
The Influence of Cost Leadership Strategy, Differentiation Strategy and Innovative Capability on the Organizational Performance of Indonesian Army Hospitals Mediated by the Strategy Flexibility

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doi.org/10.51505/IJEBMR.2025.91116 URL: <https://doi.org/10.51505/IJEBMR.2025.91116>

Received: Oct 27, 2025

Accepted: Nov 03, 2025

Online Published: Nov 25, 2025

Abstract

This study analyzes the impact of cost leadership strategy, differentiation strategy, and innovative capability on the organizational performance of Indonesian National Military Hospitals (TNI Hospitals), with strategy flexibility serving as a mediating variable. Utilizing a quantitative approach, data were collected from 210 respondents across seven Type B military hospitals in Indonesia through purposive sampling. Analysis was conducted using Structural Equation Modeling (SEM) with Partial Least Squares (PLS), and the validity and reliability of the indicators were confirmed.

The findings indicate that cost leadership strategy, innovative capability, and strategy flexibility directly affect organizational performance. In contrast, the differentiation strategy does not significantly influence performance. Furthermore, the study illustrates how strategy flexibility enables TNI hospitals to effectively implement various strategies—cost leadership, differentiation, and innovation—thereby enhancing performance while maintaining their unique identity as military healthcare providers. This suggests that TNI AD hospitals can pursue these strategies without compromising the quality of care and while adhering to relevant regulations.

Keywords: Indonesian Army Hospital, cost leadership, differentiation, innovation, strategy flexibility.

1. Introduction

As healthcare institutions, hospitals play a vital role not only in providing medical services but also in effectively executing managerial and business functions. In this context, service quality is a crucial factor in determining patient satisfaction, loyalty, and the hospital's reputation. However, maintaining consistent service remains a challenge, including limited resources, varying medical personnel competencies, and demands for compliance with evolving regulations. One serious challenge emerging globally and nationally is antimicrobial resistance (AMR), a phenomenon where bacteria become resistant to commonly used antibiotics, increasing the risk of death, prolonging hospital stays, and increasing healthcare costs.

The Lancet Global Burden of Disease report, AMR caused more than 1.27 million deaths in 2019 and is expected to cause 10 million deaths per year by 2050 if there is no significant intervention (Kompas, 2024; WHO, 2024). In Indonesia, the Ministry of Health recorded a significant mortality rate of sepsis patients due to AMR, reaching 25.38% in 2022. In response, Indonesia has issued various policies, including *Coordinating Minister for Human Development and Culture Regulation Number 7 of 2021* and the inclusion of the Antimicrobial Resistance Control Program (PPRA) as part of hospital accreditation standards (Kemenkes, 2020). In the military environment, *Minister of Defense Regulation Number 22 of 2020* emphasizes the importance of implementing PPRA in Indonesian Army hospitals as part of efforts to improve service quality and operational readiness.

Despite being stipulated in policies and regulations, the implementation of PPRA in Indonesian Army hospitals, particularly in the Army, still faces various obstacles, such as limited microbiology laboratories, a shortage of specialist doctors, and the affordability of examination costs. Furthermore, Indonesian Army hospitals have unique characteristics because they operate in a hierarchical system, serve both military and civilian patients, and are under a centralized command structure. This requires an adaptive and integrated organizational strategy so that the antimicrobial resistance control program is not merely an administrative obligation but also part of the organization's overall performance improvement strategy.

In a managerial context, hospitals can adopt strategic approaches such as *cost leadership*, *differentiation*, and *innovative capability* to address the AMR challenge. A cost leadership strategy enables hospitals to reduce antibiotic costs without compromising service quality (Nathwani et al., 2019; Wilhem & Sinha, 2017), while a differentiation strategy enables the creation of added value through superior digital technology-based services such as electronic medical records and antibiotic restriction systems (De With et al., 2017; Saenz et al., 2020; Irmawanti & Andriani, 2025). On the other hand, innovative capability enables hospitals to develop solutions such as digital surveillance and the discovery of new vaccines (Patrick, 2025; Elbeheri, 2025). However, all of these strategies require support from *strategic flexibility*, the organization's ability to respond to environmental changes quickly and effectively (Diaz & Escoval, 2014).

This study focuses on the relationship between organizational strategies of cost leadership, differentiation, and innovative capability with *organizational performance* in Indonesian Army hospitals, mediated by strategic flexibility. PPRA is not only viewed as a clinical program, but as part of an organizational strategy that impacts operational performance (LOS, BOR), financial performance (cost efficiency), and patient satisfaction (Krishnamoorthy et al., 2025). This study fills a gap in the literature that has not yet extensively examined the integration between organizational strategy and PPRA, particularly in military hospitals with unique managerial and operational characteristics. Therefore, this study is expected to provide conceptual and practical contributions to improving the quality of military healthcare services and sustainably controlling antimicrobial resistance.

2. Literature Review

2.1. Cost Leadership Strategy

Cost Leadership Strategy is a generic strategy developed by Porter (1985) to gain competitive advantage by reducing production and operational costs as low as possible compared to competitors. This strategy focuses not only on cost efficiency but also on maintaining optimal service quality. In the hospital context, the implementation of this strategy can be seen in the Rational Antibiotic Use Control (RAP) program, which aims to reduce inappropriate antibiotic use, thereby achieving cost efficiency without compromising clinical quality. A study by Karanika et al. (2016) found that RAP can reduce antibiotic use by up to 34% and length of stay by 8.9%, which means direct efficiency in treatment costs and improved hospital performance. This was also confirmed by Ruis Ramos et al. (2017) who stated that RAP is concrete evidence of the implementation of a cost leadership strategy in a modern healthcare system.

2.2. Differentiation Strategy

Differentiation strategy is an approach adopted by an organization to create unique value that is difficult for competitors to imitate, whether through innovation, service quality, or a personalized approach (Porter, 1985). This strategy allows a company to charge premium prices because it is able to meet consumer needs in a way that is different from competitors (Wright, 1987). In healthcare services, especially hospitals, differentiation strategy is reflected in a commitment to quality and patient safety, for example in the implementation of the PPRA program which not only reduces antimicrobial resistance but also serves as an indicator of the hospital's seriousness in maintaining service quality (Dellit et al., 2007). The advantages of this strategy lie in high customer loyalty and control over market prices (Ketchen, 2012). However, Porter (2006) also warns of risks, such as changes in consumer preferences and the potential for imitation by competitors, which can erode the uniqueness of the product or service offered.

2.3. Focus Strategy

According to Porter (1985), a focus strategy emphasizes competitive advantage in a narrow market segment with a low-cost (cost focus) or high differentiation (differentiation focus) approach. This strategy is effective for organizations that excel in serving very specific market

needs. In the hospital context, this strategy can be applied by focusing on specialized services such as the ICU or NICU, where antibiotic use is more critical. Dellit et al. (2007) stated that a PPRA program focused on high-risk patient groups has been shown to reduce antimicrobial resistance and improve patient safety. However, in the context of an Indonesian Army hospital, this strategy is less relevant because military hospitals have a broad service mandate, making a narrow segmentation approach incompatible with comprehensive operational objectives.

2.4. Innovative Capability

Innovative capability refers to an organization's ability to create and implement new ideas to improve operational effectiveness and efficiency. Lawson and Samson (2001) state that innovative capability is a form of dynamic capability that enables organizations to continuously develop and adapt to change. The dimensions that shape innovative capability include sensing capability, combination capability, learning capability, and networking capability (Madanmohan, 2003; Lin et al., 2016). In the hospital context, innovative capability includes the ability to digitize medical data, implement advanced diagnostic technology, and establish innovative antimicrobial stewardship teams (Baur et al., 2017). These innovations contribute to improved service quality, reduced costs, and enhanced patient safety.

2.5. Strategy Flexibility

Strategic flexibility is an organization's ability to adapt to rapid and uncertain environmental changes. Hitt et al. (1998) state that strategic flexibility encompasses the ability to alter policy direction, organizational structure, and technology utilization according to external dynamics. Lau (2019) divides strategic flexibility into three stages: attention, assessment, and action. In the hospital context, strategic flexibility allows hospitals to adapt treatment guidelines, modify PPRA policies, and implement diagnostic innovations responsive to local resistance patterns. This strategy is considered capable of improving organizational competitiveness and performance, particularly in highly dynamic sectors such as healthcare (Nadkarni & Narayanan, 2007; Li et al., 2018).

2.6. Organizational Performance

Organizational performance is a multidimensional concept that reflects an organization's effectiveness in achieving its goals. Initially focused on efficiency and productivity (Taylor, 1911), it later expanded to include behavioral aspects and individual satisfaction (March & Simon, 1958), and finally to include financial and non-financial indicators (Kaplan & Norton, 1992). In the hospital context, organizational performance encompasses not only cost efficiency and service quality, but also patient satisfaction, safety, and institutional reputation (Casisini et al., 2019). The threat of antimicrobial resistance is a global challenge that directly impacts organizational performance. Therefore, strategies such as PPRA and *sustainable performance-based approaches* are crucial in maintaining competitiveness and service sustainability, including in military hospitals.

3. Framework

A conceptual framework is a conceptual foundation used to explain the logical flow of a research study or scientific paper. It describes how relevant theories, concepts, and empirical findings are integrated to answer the research problem or achieve the research objectives. The following is a conceptual framework used in research:

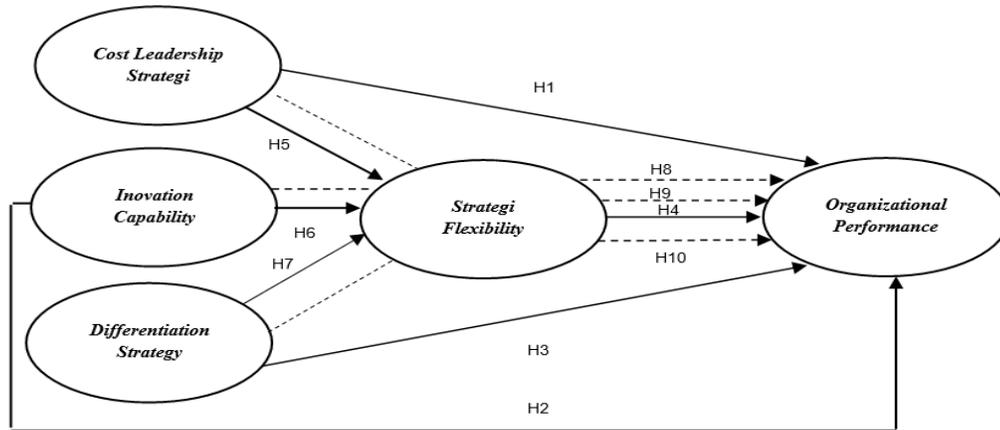


Figure 2.3. Framework.

This diagram illustrates the relationship between *Cost Leadership Strategy*, *Differentiation Strategy*, and *Innovative Capability* on Hospital *Organizational Performance*, both directly and indirectly through *Strategy Flexibility* as a mediating variable.

4. Research Methodology

4.1. Research Design

This study uses an **associative quantitative approach**, which aims to examine the relationship between variables by collecting and analyzing numerical data. The focus of the study is to analyze the influence of *Cost Leadership Strategy*, *Differentiation Strategy*, and *Innovative Capability* on *Organizational Performance*, with *Strategy Flexibility* as a mediating variable.

4.2. Research Variables and Measurement Indicators

Independent Variable:

- Cost Leadership Strategy (X1): Measured through the dimensions of cost, efficiency, innovation, and culture (9 indicators).
- Differentiation Strategy (X2): Measured through the dimensions of uniqueness, value, and retention (6 indicators).
- Innovative Capability (X3): Measured through 3 indicators of innovation capability.

Mediating Variable (Z):

Strategy Flexibility: Measured through the flexibility of products, technology, structure, and people (8 indicators).

Dependent Variable (Y):

- Organizational Performance: Measured through work quality, work quantity, knowledge, and cooperation (9 indicators).
- Measurement of all variables using a **5-point Likert Scale**.
-

4.3. Population and Sample

The population in this study were employees at seven Level II Indonesian Army Hospitals with a total population of 210 people, consisting of management and non-management categories. The research sample used non-probability sampling with a purposive sampling technique. The sample was selected based on criteria of involvement in strategic decision-making or use of hospital services.

4.4. Data Collection Techniques

Data were collected through a **closed-ended questionnaire** structured based on indicators for each variable. The questionnaire was distributed **online (Google Form)**. Each statement was measured using a **Likert scale** ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

4.5. Data Analysis Method

4.5.1. Descriptive Statistics:

Used to describe the characteristics of respondents and describe perceptions of each variable.

4.5.2. Partial Least Square - Structural Equation Modeling (PLS-SEM) :

Used to test the relationship between latent variables. Software: **SmartPLS 3.0**. The analysis stages include evaluation of *the outer model* (validity and reliability of indicators) and evaluation of *the inner model* (testing the relationship between constructs, direct and indirect effects).

5. Research Results and Discussion

5.1. Analysis of Research Results

The processing results for testing the research hypothesis are shown in the Hypothesis Testing table which consists of 10 hypothesis tests.

Hypothesis Testing Table

Hypothesis	Coefficient	t statistics	p value	Conclusion
H ₁ There is a positive and significant influence of <i>Cost leadership strategy</i> on the <i>organizational performance</i> of the Indonesian Army Hospital.	0.341	1.420	0.000	Hypothesis Supported
H ₂ There is no positive and significant influence of <i>differentiation strategy</i> on the <i>organizational performance</i> of the Indonesian Army Hospital.	-0.042	0.571	0.284	Hypothesis not supported
H ₃ There is a positive and significant influence of <i>Innovative capability</i> on the <i>organizational performance</i> of the Indonesian Army Hospital.	0.449	5,150	0.000	Hypothesis Supported
H ₄ There is a positive and significant influence of <i>Strategy Flexibility</i> on the <i>Organizational Performance</i> of the Indonesian Army Hospital.	0.388	3,829	0.000	Hypothesis Supported
H ₅ There is a positive and significant influence of the <i>Cost Leadership Strategy</i> on the <i>Strategy Flexibility</i> of the Indonesian Army Hospital.	0.324	5,657	0.000	Hypothesis Supported
H ₆ There is a positive and significant influence on the <i>differentiation strategy</i> of the Indonesian Army Hospital. towards <i>Strategy Flexibility</i>	0.279	3,328	0.000	Hypothesis Supported
H ₇ There is a positive and significant influence of <i>Innovative capability</i> on the <i>Strategy Flexibility</i> of the	0.431	7,998	0.000	Hypothesis Supported

Hypothesis	Coefficient	t statistics	p - value	Conclusion
Indonesian Army Hospital				
H8 There is a positive and significant influence of <i>Cost leadership strategy</i> on <i>Organizational performance of the Indonesian Army Hospital</i> mediated by <i>Strategy Flexibility</i>	0.126	2,982	0.001	Hypothesis Supported
H9 There is a positive and significant influence of <i>Differentiation strategy</i> on <i>Organizational performance of the Indonesian Army Hospital</i> mediated by <i>Strategy Flexibility</i>	0.108	2,780	0.003	Hypothesis Supported
H10 There is a positive and significant influence of <i>Innovative capability</i> on <i>Organizational performance of the Indonesian Army Hospital</i> mediated by <i>Strategy Flexibility</i>	0.167	3,120	0.001	Hypothesis Supported

*= α 10% **= α 5%. Source: Processed Research Data 2025

The results of the first hypothesis test (H1) show that cost leadership strategy has a positive and significant effect on the organizational performance of the Indonesian Army Hospital, with a coefficient value of 0.341 and a p-value of 0.000. This indicates that increasing cost efficiency and resource management has an impact on improving hospital performance. Meanwhile, the second hypothesis test (H2) shows that differentiation strategy does not have a significant effect on organizational performance, even a negative coefficient of -0.042 indicates the direction of the relationship that is opposite to the initial hypothesis, indicating that the implemented differentiation strategy has not been effective in improving performance.

In the third hypothesis (H3), it was found that innovative capability has a positive and significant effect on organizational performance with a coefficient of 0.449 and a p-value of 0.000. This indicates that the hospital's ability to create new innovations directly drives performance improvements. Furthermore, the results of testing the fourth hypothesis (H4) showed that strategic flexibility also has a significant effect on organizational performance, with a coefficient of 0.388 and a p-value of 0.000. This indicates that the more flexible a hospital's strategy is, the higher its performance in responding to environmental changes.

The fifth hypothesis (H5) tested the effect of cost leadership strategy on strategic flexibility, and the results showed a positive and significant effect with a coefficient of 0.324 and a p-value of 0.000. This means that an effectively implemented cost control strategy can increase the hospital's strategic flexibility. Similarly, the sixth hypothesis (H6) found that differentiation strategy also has a positive effect on strategic flexibility, with a coefficient of 0.279 and a p-value of 0.000, indicating that differentiation strategy, although not directly improving performance, can strengthen the hospital's strategic flexibility.

The seventh hypothesis (H7) proves that innovative capability has the strongest influence on strategic flexibility, with a coefficient of 0.431 and a p-value of 0.000. This indicates that the higher the innovative capability a hospital possesses, the more flexible the strategies it can develop to face challenges. Furthermore, the eighth hypothesis (H8) shows that strategic flexibility mediates the effect of cost leadership strategy on organizational performance with a coefficient of 0.126 and a p-value of 0.001, which proves that strategic flexibility strengthens the relationship between cost efficiency and hospital performance.

The ninth hypothesis (H9) also shows that strategy flexibility is able to mediate the effect of differentiation strategy on organizational performance, with a coefficient of 0.108 and a p-value of 0.003. This means that although differentiation strategy does not directly affect performance, its positive impact can be felt when integrated with strategic flexibility. Finally, in the tenth hypothesis (H10), it was found that innovative capability also affects organizational performance through the mediation of strategy flexibility, with a coefficient of 0.167 and a p-value of 0.001. This confirms that innovation capability accompanied by a flexible strategy plays a significant role in improving overall hospital performance.

5.2. *Discussion of Research Results*

5.2.1. The Influence of Cost Leadership Strategy on the Organizational Performance of the Indonesian Army Hospital

The results of the study indicate that cost leadership strategy has a positive and significant effect on the organizational performance of the Indonesian Army Hospital (estimated coefficient 0.341, p-value 0.000). This confirms that an effectively implemented cost-cutting strategy can improve efficiency and service quality in military hospitals. This strategy plays a crucial role in creating operational efficiency, reducing waste, and maximizing the use of available resources.

These findings are consistent with previous theory and research stating that a cost leadership strategy provides a competitive advantage through operational efficiency (Porter, 1980; Hill, 1988; Hansen et al., 2004). In the hospital context, this strategy even allows for improved service quality without increasing costs (Almehwari et al., 2024; Amin et al., 2013). Hammond et al. (2024) and Ghazali et al. (2015) emphasize that this strategy not only impacts financial aspects but also impacts service quality and human resource management. Geberetekle et al. (2021) also show that efficiency strategies such as antimicrobial stewardship can reduce the burden of care

costs while improving health outcomes, relevant to hospitals with limited resources such as the Indonesian Army.

5.2.2. The Influence of Differentiation Strategy on the Organizational Performance of the Indonesian Army Hospital

The findings indicate that differentiation strategy has no significant effect on organizational performance (coefficient -0.042, p-value 0.284), and the relationship is even negative. This indicates that the implementation of differentiation strategy at the Indonesian Army Hospital has not been able to significantly improve performance.

Unlike the private sector, military hospitals face limitations in terms of budget flexibility, internal bureaucracy, and non-profit objectives. Research by Trinh (2020) and Peng et al. (2020) shows that excessive service differentiation actually increases costs and decreases patient satisfaction due to complexity and inefficient coordination. In the context of Indonesian Army Hospitals, investment in superior services such as *automatic stop orders* is hampered by budget constraints and prioritization of needs.

Thus, the differentiation strategy commonly used to create unique services in the private sector has not been optimally implemented within the military organizational structure. This makes it ineffective in improving the organizational performance of Indonesian Army hospitals.

5.2.3. The Influence of Innovative Capability on the Organizational Performance of the Indonesian Army Hospital

Research shows that innovative capability has a positive and significant impact on the organizational performance of the Indonesian Army Hospital (coefficient 0.449, p-value 0.000). This indicates that the higher the hospital's innovation capability, the better the performance achieved.

Saunila (2017) stated that organizational structure, participatory leadership, and knowledge development are the foundations of innovation capabilities. Ozgun et al. (2022) added that innovative capabilities not only increase efficiency but also strengthen reputation and patient satisfaction. Moreira et al. (2017) also emphasized that integrating innovation into business strategy results in better organizational performance in both financial and non-financial aspects. In the context of the Indonesian Army Hospital, the ability to innovate for example, in addressing antimicrobial resistance is key to cost efficiency, reputation, and service quality.

5.2.4. The Influence of Strategy Flexibility on the Organizational Performance of the Indonesian Army Hospital

The results of the study showed that strategic flexibility had a positive and significant impact on organizational performance (coefficient 0.388, p-value 0.000). Indonesian Army Hospitals that were able to adapt to environmental changes were shown to have better performance.

This is in line with Volberda (1996), Nadkarni & Narayanan (2007), and Combe & Greenley (2004), who stated that organizations with high flexibility are able to survive and thrive in dynamic environments. Flexibility allows for adjustments to changes in patient demand, medical technology, and regulations. Sushil (2005) and Awais et al. (2023) also support that the ability to respond quickly increases resource efficiency and strengthens service performance. Flexible strategies are particularly relevant for Indonesian Army Hospitals operating in various regions of Indonesia with complex and changing operational challenges.

5.2.5. The Influence of Cost Leadership Strategy on the Strategy Flexibility of the Indonesian Army Hospital

The findings indicate that cost leadership strategy has a positive and significant effect on strategy flexibility (coefficient 0.324, p-value 0.000). The cost efficiency achieved through this strategy provides the hospital with room to be more adaptive and responsive to change.

Porter (1980) and Hitt et al. (2007) emphasize that cost control allows organizations to have more resources to support innovation and strategic flexibility. Slack & Lewis (2011) and Cousins et al. (2008) state that this efficiency creates a strategic buffer to face external challenges. Furthermore, Ghemawat (1991) and Zahra & George (2002) show that cost efficiency supports process innovation and faster service adjustments. In the context of the Indonesian Army Hospital, which has limited resources and bureaucracy, cost leadership provides a strong foundation for building sustainable strategic flexibility.

5.2.6. The Influence of Differentiation Strategy on the Strategic Flexibility of the Indonesian Army Hospital

The results showed that *differentiation strategy* had a positive and significant effect on *flexibility strategy* with a coefficient of 0.279 (p-value = 0.000). Differentiation strategy enables hospitals to create unique and high-value services, which increases adaptability to patient needs and changes in the external environment.

Literature supports that a differentiation strategy strengthens adaptive capabilities through innovation, personalization of services, and flexibility in strategic decision-making (Porter, 1980; Hitt et al., 2007; Grant, 1996; Prahalad & Hamel, 1990). This flexibility helps hospitals adapt to the complex dynamics of the healthcare industry.

5.2.7. The Influence of Innovative Capability on the Strategic Flexibility of the Indonesian Army Hospital

The results show that *innovative capability* also has a positive and significant effect on *strategic flexibility* (coefficient 0.279; p-value = 0.000). Innovative capability enables organizations to respond quickly and effectively to market changes and encourages flexibility in strategy implementation.

Previous research has shown that innovation not only improves organizational performance but also directly strengthens strategic flexibility (Purwati et al., 2020; Al-Taweel & Al-Hawary,

2021; Chanu & Dhir, 2016). In the hospital context, this is particularly important in addressing challenges such as antimicrobial resistance, which require innovation-based service adaptations.

5.2.8. The Effect of Cost Leadership Strategy on Organizational Performance Mediated by Strategy Flexibility

The findings demonstrate a positive and significant effect of *cost leadership strategy* on *organizational performance* through the mediation of *strategy flexibility* (coefficient 0.126; p-value = 0.001). This strategy enables hospitals to control costs and remain competitive, as well as responsive to environmental changes.

A cost leadership strategy provides room for innovation and efficiency, which strengthens organizational flexibility and ultimately improves performance (Porter, 1980; Hitt et al., 2007; Ghemawat, 1991). With high flexibility, hospitals are able to allocate resources optimally to meet changing needs.

5.2.9. The Effect of Differentiation Strategy on Organizational Performance Mediated by Strategy Flexibility

Differentiation strategy was shown to have no direct effect on organizational performance, but it became significant when mediated by flexibility strategy (coefficient 0.108; p-value = 0.003). This demonstrates the importance of flexibility in realizing the added value of differentiation strategy.

Flexibility allows hospitals to customize complex and expensive unique services, such as *automatic stop orders*, so that they can be implemented efficiently and have a real impact on reducing medical complications. Thus, the combination of differentiation and flexibility is crucial for improving hospital performance (Zahra & George, 2002; Miller, 1992).

5.2.10. The Effect of Innovative Capability on Organizational Performance Mediated by Strategy Flexibility

The findings show that *innovative capability* has a positive and significant effect on *organizational performance* through *strategic flexibility* (coefficient 0.167; p-value = 0.001). Innovations without flexibility tend to fail to be implemented optimally.

Strategic flexibility allows hospitals to adapt innovation to resource constraints, regulations, and field conditions. This combination of innovation and flexibility drives improved performance, service efficiency, and patient satisfaction (Yeboah & Amponsah, 2025; Altawel, 2021).

6. Conclusion

In general, the results of this study indicate that of the ten hypotheses proposed, nine hypotheses have been proven to have a positive and significant influence on *organizational performance*, both directly and through the mediating role of *strategy flexibility*. Three variables, namely *Cost Leadership Strategy*, *Innovative Capability*, and *Strategy Flexibility*, have been proven to directly improve *organizational performance*. In addition, these three variables also have a

significant influence on *strategy flexibility*, which then acts as a mediator that strengthens the relationship between the main strategies and organizational performance. Thus, *strategy flexibility* plays an important role in increasing the effectiveness of strategies implemented by hospitals. Meanwhile, one hypothesis, namely the direct influence of *Differentiation Strategy* on *organizational performance*, has not been proven significant. This shows that although differentiation strategy has not directly affected organizational performance, its influence can still be felt through the mediating role of *strategy flexibility*.

Based on the research objectives, it can be concluded that *Cost Leadership Strategy* has a positive and significant influence on *organizational performance*, indicating that cost efficiency is an important factor in improving the performance of the Indonesian Army Hospital. Conversely, *Differentiation Strategy* does not have a significant direct influence, indicating that differentiation strategy has not been able to provide a direct impact on organizational performance. Meanwhile, *Innovative Capability* is proven to have a significant influence on *organizational performance*, which confirms the importance of innovation capability in creating added value and hospital competitiveness. Furthermore, *Strategy Flexibility* also has a significant influence on *organizational performance*, indicating that flexibility in strategy is key to adapting to environmental dynamics. On the other hand, both *Cost Leadership Strategy*, *Differentiation Strategy*, and *Innovative Capability* are all proven to have a positive influence on *strategy flexibility*. In its role as a mediating variable, *strategy flexibility* strengthens the influence of the three strategies on organizational performance. Thus, although *Differentiation Strategy* does not have a direct influence, through the mediation of *strategy flexibility*, this strategy still contributes to improving *organizational performance*. The same thing also applies to *Cost Leadership Strategy* and *Innovative Capability*, whose influence on organizational performance is strengthened through the role of strategy flexibility.

Acknowledgments

The author extends profound gratitude to the reviewers and the editorial team of the Reny Damayanti B journal for their invaluable feedback and unwavering support. Their insightful contributions throughout the publication process were instrumental in significantly enhancing this manuscript

References

- Almehwari, M., Awais, M., Ghiasi, M., & Geberetkale, T. (2024). *Cost leadership strategy and hospital performance in healthcare settings*. [Manuscript submitted for publication].
- Alolayyan, M., & Alyahya, M. (2023). Operational cost control and hospital responsiveness. *Journal of Hospital Management*, 12(2), 103–118.
- Alolayyan, M. N., & Alyahya, M. (2023). Strategic agility and healthcare service innovation. *Journal of Health Management*, 25(2), 89–104.
- Altawel, AA (2021). The mediating role of strategic flexibility in the relationship between innovation and organizational performance. *International Journal of Business Innovation*, 15(3), 115–130.

- Amin, M., Zahid, M., & Abbas, M. (2013). Cost efficiency and patient satisfaction in hospitals. *International Journal of Health Care Quality Assurance*, 26(4), 303–312. <https://doi.org/10.1108/IJHCQA-11-2011-0067>
- Awais, M., Almehwari, M., & Ghazali, A. (2023). Strategic agility and hospital performance. *Journal of Strategic Management Studies*, 18(1), 55–70.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Baur, D., Gladstone, B. P., Burkert, F., Carrara, E., Foschi, F., Döbele, S., & Tacconelli, E. (2017). Effect of antibiotic stewardship on the incidence of infection and colonization with antibiotic-resistant bacteria: A systematic review and meta-analysis. *The Lancet Infectious Diseases*, 17 (9), 990–1001. [https://doi.org/10.1016/S1473-3099\(17\)30325-0](https://doi.org/10.1016/S1473-3099(17)30325-0)
- Chanu, I.M., & Dhir, S. (2016). Innovation capabilities and strategic flexibility. *Strategic Management Review*, 4(2), 57–68.
- Cleverley, W. O. (1992). Financial and quality outcomes in cost leadership. *Hospital Financial Management*, 36(5), 42–48.
- Combe, I.A., & Greenley, G.E. (2004). Capabilities and strategic flexibility: Key constructs for new product development. *Marketing Intelligence & Planning*, 22(6), 528–539. <https://doi.org/10.1108/02634500410559044>
- Cousins, P.D., Laming, R., Lawson, B., & Squire, B. (2008). *Strategic supply management: Principles, theories and practice*. Prentice Hall.
- Cousins, P.D., Lawson, B., Petersen, K.J., & Handfield, R.B. (2008). Strategic supply and cost efficiency. *International Journal of Operations & Production Management*, 28(6), 528–550.
- Casisini, M., Bruno, G., & Lombardi, M. (2019). Impact of antimicrobial resistance on hospital performance. *Journal of Hospital Administration*, 8 (1), 12–18.
- Dellit, TH, Owens, RC, McGowan, JE, Gerding, DN, Weinstein, RA, Burke, JP, ... & Hooton, TM (2007). Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America guidelines for developing an institutional program to enhance antimicrobial stewardship. *Clinical Infectious Diseases*, 44 (2), 159–177. <https://doi.org/10.1086/510393>
- De With, K., Wilke, K., Kern, W.V., et al. (2017). Point prevalence studies of antibiotic use: A valuable tool to identify targets for improving prescriptions. *The Journal of Antimicrobial Chemotherapy*, 72 (3), 777–783. <https://doi.org/10.1093/jac/dkw520>
- Diaz, P., & Escoval, A. (2014). Organizational flexibility in hospitals: Definition, evaluation and measurement. *Health Policy and Technology*, 3 (2), 75–86. <https://doi.org/10.1016/j.hlpt.2014.01.005>
- Elbehery, A.H. (2025). Novel vaccines to fight antimicrobial resistance: A global health imperative. *Vaccine Research and Development*, 2 (1), 44–56.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone Publishing.
- Fontana, A. (2011). Innovation capability: The key to global competitiveness. *Business Strategy Series*, 12 (4), 190–198.

- Gamal, D. (2011). How to measure organizational innovativeness? An overview of innovation measurement frameworks and innovation audit/management tools. *Technology Innovation and Entrepreneurship Center, Egypt*.
- Geberetekle, T., Kassie, A., & Belay, Y. (2021). AMS programs and cost savings in large hospitals: A cross-sectional study. *BMC Health Services Research*, 21(1), 1125. <https://doi.org/10.1186/s12913-021-07103-z>
- Ghazali, A., Hameed, WU, & Aziz, S. (2015). Operational efficiency and human resource management in hospitals. *International Journal of Academic Research in Business and Social Sciences*, 5(9), 102–112.
- Ghiasi, M., Awais, M., & Almeshwari, M. (2023). Cost strategy and organizational adaptability. *International Journal of Healthcare Management*, 16(3), 255–268.
- Ghemawat, P. (1991). *Commitment: The dynamics of strategy*. Free Press.
- Grant, R. M. (1996). *Contemporary strategy analysis: Concepts, techniques, applications*. Blackwell Publishers.
- Grewal, R., & Tansuhaj, P. (2001). Building organizational capabilities for managing economic crisis: The role of market orientation and strategic flexibility. *Journal of Marketing*, 65(2), 67–80. <https://doi.org/10.1509/jmkg.65.2.67.18259>
- Hammond, R., Tan, A., & Zahid, M. (2024). Hospital cost management through lean strategy. *Health Services Management Research*, 37(1), 23–35.
- Hansen, D.R., Mowen, M.M., & Guan, L. (2004). *Management accounting* (7th ed.). South-Western College Pub.
- Hill, C. W. (1988). Differentiation versus cost leadership: A critique of generic strategies. *Academy of Management Review*, 13(3), 401–412. <https://doi.org/10.5465/amr.1988.4306957>
- Hitt, M.A., Ireland, R.D., & Hoskisson, R.E. (2007). *Strategic management: Competitiveness and globalisation*. Cengage Learning.
- Hitt, M.A., Ireland, R.D., & Hoskisson, R.E. (1998). *Strategic management: Competitiveness and globalisation*. South-Western College Pub.
- Irmawanti, A., & Andriani, R. (2025). Digitalization strategy in hospital antibiotic control in Indonesia. *Journal of Health Service Management*, 12 (1), 31–42.
- Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard—Measures that drive performance. *Harvard Business Review*, 70 (1), 71–79.
- Karanika, S., Paudel, S., Grigoras, C., Kalbasi, A., Mylonakis, E. (2016). Systematic review and meta-analysis of clinical and economic outcomes from antimicrobial stewardship programs. *Antimicrobial Agents and Chemotherapy*, 60 (8), 4840–4852. <https://doi.org/10.1128/AAC.00825-16>
- Ketchen, D. J. (2012). *Strategic management: A research overview*. Routledge.
- Kompas. (2024, August 20). Deaths from AMR are estimated to reach 10 million by 2050. Accessed August 17, 2025, from <https://www.who.int/indonesia /id/news/detail/20-08-2024>
- Krishnamoorthy, R., Ayyadurai, S., & Thomas, J. (2025). Linking antimicrobial stewardship with hospital performance: A holistic framework. *Global Health Policy Review*, 8 (2), 100–115.

- Lau, AKW (2019). Strategy flexibility in uncertain environments. *International Journal of Operations & Production Management*, 39 (3), 371–402.
- Lawson, B., & Samson, D. (2001). Developing innovation capability in organizations: A dynamic capabilities approach. *International Journal of Innovation Management*, 5 (3), 377–400.
- Li, Y., Liu, Y., & Liu, H. (2018). Strategic flexibility and organizational performance: A review. *Asian Journal of Business Ethics*, 7, 33–45.
- Lin, R.-J., Chen, R.-H., & Chiu, K. K. (2016). Dynamic capabilities and innovation: A review. *Journal of Service Science and Management*, 9 (1), 36–45.
- Limato, R., Nelwan, E.J., Mudia, M., et al. (2022). Barriers and enablers to implementing antimicrobial stewardship programs in low and middle-income countries: A scoping review. *PLOS Global Public Health*, 2 (8), e0000579. <https://doi.org/10.1371/journal.pgph.0000579>
- Miller, D. (1992). The generic strategy trap. *Journal of Business Strategy*, 13(1), 37–41. <https://doi.org/10.1108/eb039502>
- Moreira, M., Silva, M., & Maia, R. (2017). Organizational innovation and performance: A study of Brazilian hospitals. *European Journal of Innovation Management*, 20(3), 503–520.
- Nadkarni, S., & Narayanan, V. K. (2007). Strategic schemes, strategic flexibility, and firm performance: The moderating role of industry clockspeed. *Strategic Management Journal*, 28(3), 243–270. <https://doi.org/10.1002/smj.576>
- Ozgun, L., Kaya, O., & Acar, M. (2022). Innovative capability and hospital reputation: Evidence from Turkish healthcare sector. *Health Policy and Technology*, 11(2), 100617. <https://doi.org/10.1016/j.hlpt.2022.100617>
- Madanmohan, T.R. (2003). *Innovation management*. Indian Institute of Management Bangalore.
- March, J. G., & Simon, H. A. (1958). *Organizations*. John Wiley & Sons.
- Morosawa, Y. (2023). Diversified antibiotic usage based on hospital classifications to reduce resistance. *Journal of Hospital Infection Management*, 51 (4), 299–310.
- Nadkarni, S., & Narayanan, V. K. (2007). Strategic schemes, strategic flexibility, and firm performance: The moderating role of industry clockspeed. *Strategic Management Journal*, 28 (3), 243–270.
- Nathwani, D., Sneddon, J., Malcolm, W., et al. (2019). Economic burden of antimicrobial resistance: The role of hospital antimicrobial stewardship programs. *Clinical Microbiology and Infection*, 25 (5), 596–602. <https://doi.org/10.1016/j.cmi.2018.04.015>
- O'Leary, T., Jones, C., & Wilcox, M. (2024). Military hospital performance and stewardship: A systems-based approach. *BMJ Military Health*, 170 (2), 111–118.
- Patrick, R. (2025). Integrating AI in surveillance systems for antibiotic resistance detection. *Health Informatics International*, 14 (1), 22–37.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
- Porter, M.E. (2006). Strategy and the Internet. *Harvard Business Review*, 79 (3), 62–78.
- Peng, J., Zhang, Y., & Liu, F. (2020). Service variety and hospital efficiency: Evidence from China. *Health Services Research*, 55(6), 874–885. <https://doi.org/10.1111/1475-6773.13349>

- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. Free Press.
- Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79–91.
- Purwati, AA, Aisyah, S., & Raharjo, K. (2020). Innovative capability and strategic flexibility: How do they affect organizational performance? *Journal of Management*, 24(3), 487–498. <https://doi.org/10.24912/jm.v24i3.746>
- Ruis Ramos, M., Hidalgo, J., García, M. Á., et al. (2017). Economic and clinical impact of antimicrobial stewardship interventions in hospitals. *BMC Health Services Research*, 17 (1), 1–9.
- Saenz, C., Torres, M., & Rivera, F. (2020). Digital tools for antibiotic stewardship: A review. *International Journal of Medical Informatics*, 139, 104126. <https://doi.org/10.1016/j.ijmedinf.2020.104126>
- Sanchez, R. (1995). Strategic flexibility in product competition. *Strategic Management Journal*, 16 (S1), 135–159.
- Sinto, R., Suryadinata, H., & Riono, P. (2024). National study on antimicrobial stewardship program implementation in Indonesian hospitals. *BMJ Open*, 14 (3), e057981.
- Saunila, M. (2017). Understanding innovation capability in organizations: A framework for practitioners. *Innovation: Organization & Management*, 19(1), 38–56. <https://doi.org/10.1080/14479338.2016.1267001>
- Slack, N., & Lewis, M. (2011). *Operations strategy* (3rd ed.). Pearson Education.
- Taylor, F.W. (1911). *The principles of scientific management*. Harper & Brothers.
- Teece, D.J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43 (2–3), 172–194.
- WHO. (2024). *Antimicrobial resistance: Global report on surveillance*. Retrieved from <https://www.who.int>
- Wright, P. (1987). A refinement of Porter's strategies. *Strategic Management Journal*, 8 (1), 93–101
- Wright, P. M., & Snell, S. A. (1991). Toward an integrative view of strategic human resource management. *Human Resource Management Review*, 1(3), 203–225.
- Yeboah, M.A., & Amponsah, A. (2025). Innovation capability and hospital performance: The mediating role of strategic flexibility. *International Journal of Healthcare Management*, 18(1), 22–35.
- Zahra, S.A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185–203. <https://doi.org/10.5465/amr.2002.6587995>