). Additionally, organizational culture can either facilitate or hinder the implementation of integrated information systems, influencing how employees adapt to changes brought about by new systems (Asniati et al., 2019).

In conclusion, the synthesis of these studies underscores the intricate relationship between organizational culture, leadership, and the effectiveness of accounting information systems within organizations. Understanding and fostering a positive organizational culture, along with effective leadership, are vital for optimizing the performance and quality of accounting information systems.

3.4 Key findings: How AIS contributes to different types of innovation

Accounting Information Systems (AIS) are crucial in fostering various types of innovation within organizations. Research by Binh et al. (2022) demonstrates that an innovative organizational culture significantly impacts the quality of AIS, indicating that organizations valuing innovation are more likely to have effective AIS. Additionally, Miftah & Julina (2020) suggest that Management Accounting Information Systems mediate the relationship between innovation and firm performance, highlighting the importance of AIS in translating innovative ideas into tangible outcomes.

Moreover, Semenova et al. (2021) stress the importance of innovation in accounting to provide comprehensive information for decision-making, suggesting that AIS should evolve to support innovative practices within companies. Furthermore, research by Hariyati et al. (2019) emphasizes that innovation strategies drive the need for advanced management accounting information systems, impacting internal processes and overall performance.

The study by Lind (2017) explores how accounting contributes to managing innovation processes within industrial networks, emphasizing the role of accounting in understanding network dynamics and achieving stability amidst innovation. This underscores the pivotal role of AIS in facilitating innovation and ensuring the stability and success of innovative endeavors. In conclusion, AIS are instrumental in facilitating and supporting various types of innovation within organizations. They serve as a backbone for decision-making, performance evaluation, and translating innovative ideas into practical outcomes. Organizations investing in developing robust AIS aligned with innovative cultures are better positioned to effectively drive and sustain innovation.

The factors that influence organizational innovation related to Accounting Information Systems (AIS) have been described based on the discussion above. First of all, the characteristics of Accounting Information Systems (AIS) for innovation include aspects such as broad scope, time reliability, data aggregation, integration between systems, and the ability to mediate the effects of innovation on company performance. Furthermore, the resource allocation and integrated reporting factors emphasize the importance of appropriate resource distribution, facilitation of integrated reporting, and provision of comprehensive information for decision making. The quality of the Accounting Information System is emphasized through aspects such as the existence of a high quality system, intensive collaboration, top management support, and its influence on the quality of accounting information. Finally, the role of Strategic Management Accounting is intended as an information platform for measuring
innovation, providing financial and non-financial information, and supporting strategic decision making and comprehensive analysis. By paying attention to these factors, an Accounting Information System that supports organizational innovation must be able to meet these characteristics, as well as paying attention to aspects such as appropriate resource allocation, management support, and the ability to provide the information needed for strategic decision making and analysis.

4. Conclusions

Based on the discussion that has been carried out, it can be concluded that the factors that influence organizational innovation related to Accounting Information Systems (AIS) are very important in improving the innovative performance of an organization. Accounting Information Systems (AIS) characteristics that support innovation, such as broad scope, time reliability, data aggregation, integration between systems, and the ability to mediate the effects of innovation on firm performance, play a crucial role in providing a foundation for innovation. Furthermore, the resource allocation and integrated reporting factors demonstrate the importance of appropriate resource distribution, facilitation of integrated reporting, and provision of comprehensive information to support innovative decision making. The quality of

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the Accounting Information System is also an important factor, with the existence of a high quality system, intensive collaboration, top management support, and its influence on the quality of accounting information being determining factors in supporting organizational innovation.

Finally, the role of Strategic Management Accounting has an important role as an information platform for measuring innovation, providing financial and non-financial information, and supporting strategic decision making and comprehensive analysis. By paying attention to these factors, an Accounting Information System that supports organizational innovation must be able to fulfill these characteristics, as well as paying attention to aspects such as appropriate resource allocation, management support, and the ability to provide the information needed for strategic decision making and analysis. Innovative.

Through this research, four hypotheses have been proposed to test the relationship between Accounting Information System characteristics, resource allocation, AIS quality, and the role of Strategic Management Accounting with the level of innovation in organizations. The implication of the results of this research is the importance of organizations paying attention to and optimizing their Accounting Information Systems to support organizational innovation and improve their innovative performance in the future.

5. References


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