

ANALYSIS OF THE IMPACT OF DIGITAL TRANSFORMATION CAPABILITY, INNOVATION CULTURE, AND CHANGE MANAGEMENT ON HEALTHCARE ORGANIZATIONAL RESILIENCE IN PRIVATE HOSPITALS

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ABSTRACT

The purpose of the current research is to explore the impact of Digital Transformation Capability, Innovation Culture and Change Management on Healthcare Organizational Resilience in the private hospitals. The quantitative strategy was used to conduct the survey and the focus was on the private hospital workers. We used purposive sampling to select respondents with expertise and knowledge of operational procedures, organizational transformation, and the use of digital systems or technology in the medical context. Data were collected by using online survey using google form. The data were analyzed using multiple linear regression. The results indicate that Digital Transformation Capability, Innovation Culture, and Change Management have good and significant effects on Healthcare Organizational Resilience. Among three independent variables, Change Management is the most important factor that affects Healthcare Organizational Resilience. The findings indicate that the hospital's capacity to build organizational resilience relies on the support of digital transformation skills, a culture supportive of innovation, and the ability to manage change methodically. The study shows that private hospitals need to improve their digital technology integration, create a culture that encourages innovation and learning, and focus on change readiness, communication, workforce engagement, and leadership support to increase the organization's capacity for adaptation and service continuity.

Keywords: Digital Transformation Capability; Innovation Culture; Change Management; Healthcare Organizational Resilience

INTRODUCTION

The health business is dealing with a more complex and unpredictable environment and it is more important than ever for an organization to be able to sustain, adapt and bounce back from a number of disturbances (Nur, 2023). Private hospitals are confronted with a variety of challenges such as changing patient needs and expectations, innovations in medical technology, digital transformation of healthcare services, shifts in the regulatory landscape, competition among healthcare facilities, limitations on resources, increasing operational costs, and the potential onset of diverse health crises. These factors make organizational resilience in healthcare a critical strategic capability for the continuity of healthcare services. Organizational resilience in healthcare is defined as the ability of the hospital to anticipate stresses, to sustain critical service functions during interruptions, to adapt to change and to recover organizational performance quickly and efficiently (Baskoro et al., 2025). The importance of resilience for hospitals is because failures in operational systems may have direct effects on the patient safety, quality of services, productivity of the healthcare staff, and organizational sustainability (Abbas et al., 2023).

Digital transformation competence is regarded as a variable that influences healthcare organizational resilience in private hospitals (Sudirjo et al., 2023; Vilano et al., 2025). The ability of an organization to adopt, integrate and use digital technology to transform work processes, service delivery, decision making and operational models (Judijanto et al., 2024; Anggraini & Khairunnisa, 2025). In a hospital setting, this ability is expressed in the use of hospital information systems, electronic medical records, telemedicine, integration of patient data, digital monitoring systems, analytics technologies, and a variety of applications to aid in clinical and administrative services. Hospitals with strong digital transformation skills can process information faster in the current situation (Fitri et al., 2023; Rustiyana et al., 2025). In private hospitals, an innovation culture is also viewed as a key element in building resilience in healthcare organizations, in addition to digital transformation skills. An innovation culture is the set of values, norms and climate within an organization that encourages its members to produce new ideas, experiment, share information and find better ways to deal with problems (Kusnadi et al., 2026; Harahap et al., 2025). In a changing healthcare environment, an innovative culture leaves room for medical staff, allied health professionals, administrative staff and management to develop adaptable approaches to a range of difficulties. Hospitals with an innovative culture are more likely to embrace new ways of delivering services, use technology, improve processes, and develop solutions when current practices do not fit the environment (Rony et al., 2020). Another factor expected to influence resilience in healthcare organizations in private hospitals is change management. It means the ability of an organization to systematically plan, discuss, execute and assess the changes so that the transition process is successful and has the support of the people of the organization (Arefazar et al., 2022; Mardikaningsih & Wardoyo, 2026). Hospitals are complex organizations with a wide spectrum of professions, strict standards of service and high expectations of patient safety. Therefore any change has to be planned. Hospitals must be able to change without breaking the continuity of critical service, whether facing technology advances, regulatory changes, health emergencies, service restructure or changing patient needs (Stouten et al., 2018).

The novelty of this study lies in integrating Digital Transformation Capability, Innovation Culture, and Change Management as complementary determinants of Healthcare Organizational Resilience in private hospitals. Previous research by Kusnadi et al. (2026) examined organizational resilience in the health sector through Knowledge Management Capability, Business Continuity Readiness, and Innovation Capability. However, limited attention has been given to the combined roles of digital transformation, innovation-oriented culture, and systematic change management in strengthening organizational resilience. Therefore, this study extends previous research by offering an integrated perspective that combines technological, cultural, and change-management capabilities to explain Healthcare Organizational Resilience in private hospitals.

This study aims to analyze the effect of Digital Transformation Capability, Innovation Culture and Change Management toward Healthcare Organizational Resilience in private hospitals. The importance of this study is that organizational resilience in healthcare institutions requires not only that companies have appropriate resources, but also transformational skills, adaptable organizational culture and effective change management systems to allow organizations to react to uncertainty. Theoretically, this study is expected to contribute to the literature of healthcare management, organizational resilience, digital transformation, innovation management and change management through a better understanding of the organizational elements that determine resilience of healthcare organizations. Moreover, this study is expected to contribute to the Healthcare Organizational Resilience literature by integrating three complementary perspectives, namely, technological transformation capabilities through Digital Transformation Capability, organizational renewal and learning capabilities through Innovation Culture, and organizational implementation and adaptation capabilities through Change Management .

METHODS

The research used survey method and quantitative technique. The study population was workers who worked in private hospitals in Indonesia. The population includes medical personnel, healthcare professionals, administrative staff and employees in supporting units, who are familiar with the process of the organization and changes in the hospital environment. The sampling technique was purposive sampling where the respondents were selected based on criteria such as being actively employed in a private hospital, having minimum of one year of work experience, understanding operational processes and organizational changes, and experience in use of digital systems or technologies implemented by the hospital. The data was collected through an online questionnaire using Google Forms. All items in the research instrument were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The variable Digital Transformation Capability was measured by the dimensions of digital technology integration, digital infrastructure capability, digital workforce capability, data-driven capability, and digital process transformation. The Innovation Culture was evaluated by the elements of openness to new ideas, organizational learning, information sharing, experimentation, and support for innovation.

Change Management was measured through categories of change preparedness, change communication, employee involvement, leadership support and change implementation capacity. Healthcare Organizational Resilience was assessed by the aspects of anticipatory capability, adaptive capacity, service continuity capability, recovery capability and organizational learning from disruption. The data were analyzed using multiple linear regression to determine the partial and simultaneous effects of Digital Transformation Capability, Innovation Culture and Change Management on Healthcare Organizational Resilience in private hospitals. The partial hypothesis test was conducted using t-test at 5% level of significance ($\alpha = 0.05$) and F-test was used to test the joint effect of the three independent variables. Further, coefficient of determination (R^2) was used to determine the proportion of variance of Healthcare Organizational Resilience, explained by Digital Transformation Capability, Innovation Culture and Change Management.

RESULT AND DISCUSSION

The results of data analysis on respondents who worked in private hospitals in Indonesia showed that Digital Transformation Capability, Innovation Culture, and Change Management simultaneously had good and significant effect on Healthcare Organizational Resilience. The partial test results also indicated that each independent variable has a positive and significant impact on Healthcare Organizational Resilience. This means all study hypotheses are acceptable. The coefficient of determination (R^2) of 0.414 indicates that 41.4% variance in Healthcare Organizational Resilience could be accounted for by digital transformation capability, innovation culture and change management. The regression coefficient values indicate that the most dominating influence on Healthcare Organizational Resilience was Change Management compared to Digital Transformation Capability and Innovation Culture. The results indicate that the hospitals' capacity to develop organizational resilience is associated not only with the application of digital technology and an innovation-friendly culture, but also, to a large extent, with the organization's ability to systematically manage change processes. Hospitals are required to respond to many demands and changes in the environment and effective change management ensures the continuity of healthcare services.

The results of this research found that Digital Transformation Capability has a positive and significant effect on Healthcare Organizational Resilience in the private hospital. The study reveals that the more capable hospitals are at developing, integrating and applying digital technology, the higher their organizational capacity to cope with disruptions, adapt to change, secure service continuity and restore performance after unforeseen events. The Digital Transformation Capability in hospital setting is not only availability of technical infrastructure but the capacity of organization to integrate technology with service processes, human resource skills, data management and decision-making mechanisms. Hospital information systems, electronic medical records, telemedicine, digital monitoring systems, integrated patient data and analytical technologies enable hospitals to access critical information more quickly and

accurately, allowing them to make responsive decisions in the face of changing conditions. Technology also enables the cooperation among medical, nursing, administrative, pharmacy, laboratory and other support units to fix disturbances in one aspect of the organization through more effective cross-functional coordination. In addition, digital capabilities allow hospitals to form alternative mechanisms of service delivery when traditional service operations are limited. Real-time data availability allows hospital management to detect changes in the demand for services, assess resource capacity, and reallocate workers and facilities in accordance with the organization's objectives. These capabilities improve the anticipatory and adaptive capacities that constitute the key elements of organizational resilience. But technology can only support organizational resilience successfully if hospitals are able to embed digital technologies into their organizational processes. The results of this study conclude that H1, which states that Digital Transformation Capability has a positive and significant effect on Healthcare Organizational Resilience, is supported.

The research results show that Innovation Culture has a good and significant effect on Healthcare Organizational Resilience in private hospitals. The findings imply that a supportive organizational culture that embraces new ideas, learning, knowledge sharing, experimentation, and solution creation is essential for enhancing the hospital's ability to adapt to different changes and disruptions. Hospitals in a changing healthcare environment cannot always rely on previously established processes and work practices in response to changes in the demands of patients, technology, legislation and crisis situations. Innovation Culture allows the people of the company to discover problems, suggest alternative solutions and improve the healthcare service process based on the experience gained and learning achieved. Giving medical staff, health care professionals and administrative staff the opportunity to express their ideas and participate in the innovation processes, the organization has a bigger reservoir of knowledge that can be used to react efficiently to changing situations. Moreover, an innovation-oriented culture encourages organizational learning processes, as failures and disruptions are not only seen as problems but they can be an important source of assessment and learning to improve organizational preparedness for future difficulties. This is especially relevant for Healthcare Organizational Resilience, since resilient organizations can not only return to their previous state after disruptions, but can also learn from such events and develop new capabilities. The Innovation Culture can also improve collaboration between professional groups and organizational units. In general, healthcare innovation requires the convergence of many perspectives, skill sets and capabilities. Moreover, a culture of openness to change in an organization can reduce organizational rigidity and improve the receptivity of employees to new methods, technology and processes in healthcare. The results of this study conclude that H2, which states that Innovation Culture has a positive and significant effect on Healthcare Organizational Resilience, is supported.

The results of the study show that Change Management has a positive and significant effect on Healthcare Organizational Resilience in private hospitals and is the variable that has the most dominant effect on the research model. The results suggest that change management is a strategic factor of hospitals' ability to adapt and ensure organizational continuity in dynamic conditions. Hospitals are

complex organizations containing multiple professional groups, authority structures, clinical standards, technology and interrelated service procedures. A change in one part of an organization may affect many other processes in that organization. In this case, the readiness adaptations for external constraints need to be not only well thought out but also systematically handled for their effective acceptance and implementation within the business. Effective Change Management is important in helping the hospital leadership communicate the “why” and “what” of the change, preparing the staff, involving organizational members in the change process, providing leadership support, and ensuring that the implementation of change does not interrupt patient care and service continuity. These traits are even more important when hospitals must respond quickly to health emergencies, changes in regulations, advances in technology, changes in services, or changes in what patients want. The prevalence of Change Management suggests that organizational resilience is heavily dependent on the capacity of hospitals to transform the need for adaptation into meaningful and implementable organizational changes. If there is employee resistance, poor communication, unclear roles or the workforce is not ready to drive change, then firms are unlikely to realize the biggest gains from digital technology and new ideas. The results of this study conclude that H3, which states that Change Management has a positive and significant effect on Healthcare Organizational Resilience, is supported.

CONCLUSION

Findings of this study show that Digital Transformation Capability, Innovation Culture and Change Management have a positive and significant impact on Healthcare Organizational Resilience in private hospitals. The results suggest that hospitals’ ability to systematically plan, communicate and implement organizational change is a key factor to improve their ability to adapt, maintain service continuity and recover from various disturbances. In practice, private hospitals need to improve their Digital Transformation Capability through more integration of digital technology, educating people of digital skills, and using data to drive organizational decision-making. Hospitals may also build an Innovation Culture by creating a work climate that supports the openness to new ideas, inter-professional interaction, information sharing and organizational learning from the experience gained. Nevertheless, since Change Management is the most dominant impact, the hospital management should concentrate on enhancing organizational readiness for change, clear and consistent communication, involving employees in transformation processes, providing strong leadership support, and implementing organizational changes in a well-planned and coordinated manner.

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