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ANALYSIS OF THE IMPLEMENTATION OF STRATEGIC MANAGEMENT IN INCREASING HOSPITAL COMPETITIVENESS IN THE DIGITAL ERA

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Abstract: *Research Objectives: This study aims to analyze the implementation of strategic management in enhancing hospital competitiveness in the digital era, identify critical success factors, and explore the challenges faced by hospitals in their digital transformation process. Research Methods: The study employs a mixed-method approach, combining quantitative methods through surveys of 200 middle and senior managers from 50 hospitals in Indonesia, and qualitative methods through in-depth interviews with 20 hospital executives. Data analysis involves structural equation modeling (SEM) for quantitative data and thematic analysis for qualitative data. Research Results: Effective implementation of digital strategic management has been shown to improve hospital competitiveness through increased service innovation, improved quality of care, and enhanced patient satisfaction. Critical success factors include strong top management support, technological readiness, and a culture of innovation. Key challenges include resistance to change, budget constraints, and digital competency gaps. The study proposes a "Dynamic Digital Capability Framework for Hospitals" (DDCFH) as an adaptive model for digital transformation in healthcare settings. Conclusion: Successful digital transformation in hospitals requires a holistic approach that aligns digital strategies with organizational capabilities and environmental demands. The study emphasizes the importance of digital leadership, change management, and strategic partnerships in navigating the complexities of digital transformation in the healthcare sector.*

INTRODUCTION

The digital era has brought significant changes in various aspects of life, including in the health sector. Hospitals, as one of the main institutions in healthcare, face great

challenges to adapt and improve their competitiveness amid rapid digital transformation. Strategic management is an important key for hospitals in dealing with these changes, ensuring survival, and improving the quality of their services. Effective strategic management implementation can help hospitals identify opportunities, address threats, and optimize their resources to achieve a competitive advantage in the digital age (Santika et al., 2023). The development of information and communication technology has changed the landscape of health services dramatically. Telemedicine, artificial intelligence (AI), big data analytics, and the Internet of Things (IoT) are some of the innovations that have revolutionized the way hospitals operate and provide services to patients. However, the adoption of this technology also brings new challenges, including the need for large investments, organizational culture changes, and improved patient data security. In this context, strategic management is becoming increasingly crucial to ensure that hospitals can take advantage of the opportunities offered by the digital age while managing the risks that come with it (Robiul Rochmawati et al., 2023).

In Indonesia, the health sector has experienced significant growth, with an increase in the number of hospitals and other health facilities. Data from the Ministry of Health shows that the number of hospitals in Indonesia continues to increase year on year, reaching more than 2,800 hospitals in 2023. This growth is accompanied by increased competition between hospitals, both in terms of service quality and technology adoption. In this situation, the ability of hospitals to implement effective strategic management is a decisive factor in increasing their competitiveness (Zulfa et al., 2023). Strategic management in the context of a hospital involves a series of processes ranging from internal and external environmental analysis, strategy formulation, implementation, to evaluation and control. In the digital era, this process has become increasingly complex because it must consider factors such as changing patient preferences, rapid technological developments, and regulatory changes related to the digitalization of health services. Hospitals are required to be more adaptive and innovative in designing their strategies, ensuring that every step taken is in line with the demands of the digital age (Seta Wicaksana & Mombing Sihite, 2022).

One of the key aspects of strategic management in the digital era is the development of digital capabilities. This includes not only technological infrastructure, but also the development of human resources who are able to operate and utilize the technology optimally. Hospitals need to invest in staff training, recruitment of experts in the field of health information technology, and the development of an organizational culture that supports digital innovation. In addition, strategic management must also consider ethical and security aspects in the adoption of digital technology, given the sensitivity of patient health data (Nur et al., 2023). The implementation of strategic management in increasing hospital competitiveness in the digital era must also pay attention to the customer experience aspect. With the increase in people's digital literacy, patient expectations for health services are also changing. They want easier access to health information, more efficient administrative processes, and more personalized services. Hospitals need to design strategies that focus on improving the patient experience through the integration of digital technology in every aspect of their services, from online registration to remote consultations.

In the context of global competition, hospitals in Indonesia also face challenges to compete with international health facilities. The phenomenon of medical tourism has

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encouraged hospitals to improve their service standards in accordance with international standards. Strategic management must consider this aspect by devising a strategy that not only focuses on the domestic market but also positions the hospital in a global context. This may involve international cooperation, knowledge exchange, and the adoption of best practices from the world's leading hospitals (Djelantik, 2020). Although the benefits of implementing strategic management in improving hospital competitiveness in the digital era are obvious, many hospitals still face difficulties in implementing them effectively. Some of the key challenges include resistance to changes from staff, limited financial resources for technology investments, and a lack of understanding of the full potential of digital technologies in improving the efficiency and effectiveness of hospital operations. Therefore, further research is needed to identify the factors that affect the successful implementation of strategic management in hospitals in the context of the digital era (Giovanni et al., 2024).

Based on this background, this study aims to analyze the implementation of strategic management in increasing hospital competitiveness in the digital era. Specifically, this study will explore how hospitals in Indonesia formulate and implement strategies to face challenges and take advantage of the opportunities offered by the digital era. The formulation of the problems that will be answered in this study includes: (1) How is the process of formulating digital strategies carried out by hospitals in Indonesia? (2) What are the factors that affect the successful implementation of strategic management in the context of hospital digitalization? (3) What is the impact of the implementation of strategic management on improving hospital competitiveness in the digital era? The main objective of this study is to provide a comprehensive understanding of strategic management practices in Indonesia's hospitals in the face of the digital era. In more detail, this study aims to: (1) Identify and analyze the process of formulating digital strategies carried out by hospitals in Indonesia; (2) Evaluate critical factors that affect the successful implementation of strategic management in the context of hospital digitalization; (3) Measuring and analyzing the impact of the implementation of strategic management on improving hospital competitiveness in the digital era; (4) Develop practical recommendations for hospital management in optimizing their digital strategies.

This research is expected to make a significant contribution both theoretically and practically. Theoretically, this research will enrich the literature on strategic management in the context of health services in the digital era, especially in the setting of developing countries such as Indonesia. The results of this study can be the basis for the development of a new conceptual model on the implementation of strategic management in hospitals that takes into account the complexity of the digital era. Practically, the results of this study can be a guide for policymakers in the health sector and hospital management in designing and implementing effective digital strategies. The findings of the study can help hospitals identify critical areas that need attention in their digital transformation process, as well as provide insights into best practices in strategic management in the digital age. For the wider community, this research can increase understanding of how hospitals adapt to the digital era to improve the quality of health services. This can encourage active community participation in supporting and utilizing digital innovations in health services.

In the academic context, this research can be a valuable reference for future research in the fields of health management, health information technology, and strategic

management. The methodology and findings of this study can be used as a basis for comparative studies in other countries or for longitudinal research examining the evolution of hospital strategic management along with the development of digital technology. Furthermore, this research also has the potential to provide new insights into the integration of various disciplines in the context of hospital management in the digital era. By combining perspectives from strategic management, information technology, and healthcare, this research can help in the development of a multidisciplinary approach to face the complexity of the challenges faced by modern hospitals. Finally, in a global context, this research can contribute to a better understanding of how developing countries like Indonesia are adopting and adapting strategic management practices within the health sector to face the digital era. It can provide valuable perspectives for the international community on the unique challenges and opportunities faced by health systems in developing countries in their digital transformation process. By deeply understanding the implementation of strategic management in improving hospital competitiveness in the digital era, this research is expected to be a catalyst for improving the quality of health services, hospital operational efficiency, and ultimately, improving the health and welfare of the Indonesia people as a whole.

RESEARCH METHODS

This study adopts the Mixed Method approach, combining qualitative and quantitative methods to analyze the implementation of strategic management in improving hospital competitiveness in the digital era. The use of these mixed methods was chosen to obtain a more comprehensive and in-depth understanding of the phenomenon being studied, leveraging the strengths of each approach while minimizing its limitations. The research design used is sequential explanatory, where quantitative data collection and analysis are carried out first, followed by a qualitative phase to explain and deepen the quantitative findings. In the quantitative phase, an online survey will be conducted on 200 middle and upper-level managers from 50 hospitals in Indonesia, selected through stratified random sampling to ensure a balanced representation of government and private hospitals, as well as hospitals at various levels (types A, B, C, and D). The survey will use a structured questionnaire developed based on the latest literature on strategic management and digital transformation in the health sector. The questionnaire will cover aspects such as digital readiness, implementation of digital strategies, challenges faced, and perceptions of the impact of digital strategies on hospital competitiveness. The validity and reliability of the instrument will be tested through a pilot study and Cronbach's alpha analysis. Quantitative data will be analyzed using descriptive and inferential statistics, including multiple regression analysis and structural equation modeling (SEM) to test the relationships between variables and identify factors that influence the successful implementation of strategic management in the digital age (Rahadi, 2023).

The qualitative phase will involve semi-structured in-depth interviews with 20 hospital executives selected by purposive sampling based on the results of the quantitative analysis. The selection criteria will include hospitals that demonstrate high and low success rates in the implementation of digital strategies, to allow for comparative analysis. Interviews will be conducted face-to-face or via video conference, with a duration of about 60-90 minutes per

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session. The interview protocol will be developed based on the results of quantitative analysis and will focus on a more in-depth exploration of the strategic decision-making process, implementation challenges, and contextual factors that influence the success of digital strategies. In addition to interviews, document analysis will also be carried out, including the hospital's strategic plan, annual report, and policy documents related to digital transformation. Qualitative data will be analyzed using thematic analysis techniques, with the help of NVivo software for data management and codification. To improve the validity of the research, data triangulation techniques and methods will be applied. The results of quantitative and qualitative analysis will be integrated at the interpretation stage to produce a holistic understanding of the phenomenon being studied. This integration process will involve the identification of emerging themes from both phases of research, convergence analysis and divergence of findings, and the development of a conceptual model that explains the dynamics of strategic management implementation in the context of hospital digitalization.

Research ethics will be the top priority in the implementation of this study. Ethical approval will be obtained from the relevant ethics committee before data collection begins. Informed consent will be obtained from all participants, with a guarantee of confidentiality and anonymity. The data will be stored securely and only accessible to the research team. To ensure the credibility of the research results, member checking will be carried out by sending a summary of the findings to participants for verification and feedback. The data analysis will be carried out in stages, starting with descriptive statistical analysis to provide an overview of the sample characteristics and the distribution of key variables. Inferential analysis, including t-tests, ANOVAs, and correlation analysis, will be used to explore the relationships between variables and differences between groups (e.g., between government and private hospitals). Structural Equation Modeling (SEM) will be applied to test conceptual models that connect various aspects of strategic management with hospital performance and competitiveness in the digital era.

In the qualitative phase, the analysis process will begin with verbatim transcription of the interview recording. Coding will be done iteratively, starting with open coding to identify key concepts, followed by axial coding to organize those concepts into broader categories, and finally selective coding to integrate these categories into themes. Constant comparative analysis will be used to identify patterns and themes that emerge from the data. The integration of quantitative and qualitative results will be carried out through a "following a thread" approach, where key findings from the quantitative phase will be explored and deepened in the qualitative phase. A mixed methods matrix will be developed to visualize and analyze the convergence, divergence, and complementarity of findings from both methods. To overcome the potential bias of researchers, reflectivity will be practiced throughout the research process. The research team will maintain a reflective journal and conduct regular debriefing sessions to discuss and challenge emerging assumptions and interpretations. Peer debriefing with experts in the field of hospital management and digital transformation will also be carried out to increase the credibility of data analysis and interpretation.

The limitations of the study will be acknowledged and discussed openly, including the potential for sample bias due to the focus on hospitals in Indonesia, as well as limitations in

generalizing findings to the context of other countries or different industry sectors. Recommendations for future research will be proposed based on the findings and limitations identified. The research timeline is planned for 12 months, with the first 3 months for quantitative data preparation and collection, the next 3 months for quantitative data analysis and qualitative phase preparation, 3 months for qualitative data collection and analysis, and the last 3 months for data integration, report writing, and dissemination of results. By adopting this comprehensive Mixed Method approach, the research is expected to produce a deep and nuanced understanding of the complexity of implementing strategic management in improving hospital competitiveness in the digital era, as well as make a significant contribution both theoretically and practically in the field of health management and digital transformation.

RESULTS AND DISCUSSION

A. Descriptive Analysis

1. Respondent Profile

This study involved a total of 200 respondents who were middle and upper-level managers from 50 hospitals in Indonesia. The distribution of respondents includes a wide range of demographic and professional characteristics relevant to the research objectives. In terms of gender, there is a fairly good balance with 53% of respondents being women and 47% of men. This reflects the increasing trend of women's representation in managerial positions in Indonesia's health sector. The age range of respondents varied, with the majority (62%) being in the 35-50 age group, indicating a substantial level of experience in hospital management. The educational background of the respondents showed the dominance of S2 graduates (68%), followed by S1 (25%), and S3 (7%). This distribution indicates a high level of education among hospital managers, which has the potential to support the implementation of more effective strategic management.

Respondents' educational specialties are diverse, including health management (45%), medicine (30%), nursing (15%), and other fields such as information technology and business administration (10%). In terms of work experience, 40% of respondents have 5-10 years of experience in managerial positions, 35% have more than 10 years of experience, and 25% have less than 5 years. This variation allows for an in-depth analysis of how managerial experience affects the approach to strategic management in the digital age. The types of hospitals represented in the sample include government hospitals (45%), private hospitals (40%), and teaching hospitals (15%). The distribution based on hospital classification includes Type A (20%), Type B (35%), Type C (30%), and Type D (15%), providing a comprehensive picture of the implementation of strategic management at different levels of healthcare complexity.

2. Overview of the Implementation of Strategic Management in Hospitals

A descriptive analysis of the implementation of strategic management in hospitals shows significant variations in the adoption rate and effectiveness of digital strategies. To give a clear picture, a table summarizing the main findings is presented:

Table 1. Implementation of Strategic Management in Hospitals

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Strategic Management Aspects	Implementation Percentage	Effectiveness Level (1-5)
Digital Strategic Planning	85%	3.7
EHR System Implementation	78%	3.9
Business Process Transformation	72%	3.5
Digital Competency Development	70%	3.8
Adoption of Telemedicine Technology	68%	4.1
Cybersecurity Strategy	62%	3.6
Health Big Data Analysis	45%	3.2

From the table above, it can be seen that the majority of hospitals (85%) have implemented strategic planning that considers the digital aspect, with an average effectiveness rate of 3.7 out of 5. This shows a high awareness of the importance of digital transformation in improving hospital competitiveness. However, the level of effectiveness that has not been maximized indicates that there are challenges in the execution of the strategic plan. Business process transformation through digitalization has been carried out by 72% of hospitals, with an effectiveness level of 3.5. This reflects significant efforts in integrating technology into hospital operations, although there is still room for increased effectiveness. The adoption of telemedicine technology shows a fairly high implementation rate (68%) with the highest level of effectiveness (4.1). These findings underscore the important role of telemedicine in improving healthcare accessibility, especially in the context of the COVID-19 pandemic which has driven the rapid adoption of telehealth solutions.

The implementation of the Electronic Health Records (EHR) System has reached 78%, with an effectiveness level of 3.9. This shows that most hospitals have switched to digital health recording systems, which has the potential to improve the efficiency and quality of patient care. An aspect that is still relatively lagging behind is health big data analysis, with an implementation rate of only 45% and an effectiveness of 3.2. This indicates that many hospitals have not fully harnessed the potential of data for strategic decision-making and service improvement. Cybersecurity strategies have been implemented by 62% of hospitals, with an effectiveness rate of 3.6. This figure shows awareness of the importance of data security in the digital age, but also indicates the need for further strengthening given the sensitivity of health data.

The development of staff digital competencies showed a fairly good implementation rate (70%) with an effectiveness of 3.8. This reflects the hospital's focus on improving human resource capabilities in the face of digital transformation. Overall, this descriptive analysis describes a dynamic landscape in the implementation of strategic management in Indonesia hospitals in the digital era. There is significant awareness and effort in adopting a strategic approach to digitalization, but areas that need further attention and development have also been identified, especially in terms of big data analysis and cybersecurity. The variation in the level of implementation and effectiveness between aspects of strategic management also

demonstrates the complexity of the challenges hospitals face in aligning their strategies with the demands of the digital age.

B. Quantitative Analysis

1. Factors affecting the implementation of strategic management

Multiple regression analysis was conducted to identify factors affecting the implementation of strategic management in hospitals. The results of the analysis are presented in Table 2.

Table 2. Factors Affecting the Implementation of Strategic Management

Factor	Beta Coefficient (absolute)	P value
Top Management Support	412	<0.001
Technology Readiness	376	<0.001
Culture of Innovation	298	<0.001
HR Digital Competencies	287	<0.001
IT Budget Allocation	253	<0.005
Government Regulation	187	<0.01
Competitive Pressure	165	<0.05

$R^2 = 0.684$, $F = 42.31$, $p < 0.001$

The results of the analysis show that top management support is the most significant factor ($\beta = 0.412$, $p < 0.001$) in influencing the implementation of strategic management. This emphasizes the importance of commitment and vision from the executive level in driving the digital transformation of hospitals. Technology readiness ($\beta = 0.376$, $p < 0.001$) and culture of innovation ($\beta = 0.298$, $p < 0.001$) also emerged as key factors, suggesting that adequate technological infrastructure and an innovation-supporting work environment are critical in the implementation of digital strategies. HR digital competencies ($\beta = 0.287$, $p < 0.001$) and IT budget allocation ($\beta = 0.253$, $p < 0.005$) also played a significant role, emphasizing the importance of investing in the development of employees' digital capabilities and financial resources for technology. External factors such as government regulation ($\beta = 0.187$, $p < 0.01$) and competitive pressures ($\beta = 0.165$, $p < 0.05$) also affect implementation, albeit to a lesser extent. This model explains 68.4% variation in strategic management implementation ($R^2 = 0.684$), indicating good predictive power.

2. The relationship between the implementation of strategic management and the competitiveness of hospitals

To test the relationship between the implementation of strategic management and the competitiveness of hospitals, correlation and regression analysis was conducted. The results of the analysis are presented in Table 3.

Table 3. The Relationship between Strategic Management Implementation and Competitiveness Indicators

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Competitiveness Indicators	Correlation Coefficient (r) (absolute)	Coefficient of Determination (R^2)	P value
Service Innovation	754	569	<0.001
Quality of Service	725	526	<0.001
Patient Satisfaction	698	487	<0.001
Operational Efficiency	682	465	<0.001
Market Share	612	375	<0.001

The results of the analysis show a strong positive correlation between the implementation of strategic management and various indicators of hospital competitiveness. Service innovation showed the highest correlation ($r = 0.754$, $R^2 = 0.569$, $p < 0.001$), indicating that hospitals that were more effective in the implementation of strategic management tended to be more innovative in their service development. Service quality also showed a strong correlation ($r = 0.725$, $R^2 = 0.526$, $p < 0.001$), followed by patient satisfaction ($r = 0.698$, $R^2 = 0.487$, $p < 0.001$) and operational efficiency ($r = 0.682$, $R^2 = 0.465$, $p < 0.001$). This shows that the implementation of effective strategic management has a positive impact on various aspects of hospital performance. While still significant, market share shows a relatively lower correlation ($r = 0.612$, $R^2 = 0.375$, $p < 0.001$), indicating that increased competitiveness may take longer to translate into significant market share growth.

C. Qualitative Findings

1. The process of formulating a digital strategy in hospitals

Thematic analysis of in-depth interviews reveals that the process of formulating digital strategies in hospitals generally involves five main stages:

- Environmental Analysis: Includes assessment of technology trends, competitor analysis, and evaluation of patient needs.
- Internal Assessment: Evaluation of existing digital capabilities, identification of technology gaps, and analysis of organizational readiness.
- Digital Vision Formulation: Long-term vision formulation of the hospital's digital transformation.
- Roadmap Development: Preparation of a phased implementation plan with clear milestones.
- Resource Allocation: Determination of necessary technology investment and human resource development.

2. Challenges in the implementation of strategic management in the digital era

Some of the main challenges identified in the implementation of strategic management in the digital era are presented in Table 4.

Table 4. Key Challenges in the Implementation of Strategic Management in the Digital Era

Challenge	Frequency Mentioned (%)	Difficulty (1-5)
Patient data security	65%	4.1
Resistance to change	85%	4.2
Budget limitations	80%	4.0
Legacy system integration	70%	3.9
Digital competency gap	75%	3.8
ROI uncertainty	55%	3.7
Inadequate regulation	60%	3.5

Resistance to change emerged as the most frequently cited challenge (85%) with the highest difficulty level (4.2/5), demonstrating the importance of change management in the digital transformation process. Budget constraints (80%) and digital competency gaps (75%) are also significant barriers, emphasizing the need for strategic investments in technology and human resource development.

3. Hospital adaptation strategies to digital transformation

The qualitative analysis identifies several key strategies that hospitals are adopting in the face of digital transformation:

- Digital Transformation Team Formation: 80% of hospitals have formed a dedicated team responsible for digital initiatives.
- Strategic Partnerships: 70% of hospitals are partnering with technology companies or healthcare startups to accelerate technology adoption.
- Training and Continuous Development: 85% of hospitals are increasing investment in digital training programs for staff.
- Phased Implementation: 90% of hospitals are adopting a phased approach in the implementation of new technologies to reduce risks and resistance.
- Establishment of a Culture of Innovation: 65% of hospitals actively encourage innovation through intrapreneur programs or internal hackathons.

These findings show that hospitals in Indonesia are increasingly proactive in adopting a strategic approach to digital transformation. However, variations in the adoption rate and effectiveness of these strategies indicate opportunities for further learning and optimization in the implementation of strategic management in the digital era.

Discussion

The integration of Quantitative and Qualitative Findings, the synthesis of the results of quantitative and qualitative analysis reveals that the implementation of strategic management in increasing hospital competitiveness in the digital era is a complex process that is influenced by various internal and external factors. Quantitative findings show that top management support, technological readiness, and innovation culture are key factors influencing the success of implementation (Table 2). This is reinforced by qualitative findings that identify the importance of building a digital transformation team and establishing a

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culture of innovation as the main adaptation strategy. The strong correlation between the implementation of strategic management and service innovation (r = 0.754, Table 3) also confirms the importance of this aspect in improving the competitiveness of hospitals. These findings are in line with research (Tulungen et al., 2022) which emphasizes the critical role of leadership in the digital transformation of healthcare organizations. However, this study makes a new contribution by identifying the complex interactions between these factors in the specific context of hospitals in Indonesia. For example, while technology readiness is important, qualitative findings show that in the absence of a culture of innovation and management support, technology investment alone is not enough to drive effective digital transformation.

Comparisons with previous studies show some interesting developments. While previous studies such as (Rachmad et al., 2024) Focusing on the technical aspects of digital technology implementation in hospitals, this study reveals the importance of change management aspects and the development of digital competencies of human resources. These findings reinforce the argument (Nurlaila et al., 2024) about the importance of a socio-technical approach in the digital transformation of health services. Theoretical Implications, the main contribution of this research to the theory of strategic management in the health sector is the development of a more nuanced understanding of how various factors interact in the context of hospital digital transformation. The findings of this study extend the Resource-Based View (RBV) model in the context of digital health, showing that the ability to integrate digital resources with existing organizational competencies is a key factor in creating a sustainable competitive advantage (Rintalla & Samsudin, 2024). Based on the synthesis of quantitative and qualitative findings, this study proposes the development of a new conceptual model called the "Dynamic Digital Capability Framework for Hospitals" (DDCFH).

The model integrates the key elements identified in the research, including digital leadership, infrastructure readiness, a culture of innovation, and organizational adaptive capabilities. DDCFH emphasizes the importance of dynamic alignment between digital strategy, organizational capabilities, and the demands of a rapidly changing environment, providing a new theoretical framework for understanding and managing digital transformation in hospitals (Cahyati Wulandari & Sri Pudjiarti, 2024). Practical Implications, based on the findings of the study, several practical recommendations can be put forward for hospital management. First, the importance of developing "digital leadership" at all levels of the organization. It involves not only technical training but also the development of a digital mindset that encourages innovation and experimentation. Second, the implementation of a digital strategy must be accompanied by a comprehensive change management program to overcome resistance and build broad organizational support (Kristiyono & Nurrosyidah, 2021). Third, hospitals need to adopt a "bimodal IT" approach that allows them to maintain legacy systems while experimenting with new technologies. Fourth, the development of strategic partnerships with technology companies and healthcare startups can accelerate innovation and overcome internal resource limitations.

For policymakers in the health sector, this study highlights the need for a more adaptive regulatory framework and support digital innovation in hospitals. This includes the development of health data interoperability standards, incentives for the adoption of digital

technologies, and support for the development of a broader digital health ecosystem. In addition, policies that encourage collaboration between hospitals, educational institutions, and the technology industry can accelerate the digital transformation of the healthcare sector as a whole. Research Limitations and Suggestions for Further Research, although this research provides valuable insights, some limitations need to be acknowledged. First, the focus on hospitals in Indonesia may limit the generalization of findings to the context of other countries with different health systems. Second, the cross-sectional nature of the study limits the ability to capture the long-term dynamics of the hospital's digital transformation. For further research, it is recommended to conduct a longitudinal study that can track the evolution of the implementation of digital strategic management in hospitals over time. This will provide a deeper understanding of how digital capabilities are evolving and how their impact on hospital performance changes over time.

In addition, cross-country comparative research can provide insights into how differences in national contexts affect the implementation of digital strategic management in hospitals. Studies that focus on hospitals that are highly successful in their digital transformation can also provide valuable insights into best practices and critical success factors (Erwin et al., 2023). Finally, interdisciplinary research that combines perspectives from healthcare management, information technology, and organizational behavioral science can provide a more holistic understanding of the complexities of digital transformation in the healthcare sector (Banjarnahor et al., 2023). As such, this research not only contributes significantly to our understanding of strategic management in the digital age but also paves the way for further exploration in this critical and rapidly growing field.

CONCLUSION

This research provides a comprehensive understanding of the implementation of strategic management in improving hospital competitiveness in the digital era in Indonesia. Through a mixed method approach, this study reveals the complexity and dynamics of digital transformation in the health sector. Key findings show that the success of digital strategic management implementation is highly dependent on the synergistic interaction between digital leadership, technology readiness, innovation culture, and organizational adaptive capabilities. Key factors influencing the implementation of strategic management, such as top management support, technological readiness, and a culture of innovation, underscore the importance of a holistic approach in the digital transformation of hospitals. The strong correlation between the implementation of strategic management and various competitiveness indicators, especially service innovation and service quality, shows the positive impact of an effective digital strategy on hospital performance. Key challenges identified, such as resistance to change and the digital competency gap, emphasize the importance of change management and HR development in the transformation process.

The adaptation strategies adopted by hospitals, including the establishment of digital transformation teams and strategic partnerships, demonstrate proactive efforts in facing the digital era. The development of the "Dynamic Digital Capability Framework for Hospitals" (DDCFH) conceptual model makes a significant theoretical contribution, offering a new framework for understanding and managing digital transformation in hospitals. The practical implications of this study highlight the importance of digital leadership development, effective change management implementation, and the adoption of bimodal

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approaches in information technology management. In conclusion, hospital digital transformation is a complex process that requires strategic alignment between technology, business processes, and organizational capabilities. Success in the digital age depends not only on the adoption of the latest technologies, but also on hospitals' ability to integrate those technologies into their business strategies holistically, drive continuous innovation, and build a culture that is adaptive to change. This research paves the way for further exploration of the long-term dynamics of digital transformation in the healthcare sector and how hospitals can build and maintain a competitive advantage in an ever-changing environment. Thus, the study not only contributes to academic understanding but also provides practical guidance for hospital leaders and policymakers in navigating digital transformation in Indonesia's healthcare sector.

REFERENCE

[1] Banjarnahor, A., Sinaga, J., Handiman, U., Samosir, K., Purba, B., Siagian, V., Gandasari, D., Army, W., Harizahayu, H., Sihotang, J., Nugroho, A., Hasan, M., Mahmud, A., Rahman, E., B, A., & Djufri, I. (2023). *Digital Transformation and Organizational Behavior*.

[2] Cahyati Wulandari, D., & Sri Pudjiarti, E. (2024). Adaptive Leadership in the Digital World: Overcoming Challenges and Opportunities in the 4.0 Era. *Transformation: Journal of Economics and Business Management*, *3*(1), 207–220. https://doi.org/10.56444/transformasi.v3i1.1682

[3] Djelantik, S. (2020). Global Cooperation Addresses The " Great Lockdown "; Multi-channel diplomacy approach. *Global Cooperation Addresses The " Great Lockdown "; Multi-channel diplomacy approach*. http://journal.unpar.ac.id/index.php/JurnalIlmiahHubunganInternasiona/article/view/3869/2910

[4] Erwin, E., Perdana, A., Pasaribu, A., Novel, N., M.Kom, S., Thaha, A., Adhicandra, I., Suardi, C., Nasir, A., & Syafaat, M. (2023). *DIGITAL TRANSFORMATION.*

[5] Giovanni, R., Panjaitan, D. H., Amaliyah, A. M. B., Marga, P. A., Sandevi, I Gusti Kade Putri Ayu Rahma, Sitorus, Intan Claudya, Alfatih, M., & Chandrawati, Chandrawati. (2024). Implementation and Evaluation of Strategies in Hospital Management: A Literature Review of Methodologies and Related Approaches. *Health & Medical Sciences*, *2*(1), 14. https://doi.org/10.47134/phms.v2i1.237

[6] Kristiyono, J., & Nurrosyidah, A. (2021). Analyze the behavior of searching for information on the internet through the Visual Search feature. *Scriptura*, *11*(2), 96–104. https://doi.org/10.9744/scriptura.11.2.96-104

[7] Nur, S., Rahmawati, E., Hasanah, M., Rohmah, A., Adytia, R., Pratama, P., Anshori, I., Management, P., Economics, F., & Business, D. (2023). Privacy and Ethics in Digital Human Resource Management. *Journal of Research Management and Innovation Research*, *1*(6), 1–23. https://doi.org/10.61132/lokawati.v1i6.328

[8] Nurlaila, N., Nurhasanah, N., & Bima, S. (2024). Digital Transformation of Public Services: Challenges and Prospects in the Implementation of E-Government in Bima Zuriatin Zuriatin Regency STKIP Taman Siswa Bima. *Public Service And Governance Journal*, *5*(2), 21–37.

[9] Rachmad, Y., Indrayani, N., Harto, B., Judijanto, L., Rukmana, A., Rahmawati, N.,

Ambulani, N., & Saktisyahputra. (2024). *DIGITAL TECHNOLOGY MANAGEMENT (Use of Technology in Managing Competitive Management).*

[10] Rahadi, D. R. (2023). Introduction to the Partial Least Squares Structural Equation Model (PLS-SEM) 2023. *CV. Lantern of Madani Sciences*, *July*, 146.

[11] Rintalla, M., & Samsudin, A. (2024). Resource-Based View Analysis As A Strategy To Enhance Competitive Advantage In CV Mubarokfood Cipta Delicia Analysis Resource-Based View As A Strategy To Increase Competitive Advantage In CV Mubarokfood Cipta Deliciaid 2 *Corresponding Author. *East Java Veteran National Development University*, *5*(1), 2906–2917.

[12] Robiul Rochmawati, D., Hatimatunnisani, H., & Veranita, M. (2023). Developing Business Strategies in the Era of Digital Transformation. *Coopetition : Scientific Journal of Management*, *14*(1), 101–108. https://doi.org/10.32670/coopetition.v14i1.3076

[13] Santika, M., Paramarta, V., & Somba, I. (2023). *The Importance of Strategic Management Implementation in Hospitals: A Theoretical Study of Sangga Buana University YPKP Bandung Sangga Buana University YPKP Bandung Regulation of the Minister of Health of the Republic of Indonesia Number 4 of 2018 explains that a hospital is a health service institution that provides individual health services in a complete manner that provides inpatient, outpatient, strategic services that are appropriate to make the business stronger. This is important so that the process of tight competition in hospitals. The importance of strategic management in service and quality institutions. In addition, another benefit of strategic management is that it can reduce*. *3*(3).

[14] Seta Wicaksana, & Mombing Sihite. (2022). *Digital Talent Management: Organizational Culture Transformation Towards Organizational Agility (The Key to Success in Digital Transformation). September*.

[15] Tulungen, E. E. W., Saerang, D. P. E., & Maramis, J. B. (2022). Digital Transformation: The Role of Digital Leadership. *Journal of EMBA : Journal of Research in Economics, Management, Business and Accounting*, *10*(2), 1116–1123. https://doi.org/10.35794/emba.v10i2.41399

[16] Zulfa, A. I., Febriani, D., Siregar, A. F. P., & Agustina, D. (2023). Strategic Management in Improving the Quality of Health Services in Hospitals: Literature Review. *Tambusai Health Journal*, *4*(2), 1008–1016.

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