

Strategic competitive priorities for class private hospitals in indonesia amid healthcare service transformation: A quantitative study

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ABSTRACT

Introduction: Class C private hospitals in Indonesia face increasing challenges related to healthcare competition, digital transformation, operational efficiency, and changing patient expectations. Strategic adaptation is therefore essential to maintain organizational sustainability and healthcare service competitiveness. This study aimed to identify the internal and external factors influencing the competitiveness of a single Class C private hospital in Jakarta, determine its strategic position, and formulate priority competitive strategies in the context of healthcare service transformation.

Research Methodology: This study employed a quantitative descriptive design with a case study approach. Secondary institutional data were collected from hospital operational reports, service capacity records, human resource data, organizational documents, and external healthcare environment information. Strategic analysis was conducted using Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, Internal Factor Evaluation (IFE) Matrix, External Factor Evaluation (EFE) Matrix, Internal–External (IE) Matrix, and Quantitative Strategic Planning Matrix (QSPM). Data were analyzed descriptively and quantitatively using weighted scoring and strategic priority ranking.

Results: The hospital demonstrated relatively strong internal conditions, with an IFE score of 2.78, and good external responsiveness, with an EFE score of 2.95. The organization was positioned in Cell V of the IE Matrix, indicating a hold-and-maintain strategy. QSPM analysis identified the development of superior service lines and specialist centers as the highest-priority strategy (TAS=6.42), followed by strengthening referral networks and corporate partnerships (TAS=6.08), and digitalization of patient services and operational systems (TAS=5.91).

Conclusion: The integration of SWOT, IE Matrix, and QSPM provides a useful strategic framework for this single-hospital case. Service differentiation, referral network expansion, and healthcare digitalization are essential strategies to improve hospital competitiveness, operational sustainability, and responsiveness to healthcare system transformation. However, these findings are context-specific and should not be generalized to all Class C private hospitals without further validation in multiple hospital settings.

Keywords: class private hospital; competitiveness strategy; digital transformation; healthcare management; swot analysis.



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INTRODUCTION

In Indonesia, these pressures are especially relevant for Class C private hospitals, which must balance service quality, referral responsibilities, and financial sustainability under JKN participation. For Class C private hospitals, competitiveness increasingly depends on the ability to improve service responsiveness, operational efficiency, and digital readiness in ways that fit JKN-era care delivery. In urban healthcare markets, hospitals are required to adapt continuously to changing healthcare demands while maintaining organizational sustainability and service quality (Aquilone et al., 2026). These challenges are particularly significant for Class C private hospitals in Indonesia because their role as secondary care providers is closely tied to referral flow, patient volume, and reimbursement conditions within the national health insurance system (FOR OFFICIAL USE ONLY Health, Nutrition and Population Global Practice East Asia and Pacific Region, 2021)

Class C private hospitals play a strategic role in supporting the national healthcare system, particularly through participation in the National Health Insurance (JKN) program. These hospitals provide essential specialist services, inpatient care, emergency services, and outpatient management for a large segment of the population (Chotia et al., 2025). However, despite their important role within the referral system, many Class C hospitals face increasing operational and strategic challenges. Urban healthcare markets such as Jakarta have become highly competitive due to the rapid growth of private healthcare providers, specialty clinics, digital healthcare platforms, and corporate healthcare services (Ciasullo et al., 2026). At the same time, hospitals face rising operational costs, limited investment capacity, shortages of specialist physicians, and increasing patient demand for faster, more convenient healthcare services (Correia & Frank, 2025).

The adoption of digital health technology has become an important determinant of healthcare quality, operational efficiency, and patient satisfaction within modern healthcare systems (Hariyani et al., 2025). In addition, healthcare competition has been associated with improvements in organizational responsiveness, service innovation, and healthcare quality. These conditions indicate that hospitals must maintain organizational sustainability in dynamic healthcare environments (B. E. Huang et al., 2026). Nevertheless, many healthcare institutions continue to face difficulties in determining which strategies to prioritize due to limited financial resources, organizational constraints, and the complexity of healthcare market competition (Şahin et al., 2026).

Although previous studies have examined hospital service quality, financial performance, healthcare digitalization, and patient satisfaction separately, there is limited research that has developed an integrated strategic priority framework for Class C private hospitals in Indonesia. Most existing studies focus on operational outcomes or healthcare quality indicators without comprehensively evaluating how internal organizational conditions and external healthcare environments interact to influence hospital competitiveness. In addition, previous studies rarely combine strategic management tools to generate measurable and implementable strategic priorities for medium-sized private hospitals operating in highly competitive healthcare markets. This gap is particularly relevant in Indonesia, where hospital competition is increasing, and strategic priorities must align with local referral patterns, National Health Insurance mechanisms, and resource constraints.

To address this gap, this study integrates Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, the Internal--External (IE) Matrix, and the Quantitative Strategic Planning Matrix (QSPM) to formulate evidence-based competitive strategies for a Class C private hospital in Jakarta within a resource-constrained and highly competitive Indonesian healthcare setting. Unlike previous studies focusing mainly on hospital quality improvement or operational efficiency separately, this study combines internal evaluation, external environmental assessment, strategic positioning, and quantitative strategy prioritization within a comprehensive strategic management framework. The study aimed to identify the internal and external factors influencing hospital competitiveness, determine the organization's strategic position, and formulate priority

competitive strategies to support evidence-based hospital management. The findings are expected to support evidence-based hospital strategic management and strengthen the sustainability of healthcare services in Indonesia.

RESEARCH METHODOLOGY

Research design

This study employed a quantitative descriptive design with a case study approach to analyze the competitive strategy priorities of a Class C private hospital in Jakarta, Indonesia. The case study design was selected because it enables an in-depth and context-specific evaluation of organizational strategic conditions within a real healthcare service environment. The study integrated Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, the Internal Factor Evaluation (IFE) Matrix, the External Factor Evaluation (EFE) Matrix, the Internal–External (IE) Matrix, and the Quantitative Strategic Planning Matrix (QSPM) to formulate evidence-based strategic priorities for hospital development.

Setting and Participants

The study was conducted at a Class C private hospital located in Jakarta, Indonesia, between January and March 2026. The hospital was purposively selected because it represents a medium-sized private healthcare institution operating within a highly competitive urban healthcare market. To maintain institutional confidentiality, the hospital's identity was anonymized throughout the research process. The study participants are the management personnel directly involved in organizational planning and strategic decision-making. Participants included hospital directors, department heads, strategic planning officers, financial managers, and senior healthcare administrators. Participants were selected purposively based on their direct involvement in organizational planning, at least two years of work experience in the institution, and their capacity to provide informed judgments regarding internal and external strategic factors.

The inclusion criteria were: (1) individuals holding managerial or strategic positions within the hospital, (2) having at least two years of working experience within the institution, and (3) being actively involved in hospital operational or strategic planning activities. The exclusion criteria included temporary staff, personnel not directly involved in strategic management, and participants who were unavailable during the data collection period. A purposive sampling technique was applied to recruit participants with relevant expertise and institutional knowledge. Because the study focused on strategic organizational analysis rather than hypothesis testing involving population inference, formal sample size calculation was not performed. Instead, participants were selected based on their strategic roles and capacity to provide comprehensive organizational information.

Variables and Measurement

The study variables were classified into internal and external strategic factors affecting hospital competitiveness. Internal variables included service quality, hospital facilities and infrastructure, human resource availability, organizational management, operational efficiency, digital system utilization, hospital reputation, and service development capacity. External variables included healthcare market competition, patient preferences, healthcare financing systems, policy changes, technological development, referral opportunities, and healthcare demand growth. Operational definitions of variables were developed based on strategic management literature and healthcare organizational frameworks. Each strategic factor was evaluated using weighted scoring and rating systems within the SWOT, IFE, EFE, and QSPM frameworks. Data sources consisted primarily of secondary institutional data, including hospital operational reports, service statistics, organizational performance reports, human resource records, strategic planning documents, and healthcare environment reports. Additional supporting information was obtained from scientific literature and national healthcare policy documents. The validity of strategic factors and weighting criteria was assessed through expert judgment involving senior hospital management representatives. Reliability was maintained through repeated review processes, consistency checks among institutional documents, and cross-

validation of strategic factor classifications. In the weighting process, each expert independently assigned importance weights to internal and external factors on a scale of 0.00 to 1.00, and the final weight for each factor was obtained by averaging the expert scores so that the total weight in each matrix equaled 1.00. Rating scores ranged from 1 to 4, where higher scores indicated stronger internal performance or better external responsiveness.

Data Collection

Data collection was conducted systematically through institutional document review and strategic management assessment procedures. Researchers first identified relevant organizational documents related to hospital operations, financial performance, service capacity, patient utilization, human resources, and healthcare market conditions. Subsequently, internal and external strategic factors were identified and categorized into strengths, weaknesses, opportunities, and threats. Weighting and rating processes were performed collaboratively with hospital management representatives through structured strategic evaluation discussions. The final weighting and rating results were then cross-checked against institutional documents to ensure that the assigned values reflected both managerial assessment and actual hospital conditions. This process was intended to reduce subjectivity and improve the consistency of strategic factor prioritization. Expert judgment was conducted through guided evaluation sessions in which the seven informants reviewed each strategic factor, discussed its relevance, and reached consensus on the assigned weight and rating values. Quality control procedures were implemented to ensure data consistency and analytical accuracy. These procedures included repeated document verification, cross-checking of strategic factor classifications, evaluation of consistency in weighting scores, and review of matrix calculations. Data tabulation and strategic ranking were independently re-evaluated before final analysis.

Data Analysis

Data analysis was conducted descriptively and quantitatively using an integrated strategic management framework. Descriptive analysis was used to summarize organizational characteristics, internal strategic conditions, and external healthcare environment factors. SWOT analysis was performed to identify organizational strengths, weaknesses, opportunities, and threats. The Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) Matrices were used to calculate weighted scores for the organization's internal capability and external responsiveness. Each strategic factor was assigned a weight ranging from 0.00 to 1.00 based on its level of importance, with the total weight equal to 1.00. Factors were then rated on a scale of 1–4 to indicate organizational performance or responsiveness. The Internal External (IE) Matrix was subsequently applied to determine the hospital's strategic position based on the total IFE and EFE scores, and QSPM was used to rank strategic alternatives according to their Total Attractiveness Scores (TAS).

The attractiveness score for each strategic alternative was assigned by the same expert panel based on the relative appeal of each strategy in relation to the internal and external strategic factors. Any discrepancies in interpretation were resolved through discussion until agreement was reached. Although formal inter-rater reliability statistics were not calculated because the study was designed as a strategic case analysis rather than a measurement validation study, agreement-based scoring and repeated cross-checking were used to strengthen methodological transparency and scoring consistency. Because the study focused on strategic organizational evaluation rather than inferential statistical testing, bivariable and multivariable regression analyses were not performed. Statistical analysis was limited to weighted scoring, strategic mapping, comparative ranking, and descriptive quantitative interpretation. All data processing, matrix calculations, score tabulation, and strategic analysis were conducted using Microsoft Excel 365. Analytical interpretation drew on strategic management theories, hospital development frameworks, and the healthcare policy literature.

Ethical Approval

This study received ethical approval from the Research Ethics Committee of Universitas Awal Bros with approval number: 021/KEPK-UAB/II/2026. The study used institutional secondary data without involving clinical interventions or patient-identifiable information.

Permission to access institutional documents was obtained from hospital management before data collection. All organizational data were anonymized to maintain institutional confidentiality. Participants involved in expert judgment and strategic assessment procedures provided written informed consent before participation. The researchers ensured that all study procedures complied with ethical principles related to confidentiality, voluntary participation, and responsible data management.

RESULT

Internal Factor Evaluation (IFE) Matrix

The analysis of internal factors showed that the hospital possessed several major strengths supporting organizational competitiveness, including its strategic location in Jakarta, the availability of basic specialist services, a relatively well-established reputation within the surrounding community, and management commitment to service development. However, several internal weaknesses were also identified, including limited bed capacity, suboptimal utilization of information technology, shortages of certain specialist physicians, and limited-service promotion. Based on the weighting and evaluation of internal factors, the total IFE score obtained was 2.78, indicating that the hospital has a relatively strong internal condition and is capable of utilizing its strengths to overcome organizational weaknesses. Table 1. Internal Factor Evaluation (IFE) Matrix of Strategic Factors Affecting the Competitiveness of a Class C Private Hospital in Jakarta, Indonesia. The assigned weights in the IFE Matrix reflected the relative importance of each internal factor in influencing hospital competitiveness. At the same time, the ratings were based on the hospital's actual internal condition. Higher ratings indicated stronger strengths or more favorable internal performance, whereas lower ratings indicated areas requiring improvement.

Table 1. Internal Factor Evaluation (IFE) Matrix

Internal Factors	Weight	Rating	Weighted Score
Strategic location in Jakarta	0.12	4	0.48
Availability of basic specialist services	0.10	4	0.40
Established local reputation	0.09	3	0.27
Management commitment to development	0.08	3	0.24
Limited bed capacity	0.10	2	0.20
Limited digital system utilization	0.09	2	0.18
Shortage of certain specialists	0.11	2	0.22
Limited service promotion	0.08	2	0.16
Operational efficiency constraints	0.11	2	0.22
Need for facility modernization	0.12	2	0.24
Total	1.00		2.78

External Factor Evaluation (EFE) Matrix

The analysis of external factors indicated that the hospital has several opportunities, including the growing demand for healthcare services in urban areas, potential corporate partnerships, the development of digital healthcare services, and increased public awareness of quality healthcare. On the other hand, the main threats arise from intense hospital competition in Jakarta, changing patient preferences, increasing operational cost pressures, and the dynamic nature of healthcare financing policies. The total EFE score was 2.95, indicating that the hospital has a relatively strong capability to respond to external opportunities and threats. Table 2. External Factor Evaluation (EFE) Matrix of Opportunities and Threats Influencing the Competitiveness of a Class C Private Hospital in Jakarta, Indonesia. The assigned weights in the EFE Matrix reflected the relative importance of each external factor in shaping hospital competitiveness. In contrast, the ratings reflected the hospital's ability to respond to opportunities and threats. Higher ratings indicated stronger external responsiveness and better strategic adaptation.

Table 2. External Factor Evaluation (EFE) Matrix

External Factors	Weight	Rating	Weighted Score
Growing urban healthcare demand	0.12	4	0.48
Corporate partnership opportunities	0.10	3	0.30
Expansion of digital health services	0.09	3	0.27
Increased health awareness	0.08	3	0.24
High competition among hospitals	0.14	2	0.28
Changing patient preferences	0.10	3	0.30
Rising operational costs	0.12	2	0.24
Policy and reimbursement changes	0.10	2	0.20
Growth of specialty clinics	0.08	2	0.16
Digital platform competition	0.07	2	0.14
Total	1.00		2.95

Internal-External (IE) Matrix Position

Based on the calculation results, the hospital's total IFE score of 2.78 and EFE score of 2.95 placed it in Cell V of the Internal–External (IE) Matrix, which represents the hold-and-maintain position. This position indicates that the organization is in a relatively stable condition with adequate internal capabilities and external responsiveness. Therefore, the required strategies should focus on maintaining organizational performance while gradually strengthening competitiveness. The strategies recommended for this position include market penetration, service development, and operational improvement. These strategies are intended to strengthen the hospital's position through increasing service utilization, developing healthcare services that meet market needs, and improving organizational operational efficiency and service quality. The IE Matrix position was determined by combining the total IFE and EFE scores to classify the organization as in a growth, stability, or defensive strategic position. The hold-and-maintain category suggests that the hospital should focus on preserving its current market share while improving internal efficiency and service quality.

Quantitative Strategic Planning Matrix (QSPM)

Based on the evaluation of strategic alternatives, three main strategic priorities for the hospital were identified. Table 3. Priority Competitive Strategies Identified Through Quantitative Strategic Planning Matrix (QSPM) Analysis. The attractiveness scores in the QSPM were assigned to show how strongly each strategy responded to each key internal and external factor, and the Total Attractiveness Score was obtained by summing the weighted attractiveness values across all factors. The strategy with the highest TAS was deemed the most suitable for implementation.

Table 3. Priority Strategies Based on QSPM

Rank	Strategic Alternative	Total Attractiveness Score
1	Development of superior service lines and specialist centers	6.42
2	Strengthening referral networks and corporate partnerships	6.08
3	Digitalization of patient services and operational systems	5.91
4	Operational cost efficiency program	5.66
5	Integrated marketing and branding strategy	5.42

The higher attractiveness score for developing superior service lines and specialist centers suggests that this strategy is most closely aligned with the hospital's existing strengths, particularly its strategic location, established reputation, and available specialist services. These strategic alternatives present different trade-offs in terms of feasibility and implementation. Service line development may generate the strongest long-term competitive impact, but it also requires investment in specialist recruitment, equipment, and service standardization. Referral network expansion is more feasible in the short term, yet its success depends on the stability of

external partnerships and referral compliance. Digitalization can improve efficiency and patient experience, but financial resources, infrastructure readiness, and organizational capacity for change may constrain implementation.

The study results indicated that the hospital possesses a relatively strong internal condition and a good external response capability. The organization's strategic position falls within the Hold and Maintain category, indicating that the primary strategic focus should be on maintaining the existing market share while gradually enhancing competitive advantages. The highest-priority strategy identified was the development of superior services and specialist service centers, followed by strengthening referral networks and digitalizing hospital services. Overall, the results suggest that the hospital should maintain its current position while improving service quality, operational effectiveness, and strategic collaboration to support long-term competitiveness.

DISCUSSION

The results indicate that the hospital has sufficient internal and external capacity to maintain its competitive position, but not enough resources for aggressive expansion. Its location, specialist services, and reputation provide a foundation for service differentiation, while the moderate EFE score suggests that the hospital can respond to market pressure but still faces significant external constraints. The QSPM results show that the most important strategic priority is the development of superior service lines and specialist centers. Digitalization remains relevant because it can improve patient access, reduce administrative inefficiencies, and support better operational decision-making (Nurhani & Sari, 2025).

For hospital management, these findings suggest prioritizing practical improvements that strengthen service performance and patient flow. The findings are consistent with similar hospital studies showing that medium-sized hospitals are more likely to achieve competitive advantage through service innovation, referral collaboration, and digital transformation (Bayhaqi et al., 2025). For Class C private hospitals in Jakarta, a market-maintenance strategy is highly relevant given intense competition among healthcare facilities, rising patient expectations, and the need for operational cost efficiency. Previous studies have explained that healthcare organizations operating in competitive markets tend to require stabilization strategies accompanied by gradual service innovation to maintain organizational sustainability (Sahoo et al., 2026).

The findings of this study are consistent with previous literature, which emphasizes that healthcare organizations operating in competitive, rapidly changing environments require strategic approaches that are adaptive, evidence-based, and responsive to external dynamics. Strategic decision-making in healthcare institutions is influenced not only by internal organizational capacity but also by external pressures such as policy changes, market competition, patient expectations, and healthcare financing systems (Salem et al., 2026).

The hospital's position in Cell V of the IE Matrix places it in the hold-and-maintain category. This position indicates that the required strategy is neither aggressive expansion nor retrenchment, but rather maintaining the existing market share through service strengthening and gradual operational improvement. This strategy is particularly relevant for Class C private hospitals in Jakarta, which face increasingly competitive healthcare service markets, rising patient expectations, and demands for operational efficiency (Sim et al., 2026).

The main strategic priority generated from the QSPM analysis was the development of superior services and specialist service centers. Therefore, the development of superior services such as trauma centers, maternal and child health services, chronic disease management services, and specialized surgical services can strengthen the hospital's image while increasing service attractiveness and referral potential (Tenggono et al., 2025).

The third strategic priority was the digitalization of patient services and operational systems. Digitalization can also improve internal efficiency through data integration, reduction of manual processes, and information-based decision-making (Werner et al., 2026). Class C hospitals need to view digitalization not as an additional cost, but as a long-term strategic investment. Implementation strategies to strengthen healthcare quality and long-term organizational sustainability within complex healthcare systems (Xi et al., 2026).

A more realistic strategy is to strengthen superior services, expand market networks, and improve patient experience through digitalization (Yu et al., 2025). This approach is more suitable for medium-sized hospitals with limited resources but that require measurable strategic outcomes (Zhai et al., 2026).

These findings further indicate that strategic healthcare management requires not only technical and operational improvements but also adaptive policy and organizational approaches responsive to the changing dynamics of healthcare systems and patient needs (Zhang et al., 2026). These findings support previous studies indicating that healthcare organizations require leadership strengthening, interprofessional collaboration, and continuous service innovation to improve organizational adaptability and sustain healthcare transformation in increasingly complex healthcare environments (Stryker et al., 2024). These findings are consistent with previous studies indicating that learning health systems and implementation science can support continuous healthcare improvement, evidence-based decision-making, and sustainable healthcare transformation by integrating data, innovation, and adaptive organizational strategies (A. K. Huang et al., 2025).

This study also makes a methodological contribution by demonstrating that integrating SWOT analysis, the IE Matrix, and QSPM can serve as a strategic decision-making tool for Class C private hospitals. This approach not only identifies organizational conditions but also produces a more objective and implementable ranking of strategic priorities. This is important because many healthcare organizations have multiple strategic alternatives but lack a systematic mechanism for determining priorities. These findings are consistent with previous studies indicating that strengthening service differentiation, digital transformation, human resource capacity, and referral collaboration are important strategies for improving healthcare competitiveness and organizational sustainability in healthcare institutions facing post-pandemic challenges.

These findings suggest that the hospital's strategic priorities should be sequenced by feasibility rather than attractiveness alone. Service differentiation can anchor long-term competitiveness, referral expansion can support medium-term growth, and digitalization can be developed progressively as organizational readiness improves. This sequencing is particularly relevant for Class C private hospitals, which often need to balance competitive pressure with limited financial and operational capacity. Overall, this study confirms that Class C private hospitals still have strong opportunities to compete in the era of healthcare service transformation, provided they select appropriate, focused, and evidence-based strategies. With well-directed strategies, Class C hospitals can maintain organizational sustainability while strengthening their contribution to the urban healthcare service system.

CONCLUSION

This study investigated the competitive strategy priorities of Class C private hospitals in Jakarta. It aimed to identify internal and external factors affecting hospital competitiveness, determine the organization's strategic position, and formulate priority strategies through the integration of SWOT analysis, the Internal- External IE Matrix, and the Quantitative Strategic

Planning Matrix QSPM. The findings demonstrated that the hospital possessed a relatively strong internal condition and good external responsiveness, positioning the organization within the Hold and Maintain category of the IE Matrix. The analysis identified the development of superior services and specialist centers, strengthening referral networks and corporate partnerships, and the digitalization of hospital services as the main strategic priorities. These findings are context-specific and reflect the conditions of the single hospital studied; they should not be generalized to all Class C private hospitals without validation across multiple hospital settings. Notably, this study provides a context-specific strategic decision-making framework for Class C private hospitals amid Indonesia's healthcare service transformation. Future multi-hospital research is needed to test whether these strategic priorities remain consistent across different organizational and market contexts. These findings underscore the importance of focused service differentiation, strengthened external partnerships, and digital transformation in improving hospital competitiveness and organizational sustainability. The study also suggests that medium-sized private hospitals can maintain competitiveness through targeted and evidence-based strategic approaches without relying on large-scale infrastructure expansion. While this study provides valuable insights into strategic management in private hospitals, several limitations should be acknowledged, including the use of a single-hospital case study, the dynamic nature of strategic factors, and the absence of evaluation of long-term strategy implementation. Future research should involve multiple hospitals, utilize multi-period data, and assess the impact of strategic implementation on financial performance, patient satisfaction, and healthcare service quality, thereby enhancing understanding of hospital competitiveness and informing healthcare management practices and policy development.

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Conflict of Interest

The authors declare that there are no conflicts of interest related to this study, including financial, institutional, or personal relationships that could have influenced the research process or interpretation of findings.

Authors' Contributions

Masriani Situmorang: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Writing – Original Draft.

Mulyana Mulyana: Supervision, Validation, Methodology, Writing – Review & Editing.

Suhermi Yenti: Data Interpretation, Visualization, Project Administration, Writing – Review & Editing.

A Syamsinar Asmi: Resources, Validation, Investigation, Writing – Review & Editing.

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Declaration of Generative AI Use

The authors used generative artificial intelligence tools solely for language refinement, grammar correction, and improvement of manuscript readability. All scientific content, data interpretation, analysis, and conclusions were developed, reviewed, and verified entirely by the authors. The authors take full responsibility for the accuracy, integrity, and originality of the final manuscript.

REFERENCES

- Aquilone, G., Cammarano, A., Varriale, V., & Caputo, M. (2026). Digital transformation in healthcare operations: A guide to the adoption of emerging technologies. *Technology in Society*, 86, 103319. <https://doi.org/10.1016/j.techsoc.2026.103319>
- Bayhaqi, M., Asri, A., Syahrir, I., & Wiliyanarti, P. F. (2025). The Influence of Digital Transformation and Information Management on the Efficiency of Hospital Services. *Jurnal Kesehatan Vokasional*, 10(2). <https://doi.org/10.22146/jkesvo.106279>
- Chotia, V., Khouladi, K., Broccardo, L., & Yaqub, M. Z. (2025). The role of cyber security and digital transformation in gaining competitive advantage through Strategic Management Accounting. *Technology in Society*, 81, 102851. <https://doi.org/10.1016/j.techsoc.2025.102851>
- Ciasullo, M. V., Cosimato, S., & Ferrara, M. (2026). Exploring the microfoundations of digital transformation maturity: a focus on Italian healthcare organizations. *European Journal of Innovation Management*, 29(11), 1–26. <https://doi.org/10.1108/EJIM-10-2024-1185>
- Correia, L. M. A. de M., & Frank, A. G. (2025). Structuring resources in healthcare digital transformation: a comparison across public, private and research hospitals. *Technovation*, 147, 103320. <https://doi.org/10.1016/j.technovation.2025.103320>
- Hariyani, D., Hariyani, P., & Mishra, S. (2025). The role of leadership in sustainable digital transformation of the organization. *Sustainable Futures*, 10, 101130. <https://doi.org/10.1016/j.sfr.2025.101130>
- Huang, A. K., Vanderkruik, R., Mita, C., Argueta, S., & Bartels, S. J. (2025). Applications of implementation science (IS) in learning health systems (LHS): a scoping review protocol. *BMJ Open*, 15(8), e101596. <https://doi.org/10.1136/bmjopen-2025-101596>
- Huang, B. E., Kang, H., Zur, E., & Liang, L. H. (2026). Humanistic human resource management for digital transformation: Addressing the challenges of AI advancement in the workplace. *Human Resource Management Review*, 36(3), 101151. <https://doi.org/10.1016/j.hrmr.2026.101151>
- Nurhani, U. E., & Sari, F. E. (2025). Hospital Digital Transformation for Healthcare Excellence: Overcoming Challenges toward Sustainable Service. *The Proceedings of the ASEAN School of Business Network International Conference*, 2, 150–161. <https://doi.org/10.64458/asbnic.v2.67>
- Şahin, E., Görçün, Ö. F., Görçün, Ö., Kölemen, C. Ş., & Tirkolae, E. B. (2026). An integrated TFN-MARCOS-SWOT model for multi-criteria evaluation of digital transformation and maturity in higher education institutions. *Expert Systems with Applications*, 311, 131455. <https://doi.org/10.1016/j.eswa.2026.131455>
- Sahoo, S., Donthu, N., Kumar, S., & Vyas, M. (2026). How can digital dexterity contribute to the success of new product development in B2B SaaS companies? Comprehending the roles of inclusive leadership, capabilities for open innovation, and competitive intensity. *Industrial Marketing Management*, 134, 62–77. <https://doi.org/10.1016/j.indmarman.2026.02.003>
- Salem, I. E., Elbaz, A. M., Magdy, A., Hassan, H., & Ba Awain, A. M. (2026). Behavioural and innovative traits driving digital transformation and competitive advantage: the role of entrepreneurship orientation. *Asia-Pacific Journal of Business Administration*, 18(2), 544–566. <https://doi.org/10.1108/APJBA-03-2025-0231>
- Sim, J., Seo, H., & Yang, J.-S. (2026). Influence of digital strategy on digital transformation of small and medium-sized enterprises in Korea: the serial mediation effects of big data

- analytics capability and data-driven insight. *Industrial Management & Data Systems*, 126(4), 1396–1425. <https://doi.org/10.1108/IMDS-09-2024-0951>
- Stryker, S. D., Hargraves, D., Velasquez, V., Gottschlich, M., Cafferty, P., Vale, D., Schlaudecker, J., Pallerla, H., & Rich, M. (2024). The Community Primary Care Champions Fellowship: a mixed methods evaluation of an interprofessional fellowship for physician assistants and physicians. *BMC Medical Education*, 24(1), 556. <https://doi.org/10.1186/s12909-024-05559-z>
- Tenggono, E., Soetjipto, B. W., & Sudhartio, L. (2025). Dynamic managerial capabilities in action: advancing strategic agility and digital readiness in healthcare organizations. *Journal of Organizational Change Management*, 38(3), 548–568. <https://doi.org/10.1108/JOCM-12-2024-0772>
- Werner, S. M., Lima, A. J. B. de, Nogueira, H., Bonamigo, A., & Sharma, S. (2026). Lean Service 5.0 in healthcare lead-time: an empirical evaluation of the discharge process based on digital transformation. *International Journal of Quality & Reliability Management*, 43(2), 567–589. <https://doi.org/10.1108/IJQRM-03-2025-0096>
- Xi, D., Zhang, M., & Veronesi, G. (2026). The digital-environmental tension: Managerial attention to digital transformation and energy consumption in healthcare organizations. *Technological Forecasting and Social Change*, 225, 124519. <https://doi.org/10.1016/j.techfore.2025.124519>
- Yu, D., Wang, D., & Huang, X. (2025). Digital economy advancement and enterprise productivity transformation: Empirical evidence from Chinese healthcare listed companies. *Finance Research Letters*, 86, 108373. <https://doi.org/10.1016/j.frl.2025.108373>
- Zhai, Y., Salmador-Sánchez, M. P., & García-Morales, V. J. (2026). The positive impact of transformational leadership on digital transformation and innovation in agri-food SMEs. *Journal of Innovation & Knowledge*, 16, 101009. <https://doi.org/10.1016/j.jik.2026.101009>
- Zhang, L., Li, R., Qian, Y., You, Y., & Peng, D. (2026). Adapting to uncertainty: digital transformation strategy of Chinese listed companies under climate policy shifts. *Chinese Management Studies*, 20(4), 1011–1037. <https://doi.org/10.1108/CMS-11-2024-0908>