The Role of Digital Innovation in Mediating the Influence of Organizational Digital Culture, Digital Leadership, and Digital Transformation on Organizational Performance in the Indonesian Army Hospital

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ABSTRACT

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| **Aims:** The aim of this study was to examine the role of digital innovation in mediating the influence of organizational digital culture, digital leadership, and digital transformation on organizational performance in the Indonesian Army Hospital (Rumah Sakit TNI Angkatan Darat).  **Study design:** This study employed a quantitative design using Structural Equation Modeling (SEM) with Partial Least Squares (PLS-SEM) to analyze the data.  **Place and Duration of Study:** The study was conducted in RS TNI AD Type C hospitals, across Indonesia, with data collection carried out between [insert time frame].  **Methodology:** A total of 123 leaders from TNI AD Class/C hospitals were selected as participants using purposive sampling. Data were collected through a questionnaire distributed via Google Forms. SEM analysis was conducted using SmartPLS 3.0 software. The Sobel test was used to evaluate the mediating effect of digital innovation on the relationship between digital transformation and organizational performance.  **Results:** The findings indicated that digital leadership, digital transformation, and digital innovation had a partial positive effect on organizational performance. Digital transformation showed a significant positive effect on digital innovation, while organizational digital culture did not have a significant effect on either organizational performance or digital innovation. Additionally, digital leadership did not significantly impact digital innovation. The Sobel test showed that digital innovation mediated the effect of digital transformation on organizational performance, but did not mediate the effects of digital leadership or organizational digital culture on organizational performance.  **Conclusion:** This study contributes to the Resource-Based View (RBV) theory by highlighting the importance of digital leadership, digital transformation, and digital innovation in improving organizational performance. The results provide valuable insights for researchers and practitioners in leveraging digital leadership, digital transformation, and digital innovation to enhance performance, particularly in the healthcare sector. Future research should consider expanding the population to include various types of TNI AD hospitals for broader generalizability. |

*Keywords: organizational digital culture, digital leadership, digital transformation, digital innovation, organizational performance.*

1. INTRODUCTION

Hospitals in Indonesia are generally classified into two types: Government Hospitals and Private Hospitals. One example of a Government Hospital with unique characteristics is the TNI Hospital, which has its distinct features due to the influence of military elements in its management. Among the various TNI Hospitals in Indonesia, the Indonesian Army Hospital (RS TNI AD) is the most numerous and widely spread across various regions in Indonesia (Setyawan et al., 2019). The primary function of RS TNI AD is not only to provide healthcare services for soldiers and their families but also to support national defense more broadly, making the institutional performance of this hospital critical to assess.

In recent years, RS TNI AD has seen a significant increase in patient numbers, reflecting the rising demand and trust from the public for the healthcare services provided. This condition indicates the institution's success in improving the quality of medical services and expanding access to healthcare for the general public, especially in remote areas that require adequate healthcare facilities.

On the other hand, the financial performance of RS TNI AD has shown fluctuating trends in recent years. Based on the available data, the revenue of RS TNI AD has exhibited an unstable pattern, with increases and decreases in income during several periods of the past fiscal years. This situation indicates internal and external challenges in maintaining financial stability, such as operational management challenges, cost efficiency, and intense competition with other healthcare facilities, both public and private.

Furthermore, RS TNI AD faces various complex challenges in maintaining its performance sustainability, including operational efficiency, the utilization of modern healthcare technology, improving human resources (HR) quality, and adapting to dynamic regulations in the healthcare sector. One of the main challenges is the need to implement technology-based strategies, such as hospital management information systems, which have the potential to increase service efficiency and support data-driven decision-making. However, the implementation of such technologies often faces obstacles, particularly related to budget constraints and the lack of adequate HR competencies (N. D. Putri et al., 2023).

Given these conditions, RS TNI AD needs to adopt a comprehensive strategic approach to manage existing challenges and barriers, particularly in the context of increasingly fierce competition in the healthcare sector. Several previous studies have shown that factors such as organizational digital culture (Aggarwal, 2024; Masunka et al., 2022; Vo et al., 2024) digital leadership (Binsar et al., 2024; Mollah et al., 2024; Shin et al., 2023) and digital transformation (Al-Ayed et al., 2023; Surahman et al., 2023) are significant strategic aspects that support organizational performance.

However, there is a research gap, as most studies on hospital performance, organizational culture, and digital leadership have been conducted in public hospitals or civilian healthcare institutions. Additionally, previous research on the influence of organizational digital culture, digital leadership, and digital transformation on organizational performance has shown inconsistencies. To clarify the mechanisms of these relationships, this study proposes digital innovation as a mediating variable, defined as the process of creating new or improved solutions through the use of digital technology to enhance efficiency, productivity, service quality, competitiveness, and customer relationships (Mayasari, 2023).

Further research is needed to explore the role of digital innovation in elaborating the relationship between organizational digital culture, digital leadership, and digital transformation on the performance of RS TNI AD, thereby providing strategic guidance for hospital managers in improving institutional performance amidst the increasingly complex competition and fluctuating financial conditions.

1. material
   1. **Theoritical Framework**

**2.1.1 Resource-Based View (RBV)**

This study uses the Resource-Based View (RBV) as the foundation for understanding the factors influencing Organizational Performance. This theory explains that the value and advantages of a company are created from the resources it possesses. Barney (1991) stated that assets, capabilities, organizational processes, and knowledge allow companies to formulate strategies to improve efficiency and effectiveness. To gain sustainable competitive advantage, companies must possess resources that are valuable, rare, non-substitutable, and difficult to imitate (Papadopulos et al., 2020). RBV helps managers understand competencies as the main assets supporting business performance. The main focus of RBV is on resources that are difficult to buy or transfer, requiring expertise and organizational transformation in processes and culture (Barney 1991). Thus, RBV serves as a framework to analyze how resources support sustainable organizational performance.

**2.1.2 Organizational Performance**

Organizational Performance is considered the core of strategic management (Schendel & Hofer, 1979). Organizational performance is defined as the achievement of business objectives through the interaction between strategy, resources, and capabilities, measured by comparing the organization with its main competitors and representing the company’s relative strength (Teguh et al., 2022). Organizational performance is a commonly used metric in organizational settings (Mikalef et al., 2021) with literature providing various metrics and frameworks for assessing company performance. According to Al-Ayed et al (2023), organizational performance is measured from several perspectives, including the financial perspective, internal processes perspective, customer satisfaction perspective, and learning perspective. All of these aspects are identified as reflecting overall organizational performance. Therefore, this study adopts the measurement of organizational performance based on the research conducted by Al-Ayed et al (2023)

**2.1.3 Organizational Digital Culture**

Organizational Digital Culture can be conceptualized by adapting the definition from Deshpande and Webster (1989) as a set of shared assumptions and understandings about the functioning of the organization in a digital context. The core of organizational culture consists of a combination of artifacts; observable, tangible attributes that can be seen, heard, or felt when entering a new culture; values or beliefs; norms, standards, and moral principles that can be perceived through interviews and questionnaires; and underlying assumptions – concepts that are unacknowledged and assumed, which can be indirectly gathered through behavioral observations (Martínez-Caro et al., 2020).

**2.1.4 Digital Leadership**

Digital Leadership is a modern concept involving the use of digital platforms that dictate and influence employee behavior to achieve organizational strategic goals(Sheninger, 2019). Digital leadership is conceptualized as a combination of transformational leadership and digital skills (Mollah et al., 2024), enabling the organization to face dynamic environmental challenges and capture emerging opportunities through digital evaluation (Ismail et al., 2023). Digital leadership is a blend of leadership skills involving innovative and disruptive leadership through digital attitudes, including digital awareness and experience (Niu et al., 2022).

**2.1.5 Digital Transformation**

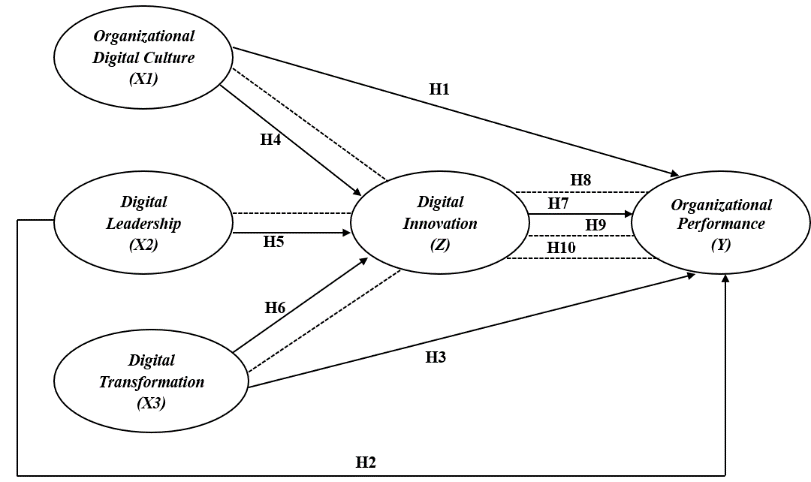
The term digital transformation is widely recognized in today’s society (Hausberg et al., 2019) as a transition toward technology-based digital systems. Based on the study by (Maroufkhani et al., 2022), digital transformation is defined as new developments in the use of artifacts, systems, and digital symbols within and around organizations. Digital transformation is generally viewed as the extensive use of digital technologies to enhance organizational performance and operational efficiency. Essentially, organizations use digital technology to improve their traditional value creation pathways and maintain competitiveness in the market (Vial, 2019). Successful digital transformation, which leads to enhanced operational performance, requires organizations to innovate with digital technology by applying significant changes in their processes and business models, as well as adopting strategies and policies that facilitate this transformation (Maroufkhani et al., 2022).

**2.1.6 Digital Innovation**

Digital innovation is generally defined as the creation of market offerings, processes, or business models that result from the use of digital technology. This definition encompasses various innovation outcomes, such as new products, platforms, services, customer experiences, and other value pathways that are made possible through the use of digital technologies and digital processes (Khin & Ho, 2019). In this study, digital innovation is contextualized into innovative digital solutions that transform products, services, and businesses of other organizations. Therefore, digital innovation is defined as the development of new products, services, or solutions using digital technology. The digital technologies used in innovation have been identified by (Urbinati et al., 2020) as Big Data, Internet of Things (IoT), Cloud Computing, Augmented Reality (AR) and Virtual Reality (VR), Artificial Intelligence (AI), and Cyber-Physical Systems.

* 1. **Conceptual Framework and Hypothesis Development**The research framework can be illustrated in the following relationship diagram:

**Figure: Conceptual Framework**

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* + 1. **The Influence of Organizational Digital Culture on Organizational Performance**

Organizational Digital Culture refers to the digital values adopted by an organization to cope with rapid environmental changes (Martínez-Caro et al., 2020). This culture affects patient satisfaction, operational efficiency, and staff development, which in turn positively impacts organizational performance (Fadly et al., 2023; Rusdian & Akmaludin, 2023). Digital culture also supports collaboration, agility, and organizational revenue (Grover et al., 2022; Kumar et al., 2024; Reinhardt et al., 2020). Therefore, Organizational Digital Culture has a positive effect on organizational performance.

Based on this discussion, the research hypothesis proposed is as follows:  
H1: There is a positive influence of Organizational Digital Culture on Organizational Performance.

* + 1. **The Influence of Digital Leadership on Organizational Performance**

Digital Leadership involves the strategic skills of leaders in utilizing digital technology to create value for the organization (Abbu et al., 2022; Mollah et al., 2024). Digital leadership encompasses the ability and culture to utilize digital technology to create organizational value (Mollah et al., 2024), which can drive cultural changes, innovation, and performance improvement as organizations transition from traditional systems. Digital leaders play a crucial role in driving innovation, making strategic decisions, and significantly improving organizational performance (Gunawan et al., 2023; Mollah et al., 2024).

Based on this discussion, the research hypothesis proposed is as follows:  
H2: There is a positive influence of Digital Leadership on Organizational Performance.

* + 1. **The Influence of Digital Transformation on Organizational Performance**

DigitalTransformation significantly enhances organizational performance through operational efficiency, value creation, and innovation in services and products (Huang et al., 2023; Martínez-Caro et al., 2020). This transformation supports business growth, international competitiveness, and responsiveness to rapidly changing customer needs (Berghaus, 2017; Vo et al., 2024). By utilizing digital technology, organizations can optimize business processes, increase efficiency, productivity, and growth in performance (Huang et al., 2023) while also enhancing organizational resilience (La Sala et al., 2024).

Based on this discussion, the research hypothesis proposed is as follows:  
H3: There is a positive influence of Digital Transformation on Organizational Performance.

* + 1. **The Influence of Digital Innovation on Organizational Performance**

Digital Innovation has a positive impact on organizational performance as it drives the emergence of new products, services, and more efficient business strategies (Fang & Liu, 2024; Kurilova & Antipov, 2020). Digital innovation enhances competitiveness and enables organizations to achieve long-term profitability and sustainability (Kohli & Melville, 2019; Zhen et al., 2021).

Based on this discussion, the research hypothesis proposed is as follows:  
H4: There is a positive influence of Digital Innovation on Organizational Performance.

* + 1. **The Influence of Organizational Digital Culture on Digital Innovation**

Digital Culture is regarded as an essential element of modern organizations (Muller et al., 2019) and is closely related to creativity in digital innovation (Elia et al., 2021; Ferreira et al., 2019), which includes the application of new techniques to solve problems. Digital innovation itself is the result of adopting digital technology, encompassing the development of new products, services, business processes, and business models (Hund et al., 2021). Research indicates that digital culture positively impacts digital innovation (Muller et al., 2019; Zhen et al., 2021), enabling organizations to generate high levels of innovation (Cohen et al., 2021).

Based on this discussion, the research hypothesis proposed is as follows:  
H5: There is a positive influence of Organizational Digital Culture on Digital Innovation.

* + 1. **The Influence of Digital Leadership on Digital Innovation**

The rapid development of technology demands digital transformation as a necessity for organizations, yet it often faces resistance from employees (Pandey, 2023). The effectiveness of digital leadership depends significantly on the role of employees in accepting and driving transformation, requiring leaders to actively involve them in the change process (Hussain et al., 2018). Significant changes, such as the transition to digital work practices, have not been fully addressed due to unclear roles and insufficient resources (Liao, 2017), but digital leadership can provide a solution. Weber et al. (2019) propose the role of “network enablers” as key players, where leaders build strong relationships and foster cohesive teamwork, especially in virtual environments (Bartsch et al., 2020). Organizations with strong digital leadership can build both domestic and global collaborative networks (Mihardjo et al., 2019) and drive internal and external coordination (Chen, 2022; Eberl & Drews, 2021), thus strengthening digital innovation. Therefore, the stronger the digital leadership in an organization, the higher the level of digital innovation.

Based on this discussion, the research hypothesis proposed is:  
H6: There is a positive influence of Digital Leadership on Digital Innovation.

* + 1. **The Influence of Digital Transformation on Digital Innovation**

Digital transformation empowers companies to enhance digitalization, replace low-value elements with data, enrich innovation resources, improve efficiency, and reduce costs and risks of innovation (Yu et al., 2017; Novikov, 2020; Yan et al., 2021; Wang & Wang, 2019). Digital transformation impacts operations, organizational structure, human resource management, and resource allocation, ultimately driving corporate innovation (Lokuge, 2019; Zhao et al., 2023). The innovative culture created through digital transformation encourages experimentation, learning, and adaptation to market changes (Hoorani et al., 2023).

Based on this discussion, the research hypothesis proposed is:  
H7: There is a positive influence of Digital Transformation on Digital Innovation.

* + 1. **The Influence of Organizational Digital Culture on Organizational Performance Mediated by Digital Innovation**

Through technological advancements and digital business activities, organizational culture evolves into digital organizational culture, a set of shared values and understanding for managing business activities digitally (Zhen et al., 2021). This culture drives adaptation to technology and data-driven decision-making, playing a crucial role in creating digital innovation, which is a key to organizational performance success. Organizational cultures that support collaboration and outcomes have been shown to enhance innovation and performance, particularly in the healthcare sector (Putri et al., 2023). Therefore, the effective implementation of digital culture will lead to sustainable digital innovation and positively impact organizational performance. Based on this discussion, the research hypothesis proposed is:  
H8: There is a positive influence of Organizational Digital Culture on Organizational Performance mediated by Digital Innovation.

* + 1. **The Influence of Digital Leadership on Organizational Performance Mediated by Digital Innovation**

Digital leadership is reflected in a leader’s ability to use real-time data, integrate technologies like AI, and drive automation to enhance efficiency and create new business opportunities (Fang et al., 2023). Digital leadership brings a new paradigm by merging technology with traditional innovation processes for broader outcomes. Digital innovation plays a critical mediating role linking digital leadership with company performance, where digital innovation enhances efficiency, product differentiation, and organizational performance.

Based on this discussion, the research hypothesis proposed is:  
H9: There is a positive influence of Digital Leadership on Organizational Performance mediated by Digital Innovation.

* + 1. **The Influence of Digital Transformation on Organizational Performance Mediated by Digital Innovation**

Digital transformation refers to significant changes in business processes through the use of digital technology to create higher value. Organizations integrating digital technology into their operations gain an advantage in responding to changes and improving performance (Kane et al., 2015). In the healthcare context, the use of information technology accelerates product and service refinement, increases competitiveness, and enhances quality (Hess et al., 2016). Research shows that digital transformation fosters innovation in healthcare services and hospital management, improving efficiency and service quality (Kurniawan et al., 2021; Syarifuddin et al., 2024).

Based on this discussion, the research hypothesis proposed is:  
H10: There is a positive influence of Digital Transformation on Organizational Performance mediated by Digital Innovation.

1. METHODOLOGY

This study uses a quantitative method with a cross-sectional design to analyze the relationships between variables within a specific period. The unit of analysis is individuals, specifically the management of the Indonesian Army Hospital (Rumkit TNI AD) from upper and middle management levels. The research population consists of 162 leaders of Type C Rumkit TNI AD across 33 hospitals in Indonesia, with respondent selection based on the relevance of the research topic. The sample was selected using purposive sampling, with a minimum sample size of 116 respondents, and a total of 123 respondents were successfully collected. Data was obtained through a questionnaire distributed via Google Forms. Furthermore, data analysis was conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS-SEM) method, utilizing SmartPLS 3.0 software.

The model proposed in this study consists of two structural equations:

1. **OP = β1 ODC + β2 DL + β3 DT + β4 DI + ε1**
2. **DI = α1 ODC + α2 DL + α3 DT + ε2**

Note:

* **OP**: Organizational Performance
* **ODC**: Organizational Digital Culture
* **DL**: Digital Leadership
* **DT**: Digital Transformation
* **DI**: Digital Innovation
* **α, β**: Coefficients representing the influence of independent variables on dependent variables for each structural equation.
* **ε**: Residual (error).

**VARIABLES AND MEASUREMENT**

This research investigates five main variables: Organizational Digital Culture, Digital Leadership, and Digital Transformation as independent variables, Digital Innovation as a mediating variable, and Organizational Performance as the dependent variable. Each variable is measured using relevant indicators.

* **Organizational Digital Culture (X1)** is measured using 4 indicators, including team collaboration and technology orientation.
* **Digital Leadership (X2)** is measured using 6 indicators, including leaders' awareness of technology risks and their role in reducing resistance to innovation.
* **Digital Transformation (X3)** is measured using 5 indicators related to the digitalization of processes and efficiency through technology.
* **Digital Innovation (Z)** is measured using 6 indicators, including system capability enhancement and the use of digital technology for services.
* **Organizational Performance (Y)** is measured using 15 indicators across 4 perspectives: financial, internal processes, customer satisfaction, and learning.

To measure these indicators, a Likert scale is used, which is effective in gauging attitudes, opinions, and perceptions with five response levels. This method is considered suitable for quantitative assessment of the studied phenomena.

1. **RESULTS AND DISCUSSION**

The results of this test are based on the data processing of the research using Partial Least Square (PLS) analysis, with the aid of SmartPLS 3.0 software. The results of the hypothesis testing are as follows:

| **Hypothesis** | **Coefficient (β)** | **P-Value** | **Conclusion** |
| --- | --- | --- | --- |
| H1: There is a positive influence of Digital Organizational Culture on Organizational Performance | 0.167 | 0.080 | Not Supported |
| H2: There is a positive influence of Digital Leadership on Organizational Performance | 0.219 | 0.037 | Supported |
| H3: There is a positive influence of Digital Transformation on Organizational Performance | 0.303 | 0.009 | Supported |
| H4: There is a positive influence of Digital Innovation on Organizational Performance | 0.253 | 0.024 | Supported |
| H5: There is a positive influence of Organizational Digital Culture on Digital Innovation | 0.083 | 0.229 | Not Supported |
| H6: There is a positive influence of Digital Leadership on Digital Innovation | 0.120 | 0.139 | Not Supported |
| H7: There is a positive influence of Digital Transformation on Digital Innovation | 0.701 | 0.000 | Supported |

**Results of Hypothesis Testing: Direct and Indirect Effects**

**Direct Effects:**

**Indirect Effects:**

| **Hypothesis** | **Coefficient (β)** | **P-Value** | **Conclusion** |
| --- | --- | --- | --- |
| H8: There is a positive influence of Organizational Digital Culture on Organizational Performance mediated by Digital Innovation | 0.021 | 0.280 | Not Supported |
| H9: There is a positive influence of Digital Leadership on Organizational Performance mediated by Digital Innovation | 0.030 | 0.179 | Not Supported |
| H10: There is a positive influence of Digital Transformation on Organizational Performance mediated by Digital Innovation | 0.177 | 0.028 | Supported |

**Source:** Data Processed using SmartPLS (2024)

Based on the hypothesis testing results in this study, out of the ten hypotheses proposed, five were found to be statistically significant (supported), while five were not supported. The detailed discussion of each result is as follows:

* 1. **The Influence of Organizational Digital Culture on Organizational Performance**

The results indicate that **organizational digital culture** does not significantly influence **organizational performance**. This suggests that even though digital culture is implemented within the organization, it is not sufficient to directly improve organizational performance. This finding reflects that despite efforts to foster digital culture, the impact on organizational performance may remain minimal, especially in the context of **RS TNI AD Type C**. The unique characteristics of **RS TNI AD**, such as a hierarchical organizational structure and highly procedural operational systems, hinder the optimal implementation of digital culture. This is in line with the findings of **Puliwarna et al. (2023),** who explained that **organizational digital culture** requires a space for innovation and collaboration, which is often obstructed by rigid military command systems. As a result, even though digital culture has been applied, its impact on performance can be limited without internal readiness that aligns with this cultural shift. This result supports earlier findings reported by **(Digital et al., 2024; Ferdian & Rahmawati, 2019; S. N. Putri et al., 2024; Rusdian & Akmaludin, 2023).**

* 1. **The Influence of Digital Leadership on Organizational Performance**

The results show that **digital leadership** has a significant and positive impact on organizational **performance.** This indicates that digital leadership, which includes a leader’s ability to guide, leverage technology, and encourage innovation within the organization, directly contributes to improving organizational performance. **Digital leadership** can stimulate creativity among individuals and align personal values with organizational values, ultimately resulting in higher organizational performance (Zhu et al., 2022). This is highly relevant in military hospitals, which are required to continuously innovate in providing medical services and conducting operational activities efficiently. The shift from traditional systems to more modern, technology-based systems in **RS TNI AD Type C** has a significantly positive impact on organizational performance, particularly when led by individuals with strong **digital leadership** skills. Competent digital leaders can drive cultural changes that are more adaptive and innovative, and enhance operational efficiency in hospital settings. This finding aligns with the studies of **(Mollah et al., 2024; Saddique et al., 2023; Senadjki et al., 2024; Shin et al., 2023; Vo et al., 2024).**

* 1. **The Influence of Digital Transformation on Organizational Performance**

The results indicate that **digital transformation** has a significant and positive impact on **organizational performance** in **RS TNI AD. Digital transformation** drives the growth of activities and enhances the potential for performance improvement (Martínez-Caro et al., 2020). In the context of **TNI AD**, digital transformation supports operational optimization by reducing manual barriers, accelerating medical information access, and facilitating the tracking of medical logistics. Furthermore, this technology enables faster and more accurate data-driven decision-making, both for administrative and clinical purposes. With **digital transformation**, the hospital is also able to provide more responsive and adaptive services in emergency situations, such as disaster response or military operations. This finding is consistent with previous research conducted by **Al-Ayed (2023), Mollah et al. (2024), Vo et al. (2024),** and **Senadjki (2024).**

* 1. **The Influence of Digital Innovation on Organizational Performance**

The results show that Digital Innovation has a significant and positive influence on Organizational Performance in RS TNI AD. This finding is consistent with the theoretical concept that digital innovation impacts organizational performance by enabling the creation of new processes, services, and products supported by technology (Kohli & Melville, 2019). Digital innovation allows the organization to accelerate decision-making, respond to customer or user needs more quickly, and optimize existing resources. Moreover, digital innovation strengthens the organization's ability to adapt rapidly to market changes and create solutions that are more aligned with technological advancements. Therefore, the more digital innovation is implemented effectively in an organization, the higher its performance in terms of productivity, efficiency, and organizational results.

* 1. **The Influence of Organizational Digital Culture on Digital Innovation**

The results indicate that Organizational Digital Culture does not have a significant influence on Digital Innovation in RS TNI AD. In other words, although digital culture has been implemented within the organization, it does not directly drive digital innovation in the hospital. Although organizational digital culture is generally considered an important foundation for the success of digital innovation, the results suggest that in the context of RS TNI AD Type C, this influence is not proven to be significant. In other words, the existing digital culture in this military hospital does not directly encourage the practice of digital innovation. This condition indicates that the presence of digital culture has not yet been an effective factor in driving the creation or development of technology-based innovations. This finding aligns with research conducted by Felizzola (2023), Zhang et al. (2021), Saebah and Merthayasa (2024), and Wiese et al. (2024).

* 1. **The Influence of Digital Leadership on Digital Innovation**

The results show that Digital Leadership does not have a significant influence on Digital Innovation in RS TNI AD. Although the leaders in this organization may have adopted the principles of digital leadership, the results show that this has not directly driven digital innovation in the hospital. This finding indicates that the presence of leaders with high digital capabilities does not necessarily have a direct impact on the creation of digital innovation within the organization. This is consistent with the findings of Inayah et al (2024), who state that digital leadership does not significantly influence digital innovation.

* 1. **The Influence of Digital Transformation on Digital Innovation**

The results show that Digital Transformation has a significant and positive influence on Digital Innovation in RS TNI AD. This finding indicates that the digital transformation processes implemented in this hospital have successfully encouraged the adoption of digital innovation. In the context of RS TNI AD, digital transformation has allowed the hospital to adopt new technologies, creating space for the development of new ideas and experimentation with more efficient technologies. This transformation process enables the hospital to adapt more rapidly to changing medical needs and operational challenges. Therefore, the success of digital transformation in RS TNIAD directly contributes to enhancing digital innovation within the organization. This finding is supported by research by Hu et al. (2023), Fang and Liu (2024), and Li et al. (2023).

* 1. **The Influence of Organizational Digital Culture on Organizational Performance Mediated by Digital Innovation**

The results indicate that Digital Innovation does not mediate the influence of Organizational Digital Culture on Organizational Performance. In other words, although RS TNI AD has implemented a digital culture within the organization, this is not sufficient to drive digital innovation that would improve organizational performance. One of the main factors causing the inefficacy of this mediation role is the organizational culture’s tendency to be rigid and centralized, as is common in military institutions. Such a culture focuses on strict adherence to procedures and operational stability, which often leaves little room for innovative initiatives to develop. Therefore, the failure of digital innovation to mediate the relationship between digital culture and organizational performance in RS TNI AD is due to various internal barriers, such as a rigid organizational structure, limited resource allocation, lack of support from management, and resistance to change at the operational level.

* 1. **The Influence of Digital Leadership on Organizational Performance Mediated by Digital Innovation**

The results show that Digital Innovation does not mediate the influence of Digital Leadership on Organizational Performance. In other words, although RS TNI AD leaders possess strong digital leadership qualities and support the implementation of technology, this is not sufficient to drive organizational performance improvements through digital innovation. The absence of a mediation role from digital innovation clarifies that innovation has not become the main channel for improving organizational performance. Instead, performance improvement is more influenced by direct leadership focusing on operational efficiency and optimization of administrative processes. This suggests that in the context of military hospitals, digital leadership tends to be used to strengthen existing systems’ stability rather than drive the creation of new value through transformational digital innovations. Even though digital leadership has been implemented, the organization has not yet fully established an ecosystem that supports sustainable digital innovation.

* 1. **The Influence of Digital Transformation on Organizational Performance Mediated by Digital Innovation**

The results of the study indicate that **Digital Innovation** successfully mediates the influence of **Digital Transformation** on **Organizational Performance.** This finding reflects the importance of the digital transformation process carried out at the hospital, as it plays a crucial role in driving **digital innovation**, which in turn enhances the organization’s performance. In other words, when digital transformation is optimally applied, it not only introduces technological changes but also facilitates innovations that directly contribute to improving hospital performance. Previous research supports the notion that digital transformation contributes to increased organizational digital innovation, which positively impacts performance, as shown by **(Hess et al., 2016; Sebastian et al., 2017).**

1. **CONCLUSION**

This study concludes that several variables have a significant and positive impact on Organizational Performance, while others do not have a direct impact or require mediation by other variables. Specifically, Digital Leadership, Digital Transformation, and Digital Innovation each have a positive influence on Organizational Performance. Additionally, Digital Transformation also shows a significant positive impact on Digital Innovation. However, the impact of Digital Organizational Culture on Organizational Performance and Digital Innovation is not significant, as is the case for the influence of Digital Leadership on Digital Innovation.

The findings of this study provide valuable guidance for managers, particularly leaders of RS TNI AD Type C, in formulating policies related to digitalization and the use of technology to enhance organizational performance. Several key recommendations include enhancing Digital Leadership by increasing employee awareness of technological risks, using technology to support operations, establishing ethical behavior, and reducing resistance to innovation. Additionally, boosting Digital Transformation through the establishment of adequate technological infrastructure, implementing integrated hospital information systems, using ERP software, and adopting IoT technologies and cloud-based communication systems is crucial. Furthermore, fostering Digital Innovation by adding new features to existing systems, developing performance dashboards, implementing automated systems for data storage, increasing service speed, and ensuring system reliability through advanced technologies such as chatbots and cloud storage is recommended. The implementation of these steps is expected to improve operational efficiency and service quality at RS TNI AD Type C and have a positive impact on overall organizational performance.

This study has several limitations that affect the interpretation and generalization of the findings, as well as the direction of future research. These limitations include the fact that the variables studied are limited to Digital Organizational Culture, Digital Leadership, and Digital Transformation, which are mediated by Digital Innovation in relation to Organizational Performance, without considering other variables that may also have an impact. Furthermore, the research sample is limited to leaders of RS TNI AD Type C, so there is a need to expand the sample to include other types of RS TNI AD to obtain more representative results. Future research should consider exploring additional factors that could influence organizational performance and extend the study across different types of RS TNI AD to enhance the generalizability of the findings.

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**COMPETING INTERESTS**

Theauthors declare that there are no competing interests regarding the publication of this manuscript.

AUTHORS’ CONTRIBUTIONS

**Marles Edy Wanto Haloho**: Conceptualized the research, designed the methodology, analyzed the data, and wrote the initial draft of the manuscript.

**Bahtiar Usman**: Contributed to data collection, reviewed the literature, and provided critical revisions to the manuscript.

**Aekram Faisal**: Assisted with data analysis, interpretation of results, and manuscript revisions.

All authors have read and approved the final manuscript.

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