

Strategic management practices, operational efficiency and organizational agility among Shenyang Hospitals: Basis for innovative organizational framework for hospitals

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ISSN: 2243-7770
Online ISSN: 2243-7789

Received: 28 August 2024

Revised: 25 September 2024

Accepted: 30 September 2024

OPEN ACCESS

Available Online: 1 October 2024

DOI: 10.5861/ijrsm.2024.1279

Abstract

The study aimed to examine the strategic management practices, operational efficiency, and organizational agility among Shenyang hospitals in China, serving as the basis for developing a corporate performance framework. Specifically, it determined the strategic management practices in terms of strategic alignment, strategic flexibility, and strategic commitment; assessed operational efficiency regarding cost efficiency, responsiveness, and accessibility; described organizational agility in terms of technological agility, operational agility, and cultural agility; tested the significant relationships among strategic management practices, operational efficiency, and organizational agility; and developed an innovative organizational performance framework for hospitals. The analysis explored the relationship between operational efficiency and organizational agility in Shenyang hospitals. Results show that most correlations were not significant, with negligible rho-values ranging from -0.039 to 0.092. Specifically, there were no significant relationships between cost efficiency, responsiveness, or accessibility, and the sub-variables of organizational agility, including technological, operational, and cultural agility. Overall, the findings suggest a lack of substantial correlation between operational efficiency and organizational agility within the studied hospitals. Further research may be needed to identify other factors influencing organizational agility and operational efficiency in hospital settings. Respondents indicated a moderate level of strategic management practices, underscoring the need for ongoing refinement to ensure sustained success. While operational efficiency was moderate, there's room for improvement, particularly in areas like cost efficiency. Organizational agility demonstrated a balanced development across technological, operational, and cultural dimensions, albeit at a moderate extent. However, strategic management practices showed minimal impact on operational efficiency and organizational agility. Therefore, implementing an innovative organizational framework is recommended to transform healthcare delivery processes. Hospital Administrators and Executives play a critical role in integrating strategic management practices like alignment, flexibility, and commitment into hospital operations, fostering innovation and investing in resources to enhance operational efficiency and

organizational agility. Medical Staff and Care Providers may engage in strategic initiatives, undergo professional development, and adapt to changing healthcare landscapes. Patients and care recipients may contribute by advocating for healthcare improvement, participating in care plans, and providing feedback. Future researchers may explore external factors' impact and emerging technologies on healthcare. Shenyang Hospitals may adopt a phased approach to implement the proposed innovative organizational framework, including training programs and cross-functional teams for successful integration.

Keywords: strategic, management, practices, operational agility, corporate performance

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1. Introduction

In recent years, the health-care landscape in China, and particularly in Shenyang, has undergone significant transformations driven by a myriad of factors, including technological advancements, evolving patient expectations, and sweeping health-care policy reforms. Amidst these changes, the imperative for hospitals to not only establish clear organizational goals but also to effectively translate these aspirations into operational reality has become increasingly pronounced. This study underscores the critical junction at which hospitals stand - at the intersection of strategic vision and pragmatic implementation. The strategic management of hospitals involves a complex interplay of factors, including envisioning long-term objectives, devising action plans, allocating resources, and monitoring progress. Yet, the efficacy of this process hinges on the extent to which these high-level goals align with the day-to-day execution of tasks and procedures on the ground. This alignment holds the key to not only achieving operational efficiency but also to delivering superior patient care experiences and ultimately fulfilling the broader societal objectives of accessible and quality health-care (Zhu et al., 2021).

Against the backdrop of Shenyang's health-care ecosystem, where an array of hospitals, both public and private, cater to the diverse health-care needs of the region's populace, understanding the nuances of strategic management becomes paramount. As health-care systems grapple with budget constraints, evolving regulations, and dynamic patient preferences, the strategic choices hospitals make determine their resilience, adaptability, and ability to seize opportunities for growth (Liu et al., 2021).

The gap in existing research pertaining to the strategic management practices in Shenyang's hospitals, specifically concerning the alignment between organizational goals and operational execution, underscores the need for a comprehensive investigation into this crucial aspect of health-care management. While the topic of strategic management within health-care systems has garnered attention in various contexts, the unique dynamics and challenges faced by hospitals in Shenyang have yet to be thoroughly explored. Existing research in strategic management within health-care often emphasizes overarching strategies and their impact on organizational performance. However, limited attention has been directed towards the practical translation of these strategies into actionable operational plans, especially within the context of Shenyang's hospitals. As health-care providers are tasked with reconciling complex and diverse goals – such as financial sustainability, quality patient care, and meeting regulatory requirements – there is a dearth of empirical studies that delve into the intricate interplay between high-level objectives and the day-to-day operations of these hospitals. Moreover, the rapid evolution of the health-care landscape in China, marked by reforms, technological advancements, and changing patient expectations, necessitates an up-to-date exploration of strategic management practices. The existing body of research may not adequately capture the nuances of these developments, particularly as they relate to Shenyang's hospitals. As such, there is a distinct research gap in understanding how hospitals in Shenyang are navigating this evolving terrain, ensuring that their strategic decisions effectively guide their operational endeavors. Furthermore, the contextual factors specific to Shenyang – such as the unique blend of public and private hospitals, the demographic characteristics of the population, and the local health-care policies – introduce complexities that demand focused attention. How these contextual factors influence the alignment between strategic objectives and operational execution remains an uncharted territory in the literature.

This dissertation seeks to traverse the intricacies of strategic management within Shenyang's hospitals, with a focused lens on the alignment between organizational agility and operational efficiency. By exploring the strategies devised by these hospitals, evaluating their translation into actionable plans, and delving into the factors that facilitate or hinder this alignment, this study endeavors to contribute insights that hold the potential to refine the strategic landscape of health-care management in the region. Through an in-depth examination of

the strategic management processes, this research aims to uncover the mechanisms employed by Shenyang's hospitals to ensure that their operational pursuits resonate with their overarching goals. The study also seeks to identify best practices and potential areas of improvement that can guide hospital leaders, policymakers, and stakeholders in their pursuit of optimized strategic management practices. The investigation into the alignment between organizational goals and operational execution in Shenyang's hospitals is not just a study of management principles, but a pursuit with far-reaching implications for the health and well-being of the population they serve. As the pages of this dissertation unfold, a comprehensive narrative will emerge, shedding light on the complex dynamics that shape the strategic direction of these health-care institutions and the manner in which this direction finds expression in the daily delivery of care

Objectives of the Study - The study aimed to examine the strategic management practices, operational efficiency and organizational agility among Shenyang hospitals in China that will be the basis in developing a corporate performance framework. Specifically, it determined the strategic management practices as to strategic alignment, strategic flexibility and strategic commitment; assessed the operational efficiency in terms of cost efficiency, responsiveness and accessibility; described the organizational agility as to technological agility, operational agility and cultural agility; tested the significant relationship among strategic management practices, operational efficiency and organizational agility and developed an innovative organizational performance framework for hospitals.

2. Methods

Research Design - This study utilized a descriptive approach. Descriptive research aims to comprehensively depict a group of individuals, events, or phenomena. It was appropriate for identifying characteristics, frequencies, trends, and classifications. It proved valuable when dealing with less known subjects or issues. The study employed literature analysis, questionnaire surveys, and mathematical statistics. A descriptive approach allowed for a thorough exploration and understanding of the research variables, including strategic management practices, organizational agility, and operational efficiency. This approach was particularly suitable when aiming to capture a holistic view of the phenomenon under investigation. Shenyang's hospitals were operating within a specific contextual environment, and a descriptive approach enabled the researcher to provide a clear and accurate depiction of how strategic objectives are translated into operational plans and executed within this unique context.

A descriptive approach was valuable for providing initial insights into the research variables. It allowed the researcher to document the current state of strategic management practices, identify patterns, and highlight potential gaps or challenges in alignment. By utilizing descriptive analysis, the researcher delved deep into the processes, mechanisms, and factors related to strategic alignment. This method allowed for a comprehensive understanding of the complex interplay amongst strategic management practices, operational efficiency and organizational ability. Descriptive analysis often involved quantitative data, which can offer nuanced insights into the motivations, perceptions, and experiences of various stakeholders within the hospitals. This depth of understanding was crucial for identifying the root causes of alignment issues. A descriptive approach serves as a foundational step that can inform future research endeavors. The insights gained from this initial exploration can guide the development of more targeted studies or interventions to enhance strategic alignment in hospitals. The findings from a descriptive study provided hospital administrators, policymakers, and stakeholders with valuable information for informed decision-making. This included adjusting strategic planning processes and improving operational execution to better align with organizational goals. The data obtained from a descriptive approach contributed to building or refining the theoretical framework that guides the study. It helped in identifying key concepts, relationships, and variables that are relevant to the research context.

This study aimed to investigate three key research variables: the strategic management practices established by hospitals in Shenyang, the strategies and mechanisms employed by these hospitals, operational efficiency, and organizational agility within Shenyang's health-care institutions. Grounded in a specific theoretical framework

and informed by pertinent literature, this study assessed the current status of these variables through an extensive review of literature pertaining to strategic management practices, operational efficiency, and organizational agility. The chosen methodology entailed a descriptive analysis to quantify and establish correlations among these variables. Ultimately, the researcher conducted a comprehensive discussion and analysis of the findings, underpinned by appropriate theoretical frameworks.

Research Locale - Shenyang, China was the place of study. It basically included three hospitals situated and operating in the said province: Shenyang 242 Hospital, The Peoples Hospital of Liaoning Province, and Shenjing Hospital of China Medical University. Shenyang, as the capital city of Liaoning Province, holds significant importance as a medical hub in northeastern China. With the presence of notable hospitals like Shenyang 242 Hospital, The Peoples Hospital of Liaoning Province, and Shenjing Hospital of China Medical University, the city offers an ideal setting to investigate the strategic management practices within the context of health-care institutions. The inclusion of three distinct hospitals in the study provided a comprehensive view of the diverse health-care settings and practices within Shenyang. Analyzing the strategic management practices across these varied health-care institutions offered insights into the commonalities and differences in operational execution, contributing to a nuanced understanding of the organizational dynamics in the health-care sector.

Shenyang, like many other cities in China, faced unique health-care challenges and opportunities due to factors such as population demographics, disease prevalence, and socio-economic conditions. Investigating the alignment between organizational goals and operational execution within the context of these challenges shed light on effective strategic management approaches tailored to the specific needs of the region. Shenjing Hospital of China Medical University was closely associated with an academic institution, providing an environment conducive to studying the integration of academic and health-care practices. Examining the strategic management practices within this collaborative setting revealed insights into how academic-industry partnerships influence the alignment between organizational goals and operational execution in the health-care sector. Shenyang's position as a key city within Liaoning Province makes it a microcosm of the larger health-care landscape in China. Understanding the strategic management practices in Shenyang's hospitals can offer valuable implications for national-level health-care policies and initiatives, contributing to the advancement of health-care management practices on a broader scale. By focusing on the hospitals in Shenyang, China, the study provided a comprehensive understanding of the strategic management practices within the context of the region's health-care institutions, leading to insights that can be applied not only at the local level but also to inform broader health-care management strategies in China.

Participants of the Study - In a study focusing on "Strategic Management Practices in Shenyang's Hospitals: A Study of Alignment Between Organizational Goals and Operational Execution," the researcher included the following respondents: Hospital Executives and Leadership: This includes CEOs, COOs, CFOs, and other high-level executives responsible for setting and implementing the hospital's strategic goals. Department Heads and Managers: Department heads and managers can offer insights into how operational plans are developed and executed within their specific areas of responsibility. Medical and Clinical Staff: Physicians, nurses, and other medical professionals can provide insights into how the strategic objectives of the hospital impact clinical practices and patient care. Administrative Staff: Administrative staff members can offer perspectives on how operational plans are executed in non-clinical departments, such as finance, human resources, and administration. Quality Improvement Teams: These teams are responsible for ensuring that operational plans align with quality and safety goals, making them valuable respondents. Frontline Staff: Frontline employees who directly interact with patients and carry out day-to-day tasks can provide insights into the practical execution of operational plans.

In the selection of the actual participants, purposive sampling technique was employed. Purposive sampling allowed the researcher to select participants who are directly relevant to the research objectives. In this case, the objective was to understand the alignment between organizational goals and operational execution within hospitals. By including Hospital Executives and Leadership, Department Heads and Managers, Medical and Clinical Staff, Administrative Staff, Quality Improvement Teams, and Frontline Staff, the researcher ensured

representation from key stakeholders who can provide comprehensive insights into strategic management practices. Raosoft online sample size calculator was employed to obtain the sample size. Currently, Shenyang 242 Hospital has 516 employees. The Peoples Hospital of Liaoning Province houses 2300 workforce. Then, Shenjing Hospital of China Medical University encompass 7, 394. Combined population will be 10, 210. Using Calculator.net (Online Sample Size Calculator), the computed sample size was be 384. Below is the distribution of population and sample size per hospital included in this study

Name of Hospital	Total Population	Sample
Shenyang 242 Hospital	516	22
The Peoples Hospital of Liaoning Province	2300	94
Shenjing Hospital of China Medical University	7, 394	268
TOTAL	10, 210	384

Instrument of the Study - This study used self-made questionnaire composed of three parts to investigate: Part I assessed the current strategic management practices employed by hospitals in Shenyang in terms of strategic alignment, strategic flexibility and strategic commitment. Each domain was composed of ten items. Part II assessed the operational efficiency of hospitals in Shenyang in terms of cost efficiency, responsiveness and accessibility. Each domain was composed of 10 items. Part III described the organization agility in Shenyang hospitals as to technological agility, operational agility and cultural agility. Each domain was composed of 10 items.

The questionnaire utilized a 4-point Likert scale to describe and analyze the responses of the respondents in each item. Validity of the Questionnaire. To attain validity, three experts in the field of study and graduate professors were asked to validate the survey questionnaire first. Comments and suggestion from the panel experts were incorporated in the revision. Then, it was submitted to them for final approval. Reliability Test. This was done by conducting a pilot testing of the validated questionnaire to 30 combined hospital executives and leaders, department heads and managers, medical staff and clinical staff, administrative staff, quality improvement teams, and frontline staff were no longer be included in the actual conduct of the study. Crocker et al. (1986) pointed out that using the α coefficient is better than the halving method to estimate the internal consistency coefficient. When preparing questionnaires, the α coefficient is often used as one of the measurement reliability data. In the field of social sciences, the use rate of the α coefficient is the highest.

Table A

Reliability Summary Table – Strategic Management Practices, Strategic Alignment and Strategic Commitment Instrument

Indicators	Cronbach Alpha	Remarks
Strategic Management Practices, Strategic Alignment and Strategic Commitment Instrument	.830	Good
Per variable		
Strategic Management Practices	.852	Good
Strategic Alignment	.965	Excellent
Strategic Flexibility	.959	Excellent
Strategic Commitment	.964	Excellent
Operational Efficiency	.879	Good
Cost Efficiency	.996	Excellent
Responsiveness	.969	Excellent
Accessibility	.968	Excellent
Organizational Agility	.874	Good
Technological Agility	.957	Excellent
Operational Agility	.969	Excellent
Cultural Agility	.954	Excellent

George and Mallery (2003) provide the following rules of thumb: “_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable”

Based on result, the Strategic Management Practices, Strategic Alignment and Strategic Commitment Instrument has an Good consistency as exhibited by the Cronbach’s Alpha value of (.830). This was validated by the Good remark from Strategic Management Practices (.852); it was confirmed by the Excellent results from

Strategic Alignment (.965), Strategic Alignment (.959), and Strategic Commitment (.964). Also, it was validated by the good remark from Strategic Alignment (.879); it was confirmed by the Excellent results from Cost Efficiency (.996), Responsiveness (.969), and Accessibility (.968). It was further validated by the Good result from Strategic Commitment (.874); it was confirmed by the Excellent results from Technological Agility (.957), Operational Agility (.969), and Cultural Agility (.954); which shows that the instrument at hand passed the reliability index test. Thus, the researcher can now proceed to the actual survey using the aforementioned instrument. Once the validation, comments and suggestions from the experts are incorporated in the revised questionnaire. Then it will be pilot-tested to obtain the reliability of the instruments. If the results of the Cronbach Alpha analysis showed that all the domains included in the questionnaire are reliable, no further changes will be made. Otherwise, the researcher will be improving the questionnaire then administer another pilot-testing until the required consistency is achieved. Summary results of the reliability test will be included in this part in tabular form.

Data Gathering Procedure - The investigator made use of electronic questionnaires that were gathered via the WeChat platform's "Questionnaire Star" application. An official request to perform a pilot test for 30 hospital executives and leaders, department heads and managers, medical staff and clinical staff, administrative staff, quality improvement teams, and front-line staff was sent in writing to the hospital administrators of Raffles Medical Dalian, Dalian Municipal Central Hospital and the Bethune First Hospital of Jilin University. After retrieving the questionnaires, the answers were coded in excel format and sent to the University research center using SPSS where the data were analyzed and studied. The researcher sent the questionnaire through "Questionnaire Star" after it had already been validated and achieved acceptable internal consistency or reliability.

Data Analysis - The following statistical tools were employed in the analysis of the data to be provided by the selected respondents: Weighted Mean. It was used to describe range of the current strategic management practices employed, encompassing strategic planning, resource allocation, and performance measurement. This was utilized in quantifying and describing the alignment of the organization goals set by hospitals in Shenyang in terms of objective specificity, alignment with mission and vision, and stakeholder engagement. Lastly, this was maximized to provide analysis of the impact of the operational execution on the overall performance and efficiency of the hospitals in relation to process efficiency, quality of care delivery, and resource optimization. A four-point Likert Scale. It was used to measure the current strategic management practices employed, encompassing strategic planning, resource allocation, and performance measurement. This was utilized in measuring the alignment of the organization goals set by hospitals in Shenyang in terms of objective specificity, alignment with mission and vision, and stakeholder engagement. Lastly, this was applied to gauge the impact of the operational execution on the overall performance and efficiency of the hospitals in relation to process efficiency, quality of care delivery, and resource optimization. t-test. This was employed in determining the relationship among current strategic management practices employed, alignment of the organizational goals and impact of the operational execution on the overall performance and efficiency of the hospitals in Shenyang, China.

Ethical Considerations - In order to maintain the integrity of the scrutiny process, the researcher ensured the strict adherence to ethical considerations. Prior to involving respondents and participants in the study, the researcher provided informed consent documents, ensuring that participation is voluntary and not coerced. Throughout the study, maintaining confidentiality was of paramount importance. Prior to data collection, the researcher underscored the significance of safeguarding confidentiality, trustworthiness, and the privacy of personal information. At the outset of the data collection phase, respondents received comprehensive information about the study's objectives. Proper citation of other researchers' works followed using the APA style. Lastly, the researcher took responsibility for any harm caused during the research process.

3. Results and discussion

Table 1

Summary Table on Strategic Management Practices

Key Result Areas	Composite Mean	VI	Rank
Strategic Alignment	2.94	Moderate Extent	3
Strategic Flexibility	3.04	Moderate Extent	1
Strategic Commitment	3.03	Moderate Extent	2
Grand Composite Mean	3.00	Moderate Extent	

Legend: 3.50-4.00=Great Extent; 2.50-3.49=Moderate Extent; 1.50-2.49=Low Extent; 1.00-1.49=Very Low Extent

In the assessment of key result areas, the organization exhibits a moderate extent of strategic alignment with a composite mean of 2.94, indicating a level of coherence between organizational objectives and strategic actions. However, this suggests potential areas for improvement to ensure full alignment with strategic goals across all facets of the organization. Consequently, it's imperative for the organization to review its processes comprehensively, identifying opportunities to bolster alignment. This could entail enhancing communication channels for strategic objectives throughout the organization and ensuring consistent direction across all departments and functions.

Regarding strategic flexibility, the organization demonstrates a moderate extent with a composite mean of 3.04, signifying a certain degree of adaptability and responsiveness to changes in the business environment. This flexibility implies the organization's ability to adjust strategies effectively in response to external factors like market dynamics and competitive pressures. Yet, there remain opportunities to further refine this agility, potentially through the implementation of processes for regular strategic reviews and scenario planning. Such measures would enable the organization to anticipate and navigate future challenges and opportunities more effectively. Furthermore, in terms of strategic commitment, the organization displays a moderate extent with a composite mean of 3.03, reflecting a reasonable dedication to the implementation of strategic initiatives. This underscores the organization's investment in executing strategic plans and realizing long-term goals. Nevertheless, there's room for reinforcement of this commitment, potentially by ensuring appropriate resource allocation to support strategic priorities and fostering strong leadership buy-in to drive implementation efforts.

Overall, the grand composite mean of 3.00 suggests a moderate extent across all key result areas. While this indicates strengths in strategic management practices, it also highlights areas for improvement. Consequently, the organization should concentrate on leveraging its existing strengths while addressing identified weaknesses in the strategic management process. This entails ongoing monitoring and evaluation of strategic initiatives to ensure continuous improvement and alignment with organizational goals, thus fostering sustainable success in the long term.

Stated results coincide with the study by Omalaja et al. (2021) which indicated that indicated that several strategic management practices, such as strategic planning, competitive analysis, and performance measurement, were commonly adopted by organizations to a moderate extent. This suggests that while these practices are widespread, they may not be fully optimized or consistently implemented across all organizations.

Table 2

Summary Table on Operational Efficiency

Key Result Areas	Composite Mean	VI	Rank
Cost Efficiency	2.89	Moderate Extent	3
Responsiveness	2.96	Moderate Extent	2
Accessibility	2.98	Moderate Extent	1
Grand Composite Mean	2.94	Moderate Extent	

Legend: 3.50-4.00=Great Extent; 2.50-3.49=Moderate Extent; 1.50-2.49=Low Extent; 1.00-1.49=Very Low Extent

The composite means for all key result areas (Cost Efficiency, Responsiveness, and Accessibility) indicate that the hospital's operational efficiency is at a moderate extent across all dimensions. Cost Efficiency (Composite Mean: 2.89): Ranked third, cost efficiency shows a moderate level of operational efficiency. This

suggests that while the hospital is managing its resources and expenditures effectively to some extent, there are opportunities for further improvement to optimize costs without compromising quality.

Responsiveness (Composite Mean: 2.96): Ranked second, responsiveness indicates a moderate level of agility and ability to meet patient needs promptly. This suggests the hospital is somewhat effective in responding to dynamic health-care demands, though there is room to enhance its responsiveness to improve patient care and satisfaction further.

Accessibility (Composite Mean: 2.98): Ranked first, accessibility has the highest composite mean, reflecting the hospital's moderate success in ensuring that health-care services are broadly available and easily accessible to diverse patient populations. While this is a positive sign, continuous efforts are needed to maintain and improve accessibility to ensure equitable health-care delivery.

The grand composite mean of 2.94 indicates a moderate extent of operational efficiency across all key result areas. This overall assessment suggests that the hospital is performing adequately but has significant opportunities for improvement in all areas to reach a higher level of efficiency and effectiveness. To enhance operational efficiency, the hospital should focus on optimizing cost efficiency, improving responsiveness to patient needs, and maintaining high accessibility standards. This may involve implementing cost-saving measures, streamlining processes to reduce response times, and ensuring that services remain accessible to all patients.

Above results align with the study of Xie et al. (2017) which revealed significant regional variations in cost efficiency among hospitals, influenced by resource utilization and local economic conditions. Hospital responsiveness, evaluated through patient satisfaction surveys, indicated that there is room for improvement in meeting patient needs to boost overall efficiency. Additionally, the study highlighted that urban hospitals generally have better accessibility than rural ones, pointing to disparities in health-care access across different regions.

Table 3
Summary Table on Organizational Agility

Key Result Areas	Composite Mean	VI	Rank
Technological Agility	3.03	Moderate Extent	1
Operational Agility	2.98	Moderate Extent	2
Cultural Agility	2.94	Moderate Extent	3
Grand Composite Mean	2.98	Moderate Extent	

Legend: 3.50-4.00=Great Extent; 2.50-3.49=Moderate Extent; 1.50-2.49=Low Extent; 1.00-1.49=Very Low Extent

The composite mean of 2.98 suggests a moderate extent of organizational agility across key result areas, indicating that hospitals have a foundation of agility but also areas for improvement. Technological Agility (Composite Mean: 3.03, Rank: 1): Hospitals demonstrate the highest level of technological agility, indicating a strong ability to adopt and integrate cutting-edge technologies to adapt to evolving medical advancements and enhance patient care.

Operational Agility (Composite Mean: 2.98, Rank: 2): Hospitals exhibit moderate operational agility, suggesting that while they have the ability to adjust operations to meet changing demands and optimize patient care delivery, there is still room for improvement in operational strategies.

Cultural Agility (Composite Mean: 2.94, Rank: 3): Cultural agility ranks slightly lower than technological and operational agility, indicating that hospitals have a moderate level of cultural adaptability and responsiveness to diverse patient backgrounds, but there is potential for enhancement in fostering a more culturally agile environment.

The moderate level of organizational agility observed in hospitals indicates a fundamental capacity for adaptability across crucial domains, albeit with room for advancement. To elevate organizational agility,

hospitals must prioritize several key initiatives. Firstly, a sustained commitment to investing in technological advancements is imperative, coupled with the cultivation of a culture that embraces technological change. This approach not only fosters innovation but also enhances patient care outcomes. Secondly, hospitals should focus on refining operational strategies to effectively respond to evolving demands and optimize the delivery of patient care services. Lastly, there is a pressing need to enhance cultural adaptability and responsiveness to accommodate the diverse backgrounds and needs of patients, fostering an environment of inclusivity and personalized health-care experiences. By addressing these critical areas, hospitals can fortify their overall organizational agility, thereby enhancing efficiency, fostering innovation, and improving responsiveness to patient needs.

This study by Derksen et al. (2018) provides valuable insights into strategies for enhancing organizational agility in health-care settings. It emphasizes the significance of investing in technological advancements, improving operational strategies, and enhancing cultural adaptability, which aligns with the recommendations outlined for hospitals to strengthen their agility. By drawing from the findings and recommendations of this study, health-care organizations can gain valuable guidance on how to cultivate agility effectively, thereby improving their responsiveness to change and innovation capabilities.

Table 4*Relationship Between Strategic Management Practices and Operational Efficiency*

Variables	rho	p-value	Interpretation
Strategic Alignment			
Cost Efficiency	-0.014	0.786	Not Significant
Responsiveness	-0.070	0.173	Not Significant
Accessibility	0.020	0.691	Not Significant
Strategic Flexibility			
Cost Efficiency	-0.050	0.325	Not Significant
Responsiveness	-0.005	0.917	Not Significant
Accessibility	0.116*	0.023	Significant
Strategic Commitment			
Cost Efficiency	0.057	0.266	Not Significant
Responsiveness	-0.071	0.167	Not Significant
Accessibility	-0.031	0.546	Not Significant

*. Correlation is significant at the 0.05 level

As seen in the table, the computed rho-values ranging from -0.014 to -0.070 indicate a very weak indirect relationship between strategic alignment and the sub variables of operational efficiency namely cost efficiency and responsiveness while the computed rho-value of 0.020 indicate a very weak direct relationship between strategic alignment and accessibility. There was no statistically significant relationship between strategic alignment and the sub variables of operational efficiency because the obtained p-values were greater than 0.05.

As seen in the table, the computed rho-values ranging from -0.005 to -0.050 indicate a very weak indirect relationship between strategic flexibility and the sub variables of operational efficiency namely cost efficiency and responsiveness while the computed rho-value of 0.116 indicate a very weak direct relationship between strategic flexibility and accessibility. There was a statistically significant relationship between strategic flexibility and accessibility because the obtained p-value was less than 0.05.

The computed rho-value of 0.057 indicates a very weak direct relationship between strategic commitment and cost efficiency while the computed rho-values ranging from -0.031 to -0.071 indicate a very weak indirect relationship between strategic commitment and the sub variables of operational efficiency namely responsiveness and accessibility. There was no statistically significant relationship between strategic commitment and the sub variables of operational efficiency because the obtained p-values were greater than 0.05.

The findings from the analysis suggest that there is a very weak indirect relationship between strategic alignment and the sub-variables of operational efficiency, namely cost efficiency and responsiveness. Similarly,

the relationship between strategic flexibility and the sub-variables of operational efficiency also appears to be very weak and indirect. However, there is a very weak direct relationship between strategic alignment and accessibility, and a statistically significant relationship between strategic flexibility and accessibility, indicating potential areas for improvement. Despite these weak associations, it is noteworthy that no statistically significant relationship was found between strategic alignment/commitment and the sub-variables of operational efficiency, implying that other factors beyond strategic factors might be influencing operational efficiency in hospitals. Overall, these results underscore the complexity of the relationship between strategic management practices and operational efficiency in health-care settings, suggesting a need for further investigation and possibly the consideration of additional variables in future studies aiming to improve hospital performance and efficiency.

The study by Arab et al. (2015) corroborates with the present findings as mentioned above as it explores the relationship between strategic management practices, particularly in the realm of human resource management, and hospital performance. While it does not directly examine the relationship between strategic alignment, flexibility, commitment, and operational efficiency, it provides insights into how strategic management practices can influence hospital performance. By drawing from the findings of this study, health-care organizations can gain valuable insights into the strategic factors that impact operational efficiency and identify potential areas for improvement. Additionally, the study underscores the importance of aligning strategic management practices with organizational goals to enhance overall hospital performance.

Table 5
Relationship Between Strategic Management Practices and Organizational Agility

Variables	rho	p-value	Interpretation
Strategic Alignment			
Technological Agility	-0.008	0.873	Not Significant
Operational Agility	-0.016	0.758	Not Significant
Cultural Agility	0.006	0.913	Not Significant
Strategic Flexibility			
Technological Agility	0.021	0.678	Not Significant
Operational Agility	0.006	0.902	Not Significant
Cultural Agility	-0.013	0.801	Not Significant
Strategic Commitment			
Technological Agility	0.053	0.298	Not Significant
Operational Agility	-0.010	0.838	Not Significant
Cultural Agility	-0.057	0.263	Not Significant

*. Correlation is significant at the 0.05 level

The computed rho-values ranging from -0.008 to -0.016 indicate a very weak indirect relationship between strategic alignment and the sub variables of organizational agility namely technological agility and operational agility while the computed rho-value of 0.006 indicates a very weak direct relationship between strategic alignment and cultural agility. The computed rho-value from 0.006 to 0.021 indicate a very weak direct relationship between strategic flexibility and the sub variables of organizational agility namely technological agility and operational agility while the computed rho-value of -0.013 indicate a very weak indirect relationship between strategic flexibility and cultural agility. The computed rho-value of 0.053 indicates a very weak direct relationship between strategic commitment and technological agility while the computed rho-values ranging from -0.010 to -0.057 indicate a very weak indirect relationship between strategic commitment and the sub variables of organizational agility namely operational agility and cultural agility. There was no statistically significant relationship between strategic management practices and organizational agility because the obtained p-values were greater than 0.05.

The analysis indicates a very weak relationship between strategic management practices and organizational agility, particularly in terms of technological agility, operational agility, and cultural agility. While there is a very weak direct relationship between strategic alignment and cultural agility, the relationships between strategic alignment/flexibility/commitment and technological agility, operational agility, and cultural agility are all very weak and mostly indirect. These findings suggest that strategic management practices may not have a significant

impact on enhancing organizational agility within the studied context. The lack of statistically significant relationships further underscores the limited influence of strategic management practices on organizational agility in this study. Stated findings affirm the study of Liang et al. (2019) which investigated relationship between strategic management practices and organizational agility in Chinese manufacturing firms. Through empirical analysis, the authors explore how strategic alignment, flexibility, and commitment influence technological, operational, and cultural agility within organizations. The findings reveal that while strategic management practices may have some influence on agility dimensions, the relationships are generally weak and mostly indirect.

Table 6*Relationship Between Operational Efficiency and Organizational Agility*

Variables	rho	p-value	Interpretation
Cost Efficiency			
Technological Agility	0.053	0.304	Not Significant
Operational Agility	-0.039	0.452	Not Significant
Cultural Agility	0.034	0.501	Not Significant
Responsiveness			
Technological Agility	0.024	0.635	Not Significant
Operational Agility	0.092	0.071	Not Significant
Cultural Agility	0.030	0.557	Not Significant
Accessibility			
Technological Agility	0.028	0.589	Not Significant
Operational Agility	-0.028	0.588	Not Significant
Cultural Agility	0.087	0.088	Not Significant

*. Correlation is significant at the 0.05 level

The computed rho-values ranging from 0.034 to 0.053 indicate a very weak direct relationship between cost efficiency and the sub variables of organizational agility namely technological agility and cultural agility while the computed rho-value of -0.039 indicates a very weak indirect relationship between cost efficiency and operational agility. The computed rho-values ranging from 0.024 to 0.092 indicate a very weak direct relationship between responsiveness and the sub variables of organizational agility. The computed rho-values ranging from 0.028 to 0.087 indicate a very weak direct relationship between accessibility and the sub variables of organizational agility namely technological agility and cultural agility while the computed rho-value of -0.028 indicates a very weak indirect relationship between accessibility and operational agility. There was no statistically significant relationship between operational efficiency and organizational agility because the obtained p-values were greater than 0.05.

The results suggest a very weak direct relationship between cost efficiency and certain dimensions of organizational agility, such as technological and cultural agility, while indicating a very weak indirect relationship with operational agility. Similarly, responsiveness shows a very weak direct relationship with organizational agility across various dimensions. Accessibility also demonstrates a very weak direct relationship with technological and cultural agility but a very weak indirect relationship with operational agility. The lack of statistically significant relationship between operational efficiency and organizational agility further emphasizes the complexity of their interplay. These findings imply that while there may be some associations between cost efficiency, responsiveness, accessibility, and organizational agility, they are minimal and may not significantly contribute to enhancing agility within organizations.

Above findings are attested by the study of Feng et al. (2020) which found that while there were some correlations between cost efficiency and agility dimensions, they were weak and often indirect. This aligns with the results described above, suggesting a consistent trend across different sectors regarding the limited influence of cost efficiency on organizational agility.

Table 7
Proposed Innovative Organizational Framework for Hospitals

Key Results Area	Objectives	Strategies	Person/s Involved	Duration	Success Indicators
Strategic Management Practices (Strategic Alignment)	To enhance the strategic management practices, particularly strategic alignment, within hospitals in China, with a focus on optimizing organizational goals, objectives, and actions to ensure alignment with evolving health-care landscapes and patient needs	Strategy 1: Establish Clear Communication Channels	Hospital administrator department heads, and staff members	Implementation can begin immediately, with ongoing monitoring and adjustments as needed.	Increased understanding of organizational goals and objectives among staff. Enhanced clarity regarding strategic priorities and initiatives. Improved alignment of individual and departmental activities with overall organizational strategies.
		Strategy 2: Implement Regular Strategic Reviews	Hospital leadership team, department heads, and key stakeholders.	Conduct strategic reviews quarterly or biannually, with periodic updates and adjustments.	Identification of emerging trends, opportunities, and challenges affecting the health-care landscape. Enhanced adaptability and responsiveness to changes in the external environment. Improved alignment of strategic actions with current organizational goals and objectives.
		Strategy 3: Foster Collaboration and Cross-Functional Integration	Hospital leadership, department heads, and staff from various departments.	Implement cross-functional collaboration initiatives as ongoing practices	Increased interdisciplinary cooperation and communication. Enhanced synergy and alignment of efforts across departments. Achievement of shared goals and objectives through collective action. Improved patient outcomes and satisfaction as a result of integrated health-care delivery.
Operational Efficiency (Cost Efficiency)	To enhance the operational efficiency, particularly cost efficiency, of hospitals in China, with the aim of optimizing resource utilization, reducing operational costs, and improving the overall financial health of health-care institutions.	Strategy 1: Implement Lean Management Practices	Hospital administrator department heads, process improvement teams, and frontline staff.	Initiate Lean initiatives immediately, with ongoing training and implementation	Reduction in waste and non-value-added activities. Streamlined processes leading to improved workflow efficiency. Cost savings achieved through optimized resource utilization. Increased employee engagement and empowerment
		Strategy 2: Invest in Technology and Automation	Hospital administrator IT department, procurement team, and relevant stakeholders.	Roll out technology and automation initiatives over a defined timeline, with continuous updates and improvements.	Enhanced accuracy and efficiency in administrative and clinical tasks Reduction in manual errors and paperwork, leading to cost savings. Improved data management and analytics capabilities for informed decision-making. Increased patient satisfaction through streamlined processes and enhanced service delivery

Organizational Agility (Cultural Agility)	To enhance Organizational Agility, specifically Cultural Agility, aiming to create a culturally sensitive and inclusive environment within the organization that fosters responsiveness, adaptability, and innovation in addressing the diverse needs of patients and staff.	Strategy 3: Implement Cost Reduction Initiatives	Hospital administrator finance department, procurement team, and department heads.	Launch cost reduction initiatives as part of annual budget planning, with regular reviews and adjustments.	Identification and elimination of unnecessary expenses and inefficiencies. Negotiation of favorable contracts with suppliers and service providers. Implementation of energy-saving measures to reduce utility costs. Achievement of targeted cost reduction goals while maintaining or improving service quality.
		Cultural Competency Training	All staff members, including executives, managers, and frontline employees.	Ongoing training sessions conducted regularly throughout the year, with refresher courses annually.	Increased staff awareness and understanding of cultural diversity. Improved communication and collaboration among staff from diverse backgrounds. Enhanced ability to deliver culturally sensitive care and services to patients. Positive feedback from patients and staff regarding cultural inclusivity.

4. Conclusions and recommendations

Respondents confirmed a moderate extent of strategic management practices, including strategic alignment, flexibility, and commitment. Respondents revealed a moderate extent of operational efficiency across key areas, including cost efficiency, responsiveness, and accessibility. Respondents disclosed a moderate extent of organizational agility across key areas, including technological agility, operational agility, and cultural agility. Strategic management practices have a negligible relationship with operational efficiency in hospitals, suggesting that other factors may play a more significant role in determining efficiency. Also, there is a very weak and non-significant relationship between strategic management practices and organizational agility in hospitals, with correlations indicating minimal impact on technological, operational, and cultural agility dimensions. Lastly, there is a negligible and non-significant relationship between operational efficiency and organizational agility across various dimensions in hospitals.

Hospital Administrators and Executives may prioritize strategic management practices that foster alignment, flexibility, and commitment to organizational goals, ensuring they are integrated into all aspects of hospital operations. Additionally, they may invest in resources and support for initiatives aimed at enhancing operational efficiency and organizational agility, fostering a culture of innovation and continuous improvement within the hospital. Medical Staff and Care Providers may actively engage in strategic initiatives aimed at improving operational efficiency and organizational agility, contributing their insights and expertise to the development and implementation of innovative practices. Additionally, they should prioritize ongoing professional development to enhance their skills and adaptability, enabling them to effectively respond to changing health-care landscapes and deliver high-quality patient care. Patients and care recipients may advocate for hospitals to prioritize operational efficiency and organizational agility, ensuring that their health-care needs are met promptly and effectively. Additionally, they may actively participate in their own care plans, communicate openly with medical staff, and provide feedback to support continuous improvement efforts aimed at enhancing overall health-care quality and responsiveness. Future researchers may explore the potential impact of external factors, such as regulatory policies and economic conditions, on the relationship between strategic management practices, operational efficiency, and organizational agility in hospital settings. Additionally, conducting longitudinal studies to track changes over time and exploring the role of emerging technologies in enhancing organizational agility may provide valuable insights for health-care management and policy development.

5. References

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