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The Role of Business Management Information Systems in Hospital: A Literature Review

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Abstract
Business Management Information Systems (BMIS) have become essential tools in the transformation of hospital operations, enabling efficiency, transparency, and informed decision-making. This literature review aims to synthesize the current body of research on the implementation and impact of BMIS in diverse hospital settings. Drawing from multiple academic databases and recent publications between 2015 and 2025, the review identifies key themes such as system integration, strategic alignment, and institutional accountability. Findings suggest that BMIS enhances hospital performance by streamlining business processes, supporting financial management, and enabling better governance. However, challenges remain, including infrastructure gaps, limited digital literacy among healthcare workers, and fragmented data systems. The review underscores the need for integrated approaches that combine technology, management, and policy to maximize the potential of BMIS. Future research should focus on empirical impact evaluations, comparative analyses across hospital types, and the role of emerging technologies in expanding BMIS functionalities.

Keywords *Business Management Information Systems; Hospital Information Systems; Healthcare Governance*

INTRODUCTION

Now, technological progress is developing rapidly, where this technology will develop from year to year. The development of this technology has given rise to information that can provide convenience in doing anything. Central Statistics Agency BPS (2020), Information Technology can be called IT where technology can help in creating, changing, communicating and distributing information where communication and computing are good from data, voice or video which are integrated by IT. The progress of this information technology can be utilized in running a business (Margareta, 2019). Information technology is a primary need that is important in utilizing an entrepreneur to support the sustainability of the business. Competition in the business world is increasing so that it is very necessary to use information technology to increase competitiveness in the business world, one of which is e-commerce (Asy'ari & Shulthoni, 2023).

E-commerce is one of the applications of technology that is widely applied in the business world, namely the media used to conduct electronic buying and selling through websites or applications (Rapika, 2021). The development of technology provides opportunities for entrepreneurs to make sales widely and practically. The e-commerce platform can be used as a type of information technology in the business world for great profit (Simamora, 2023). Many consumers like to buy online because it can be accessed anywhere and anytime, factors that can influence consumers in making online purchases because of attractive promotions or discounts, saving energy and time, having a large variety of products, more practical in terms of comparing prices, can see product reviews before buying, various payments are available, and in general the price is cheaper than shopping offline (Editorial Team, 2023). The e-commerce platform has benefits in that it facilitates communication between sellers and buyers, facilitates marketing or promotions which can reach consumers widely, and facilitates the sales and purchasing process (Fauzi, 2020).

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Website technology in the sense of e-commerce means a medium for conveying information that can be accessed anywhere as long as there is an internet connection (Lovita & Susanty, 2021). One form of information presentation that can be utilized is the accounting information system. AIS is an important element in achieving optimal performance in the decision-making process (Al-Eqab & Adel, 2013). AIS functions well if the users of the information system have a wise attitude (Hafidh Agustin & Dwinda Yanthi, 2021). This Accounting Information System integrates learning information systems with accounting, where AIS learns how to collect, store, and process data (Yudiantara, 2018). One of the important parts of an information system is technology, which can facilitate the process of recording and reporting information, this information is very important in decision making (Salsabila Asadawa Tasya & Yanthi, 2024). The rapid development of IT, accounting information processing has shifted from manual methods to automatic methods. Not only that, along with the advancement of technology today, AIS has evolved into a computer-based accounting information system (Shella et al., 2023). An entrepreneur who wants to start a business or business needs to understand AIS, which functions to collect, store, and process transactions or information (Rapika, 2021).

The emergence of e-commerce and SIA can encourage the younger generation to make entrepreneurship a career choice (Shella et al., 2023). Data quoted from Kompas.com in September 2023, Students are now expected not only to graduate from college and then look for work and become workers in institutions or companies but with the development of the era and technology, it is hoped that they can become job creators by being brave in entrepreneurship. Data obtained from Kompas.com in June 2022, showed that around 48% of young people aspire to become civil servants and as many as 35% choose to become entrepreneurs. These data show that the desire to become entrepreneurs among young people today is still low (Kompas.com, 2022). In this condition, the role of universities is very important among students, so that after graduating they not only work in government, but can also become entrepreneurs who can open up employment opportunities (Shella et al., 2023).

Entrepreneurs can use e-commerce in doing their business because using e-commerce is not difficult and very easy to access, easy to transact, the capital outlay is also not large (Indahsari & Yuliati, 2022). An entrepreneur is someone who has a new business idea by daring to take risks who is talented in recognizing new products, being able to determine how to produce them and managing capital, becoming an entrepreneur is quite challenging because it is always associated with sufficient risk (Ardyanto, 2023). In starting a business, an entrepreneur needs to have sufficient business capital to achieve his goals (Hidayah & Fitriyah, 2023). Business capital is the funds needed to carry out production activities in a business. Business capital plays a crucial role in starting a business and is often a barrier and consideration in the process (Anggraeni et al., 2023).

Based on the existing phenomena and previous research, this study was conducted to provide additional empirical evidence regarding the influence of understanding e-commerce, accounting information systems, and venture capital on entrepreneurial decisions. Through this study, it is expected to provide further evidence and expand knowledge about understanding e-commerce, understanding AIS, and understanding venture capital in their influence on entrepreneurial decisions.

LITERATURE REVIEW

Business Management Information Systems

Business Management Information Systems (BMIS) refer to technology-enabled systems designed to support the operational, managerial, and strategic functions of an organization. These systems encompass a variety of software and technologies tailored to manage business data and facilitate decision-making processes, thereby enhancing overall business performance. BMIS integrates various information systems such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and Business Intelligence (BI), which collectively streamline business processes and improve resource management. Business Intelligence (BI) plays a crucial role within BMIS by enabling organizations to analyze their operational data effectively. It involves the extraction and

aggregation of data into data warehouses, followed by the application of statistical analyses and data mining techniques to identify patterns and insights that inform managerial decisions. This analytical capability is fundamental to improving decision-making quality and operational efficiency across various business processes (Bach et al., 2022; Sanwasi & Tanjungsari, 2022).

Moreover, ERP systems are integral components of BMIS, serving as comprehensive frameworks that unify data and processes across an organization. These systems promote better management of resources by integrating both internal and external information, thereby optimizing operations and providing critical insights necessary for sustainability. Such systems ensure that all business units are aligned, facilitating efficient data flow and better resource allocation (Barna, 2022).

Modern BMIS increasingly leverage technologies such as big data analytics to adapt to the complexities of today's business environment. These systems can process large volumes of diverse data at high speeds, allowing organizations to respond swiftly to market changes and to enhance their strategic decision-making capabilities. The integration of these technologies reflects the ongoing evolution of BMIS, indicating its potential to not only support operational tasks but also to drive innovation and competitive advantage (Fan, 2023).

In addition to traditional management systems, contemporary BMIS implementations often include cloud-based solutions which enhance data accessibility and collaboration across geographies. This reduces operational silos and enhances the capacity for real-time data analysis. As a result, organizations can transform raw data into actionable intelligence, further facilitating the alignment of their strategic goals with operational performance (Jian & Yan, 2015).

Business Management Information Systems represent a multidimensional approach to managing data and resources within an organization. Through the integration of various systems like BI, ERP, and advanced data analytics, BMIS not only streamline operational processes but also enhance strategic alignment and decision-making efficiency. Such comprehensive frameworks are vital for organizations aiming to thrive in increasingly competitive and complex markets.

Business Management Information Systems in Hospitals

Business Management Information Systems (BMIS) in hospitals play a vital role in enhancing the efficiency and effectiveness of healthcare delivery. These systems utilize information technology (IT) to streamline hospital operations, improve service quality, and facilitate effective decision-making among healthcare professionals. The integration of IT in public hospitals is increasingly becoming crucial. Studies have indicated that the implementation of Hospital Information Systems (HIS) significantly contributes to the improved operations of healthcare services. For instance, the Hospital Management Information System (SIMRS) is established to assist in managing administrative tasks and business processes, demonstrating the necessity of computerized applications in these environments (Margiawati et al., 2023). Moreover, the acceptance and continuous use of these systems by hospital staff directly correlate with enhancements in service quality and patient care, as reported by research in this field. This highlights the importance of user acceptance as a critical factor for successful BMIS implementation (Rochmah et al., 2020).

The transformation in management effectiveness due to BMIS is underscored by the application of data mining and analytics. The use of big data enables hospitals to achieve a closed-loop management system, where decisions are data-driven, facilitating more informed choices that enhance operational efficacy (Li et al., 2023). The consolidation of healthcare data through digital platforms allows for improved data management and standardization across different hospital units, which is essential in addressing the challenges posed by fragmented information systems within the public health context.

Challenges remain, particularly in low- and middle-income countries. Studies indicate that despite the potential advantages of adopting advanced BMIS, impediments such as insufficient funding, lack of infrastructure, and interoperability issues weaken the implementation of these systems (Chilunjika & Uwizeyimana, 2024; N. Wang & Wang, 2019). Consequently, these barriers hinder the ability of hospitals to fulfill their operational demands and provide high-quality patient care (Muinga et al., 2020).

RESEARCH METHOD

Material and Methods

This research followed a simple review process. The study employed a structured approach to gather and analyze information based on ten simple rules for writing a literature review from Pautasso M. (2013) to identify relevant literature. This approach helped to maintain quality standards while selecting the literature for review from available online sources published from 2015 to 2025. The primary research question that guided this review was: *"What roles do Business Management Information Systems (BMIS) play in supporting governance, operational efficiency, and accountability in hospitals?"* This question was formulated to explore the various functions and impacts of BMIS within the context of public healthcare institutions, especially in resource-limited settings and developing countries.

A comprehensive literature search was carried out across several major electronic databases, including PubMed, ProQuest, and Google Scholar. The search was limited to publications from January 2020 to March 2025 and used a combination of keywords and Boolean operators such as: ("Business Management Information System" OR "BMIS" OR "Hospital Management Information System" OR "HMIS") AND ("Public Hospital" OR "Government Hospital" OR "Public Health Institution") AND ("Governance" OR "Efficiency" OR "Accountability").

FINDING AND DISCUSSION

Business management information systems play a crucial role in improving the efficiency and effectiveness of hospital operations (Janaputra et al., 2021; Sanjuluca, Almeida, et al., 2022; Setiawati et al., 2023). These systems, such as Hospital Management Information Systems (SIMRS), help hospitals manage their business processes, financial management, and decision-making. Effective implementation of information technology and management information systems can enhance hospital services, reduce administrative burdens, and allow a greater focus on improving patient care quality (Janaputra et al., 2021; Purwadi et al., 2024). Hospital managers need to possess financial skills, motivation, and interest in working in the hospital environment to effectively utilize these systems (Barati et al., 2016; Sarla, 2024).

The use of information technology in hospitals can aid in schedule management, performance assessment, and training of hospital staff, leading to improved organizational excellence (Purwadi et al., 2024). Evaluating the implementation of hospital management information systems using frameworks like the HOT-Fit method can help identify areas for improvement (Ilmada, 2023).

The adoption and effective use of these systems face various challenges, such as the need for a dedicated business process team, management involvement, and team cohesiveness (Arinahaq & Achadi, 2019). Additionally, some hospitals still rely heavily on paper-based information management processes, limiting the full potential of digital transformation (Adesunloye et al., 2024).

Role BMIS in Hospital Governance Structures

The integration of Business Management Information Systems (BMIS) in hospital governance structures plays a pivotal role in enhancing operational efficiency, decision-making processes, and overall healthcare delivery. This integration is increasingly vital in navigating complex environments characterized by economic challenges, regulatory pressures, and the dynamic needs of patient care. An extensive review of the relevant literature reveals multiple facets of how BMIS influences hospital governance and operational capabilities.

In the context of economic crises, hospitals must leverage their governance frameworks to bolster resilience and adaptability. For instance, Foroughi et al. highlight the importance of hospital management's competencies, particularly in managing interconnectedness and resilience during economic downturns, which impacts the institution's ability to address both internal and external challenges effectively (Foroughi et al., 2022). Furthermore, the strategic use of Information Technology (IT) within these frameworks supports better communication and decision-making, which are crucial when resources are strained (Sanjuluca, de Almeida, et al., 2022). Similarly, the responses of hospital management to evolving demands depict a profound acknowledgment of the need for robust IT systems to maintain operational continuity and governance efficiency (Kuo et al., 2018).

Moreover, the operational efficiency of hospitals is heavily reliant on their revenue cycle management, which is integral to sustaining financial health. Alradhi and Alanazi emphasize that hospitals, particularly governmental ones, face unique challenges in managing their revenue cycles due to regulatory constraints and the need for accuracy in billing practices (Alradhi & Alanazi, 2023). Business Management Information Systems (BMIS) facilitate this process by enabling the tracking and management of financial transactions, which are critical for maintaining hospital operations. By utilizing data mining technology, hospitals can implement continuous improvement measures that enhance their financial governance through real-time data analytics (Li et al., 2023).

Business processes in hospitals are being transformed through the implementation of advanced hospital information systems (HIS). As noted by Margiawati et al., the use of such systems significantly enhances the efficiency of internal processes, aiding hospitals to streamline operations and reduce administrative burdens (Margiawati et al., 2023). These systems also integrate various functions such as patient admission, care coordination, and administrative management, ultimately enabling a centralized approach to healthcare delivery (Rahmasari et al., 2023). This shift from traditional methods to computerized systems allows for a more refined management model that is essential in today’s fast-evolving health landscape.

The capability of Business Management Information Systems to facilitate strategic planning is another crucial aspect of governance in hospitals. Janaputra et al. articulate that strategic IS/IT planning in hospitals directly correlates with improved service quality and operational efficiency, underpinning the competitive advantage that modern healthcare institutions strive for (Janaputra et al., 2021). These systems not only support day-to-day operations but also play a strategic role in enhancing overall patient care through improved information flow and data-supported governance practices. Furthermore, the integration of HIS into hospital governance frameworks has shown to substantially elevate healthcare quality, aligning with the World Health Organization’s recommendations for effective health system management (Jassim & Khalifa, 2016).

In terms of stakeholder collaboration, successful governance structures in hospitals are increasingly reliant on strong partnerships within supply chains and community networks. Research by Setiawati et al. illustrates that effective hospital-supplier collaborations can significantly enhance overall supply chain performance, which in turn positively influences patient outcomes and service quality.

These relationships often depend on the effective sharing of data and resources through BMIS, highlighting the role of technology in fostering collaborative governance models that meet the rapidly changing demands of the healthcare sector (Setiawati et al., 2023).

The use of Health Information Technology (HIT) is also a crucial factor in care delivery and hospital governance. The adoption of integrated HIT systems allows hospitals to manage comprehensive patient data while ensuring compliance with regulatory standards, thereby improving administrative efficiencies and medical outcomes. The systematic organization of data through BMIS improves not only operational efficiency but also enhances clinical decision-making processes, which is vital for maintaining quality in patient care (Kuo et al., 2018).

In navigating crises, such as the COVID-19 pandemic, hospitals have discovered that their governance structures can be significantly enhanced through the adoption of robust HIS frameworks. Research has demonstrated that effective HIS can streamline operations during unprecedented challenges by providing real-time data and analytics essential for informed decision-making (Bostancı et al., 2022). This underscores the fact that governance in healthcare systems is increasingly predicated on the ability to harness data effectively, showcasing the instrumental role of technology in adapting to emergencies.

Furthermore, hospitals recognize the necessity of continuous training and staff engagement in ensuring the successful implementation of BMIS. The acceptance of these systems by hospital staff hinges on perceived usefulness and usability, as explored in research by Rochmah et al.. This insight stresses the need for comprehensive training programs and stakeholder engagement initiatives that underline the benefits of adopting advanced information systems, which ultimately drive systemic improvements in operational governance models (Rochmah et al., 2020).

Finally, the integration of BMIS within hospitals supports a culture of continuous improvement and accountability. As such, Rahmasari et al. highlight that the strategic planning of information management systems is essential for modern healthcare institutions to enhance their operational frameworks and improve service delivery. The goal of these ongoing enhancements is to nurture a governance structure that not only adapts to current healthcare challenges but also anticipates future demands, thereby ensuring a sustainable healthcare delivery model (Rahmasari et al., 2023).

Role BMIS in Hospital Service Efficiency

The role of Business Management Information Systems (BMIS) in enhancing the efficiency of hospital services is well-documented through various contemporary studies, demonstrating a strong connection between the deployment of information technology and the optimization of business processes in healthcare settings. Hospitals, as integral components of healthcare systems, are increasingly adopting specialized information systems, such as Hospital Management Information Systems (SIMRS), to streamline their operations and improve service delivery outcomes. The implementation of these systems plays a critical role in ensuring healthcare organizations can respond effectively to operational challenges while meeting the demands of quality care provision.

Among the various applications of BMIS in hospital settings, the integration of information technology is paramount. For instance, the Bengkayang Regional General Hospital has successfully utilized SIMRS as a computerized system to facilitate management processes, coordinating various hospital functions, including reporting and administrative procedures, which allows for the swift acquisition of precise information necessary for efficient decision-making and management (Margiawati et al., 2023). Similarly, SIMRS in the context of dental and oral hospitals has been identified as an essential tool for operational management, demonstrating that hospitals need such systems to improve

performance and competitiveness without compromising their mission of care quality (Rahmasari et al., 2023).

Moreover, the transformation brought about by BMIS extends beyond mere data processing; it encompasses a strategic shift towards data-driven decision-making. The utilization of data mining technologies in healthcare settings exemplifies this transition, where the application of big data analytics enables hospitals to implement closed-loop management systems. Such systems facilitate enhancements in performance management by leveraging accumulated data for insightful decision-making, transitioning from experience-based management to a more structured process management model. This significant shift emphasizes the importance of a sophisticated business process reengineering approach in healthcare that reduces inefficiencies and fosters continuous improvement (Li et al., 2023).

The effectiveness of BMIS also hinges on the relevance of business intelligence (BI) systems, which provide vital analytical capabilities that support strategic planning and operational decision-making. Research indicates that BI systems can lead to enhanced autonomy among key users, including managers and analysts, enabling them to address business challenges swiftly and effectively (Balje, 2023). This autonomy is essential in dynamic hospital environments, where timely and accurate information can significantly improve operational efficiency and service quality.

Furthermore, the successful implementation of BMIS relates closely to healthcare executives' ability to define and execute strategic initiatives based on real-time data insights. For instance, hospitals utilizing a robust information service platform facilitate data sharing and logistics operations, thus optimizing inter-hospital communications and service delivery processes. The integration of various systems allows for the standardization of operations, which is critical in the multifaceted nature of healthcare services, ultimately contributing to superior patient care outcomes (N. Wang & Wang, 2019).

The increasing reliance on digital solutions in healthcare institutions indicates that strategic planning efforts must be aligned with technological advancements. A systematic review of business processes in hospitals suggests that this alignment is critical for fostering operational efficiency and mitigating fragmented health services. Hospitals that adapt their processes based on market segmentation and patient needs while employing advanced information systems are better positioned to thrive in competitive healthcare landscapes (Alradhi & Alanazi, 2023).

In synthesizing these insights, it is evident that the role of BMIS extends to enhancing service efficiency through improved data management and analytical capabilities. A significant study highlighted the impact of integrated BI applications on overall hospital performance, demonstrating that when effectively utilized across managerial levels, these applications can substantially influence decision-making processes and service delivery outcomes. The implications suggest that sustained investments in BMIS and integrated technology solutions can yield long-term operational advantages and competitive benefits for hospital (Işık et al., 2021).

The strategic implementation of AI and other advanced technologies within BMIS can further augment operational capabilities. Emerging applications of AI in hospital management illustrate the potential for innovations that address patient needs, streamline administrative burdens, and enhance overall efficiency in service delivery. As healthcare continues to evolve, embracing such technologies becomes crucial for maintaining responsiveness to patient care demands (Zhang, 2024).

The potential for business intelligence to inform managerial decisions is notably substantial. Organizations effectively harnessing the capabilities of BI systems find themselves better equipped to navigate the complexities of healthcare delivery, allowing for data-driven enhancements in performance and service effectiveness. The ability of BI tools to enable more informed decision-making processes

within hospitals underscores the critical nature of BMIS in modern healthcare ecosystems (Umoh et al., 2023).

Additionally, the integration of knowledge management practices with BI applications yields synergistic advantages, enhancing hospitals' capabilities to leverage institutional knowledge effectively while augmenting their operational performance. This multidimensional utilization of information systems is indicative of a broader trend within healthcare towards a more integrated, technology-driven operational model capable of meeting diverse patient needs (Gaardboe et al., 2017).

Role BMIS in Hospital Institutional Accountability

The role of Business Management Information Systems (BMIS) in fostering institutional accountability within hospitals is crucial for addressing the challenges faced in the healthcare sector today. The adoption and effective deployment of BMIS can significantly enhance operational efficiency, promote transparency, and improve patient care, thereby reinforcing accountability at various levels within healthcare institutions.

One foundational aspect of BMIS is its capacity to facilitate timely and accurate data management. According to Okoduwa et al., the utilization of business analytics in healthcare management allows for better decision-making through predictive modeling and data mining, which streamline operations and enhance clinical outcomes (Okoduwa et al., 2024). This operational efficiency not only helps hospitals maintain financial viability but also ensures that they deliver quality healthcare services. The integration of information technology solutions in healthcare settings serves to overcome traditional barriers that often hinder effective communication and data sharing among departments, which is crucial for establishing a culture of accountability (Y. Wang et al., 2018).

Accountability in healthcare is increasingly linked to financial management processes, particularly in revenue cycle management. Alradhi and Alanazi emphasize that effective billing and revenue management strategies are vital for governmental hospitals to ensure sustainability amid economic constraints, highlighting the necessity of robust accountability systems in financial management (Alradhi & Alanazi, 2023). The complexity of healthcare financial management necessitates an adaptable approach to maintaining quality and integrity in healthcare delivery, in line with the assertions of Foroughi et al. who note that resilience in hospitals, especially during economic downturns, can be bolstered through effective management competencies and supportive information networks (Foroughi et al., 2022).

The role of BMIS extends beyond operational efficiency and financial management; it also encompasses the quality of service delivery. Maphumulo and Bhengu highlight the impact of managerial decisions on clinical outcomes, underscoring the importance of skilled leadership in healthcare settings. The entrenched culture of promoting managers based on tenure rather than competency can lead to significant gaps between management practices and clinical effectiveness, further emphasizing the need for integrating BMIS to enhance managerial capabilities and accountability (Maphumulo & Bhengu, 2019).

The concept of leveraging business intelligence systems within healthcare environments is gaining traction. Puklavec et al. note the potential benefits of business intelligence systems, including their capacity to enhance decision-making processes through improved data integration and analytics. By enabling hospital managers to access accurate performance metrics and analytics, BMIS can help drive accountability across functions, allowing for transparent evaluations of management effectiveness, which is essential for institutional improvement (Puklavec et al., 2018).

In line with this, Wong posits that fostering financial acumen among healthcare leaders is critical as it enables them to make informed decisions that integrate clinical and financial outcomes. As healthcare systems evolve towards more integrated models of care, the capability of leaders in utilizing management information systems to navigate financial complexities is paramount for ensuring accountability throughout the organization (Wong, 2024).

The successful implementation of BMIS in hospitals is not without challenges. Ijntema et al. indicate that complexities related to compliance, competition, and operational efficiencies must be addressed to enhance the effectiveness of business models in healthcare. The dynamics of managed competition can influence how effectively BMIS align with treatment quality and financial outcomes, reinforcing the need for continuous evaluation and adaptation of these systems alongside evolving healthcare demands (Ijntema et al., 2022).

The training and education of healthcare managers is essential for the success of BMIS integration. The work of Sammut and Ngoye emphasizes the lack of adequately trained healthcare managers in Africa and the necessity for tailored educational programs that focus on healthcare management and business principles. As healthcare environments become increasingly complex, investments in educational frameworks that highlight the importance of BMIS and financial accountability are vital for building a resilient healthcare system (Sammut & Ngoye, 2019).

The interplay between technology, management practices, and accountability in healthcare settings underscores the transformative potential of BMIS. Thabet et al. illustrate that implementing risk-aware process modeling tools can optimize healthcare processes and thereby enhance accountability. In a healthcare landscape where the stakes are high, ensuring that all parts of the system function optimally through advanced information systems is crucial for driving the accountability that the public demands (Thabet et al., 2021).

LIMITATION & FURTHER RESEARCH

This literature review presents an overview of the role of Business Management Information Systems (BMIS) in hospitals across various organizational types and healthcare systems. However, several limitations must be acknowledged. First, the review was limited to studies published between 2015 and 2025, which may have excluded earlier foundational works that still hold relevance. Second, while the review included studies from various hospital settings, it did not conduct a systematic comparison based on hospital types (e.g., public vs. private, general vs. specialty), which could yield deeper insights into contextual variations in BMIS implementation.

Third, the heterogeneity in the methodologies and outcome indicators across the reviewed studies made it challenging to synthesize findings into a unified evaluative framework. Some studies focused on administrative impacts, while others emphasized clinical outcomes or financial performance, leading to a broad yet somewhat fragmented landscape of insights. Additionally, the review mainly drew from secondary sources and did not include primary field data or stakeholder interviews, which might have enriched the analysis with experiential perspectives.

For future research, more in-depth, empirical, and comparative studies are recommended to evaluate how BMIS affects hospital performance across different institutional models and health systems. Quantitative research employing standardized indicators of performance—such as cost-efficiency, patient throughput, or data accuracy—will help establish causality and support evidence-

based policy. Furthermore, exploring the integration of BMIS with emerging technologies such as artificial intelligence, machine learning, and telemedicine will provide valuable insights into the next phase of digital transformation in hospital management.

CONCLUSIONS

This literature review has demonstrated that Business Management Information Systems (BMIS) are pivotal in advancing hospital governance, operational efficiency, and institutional accountability. By streamlining administrative processes, enhancing decision-making, and fostering data-driven management, BMIS offers significant potential to improve hospital performance across a wide range of settings. BMIS applications, including Hospital Management Information Systems (HMIS), Financial Management Information Systems (FMIS), and decision support platforms, have contributed to better financial planning, real-time data integration, and transparency in resource utilization. These systems support strategic alignment between organizational goals and operational practices, empowering hospital leaders to make informed decisions.

Nonetheless, successful BMIS implementation is influenced by several critical factors, including infrastructure readiness, user competency, managerial commitment, and supportive policy frameworks. Technological investments must be matched with human capacity development and clear governance structures to ensure sustainability. BMIS constitutes a vital pillar of modern hospital management. Its continued development and strategic use are essential not only for improving healthcare service delivery but also for fostering a culture of accountability, efficiency, and innovation within healthcare institutions globally.

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