

Economic and Business Horizon

ISSN: 2963-2765

Economic and Business
Horizon

Volume: 04
Issue: 02
Year: 2025
Page: 205-214

Citation:

Savitri, A., & Mas'ud, F.
(2025). Organizational
Culture and Digital
Engagement: Study at
Hospital X, Integrative
Model. *Economic and
Business Horizon* 4(2), 205-
214

Organizational Culture and Digital Engagement: Study at Hospital X, Integrative Model

Anastasia Savitri^{1*}, Fuad Mas'ud¹

¹ Universitas Diponegoro, Semarang, Indonesia

* Corresponding author: Anastasia Savitri (savitri.rse@gmail.com)

Abstract

Digital transformation in healthcare creates structural and cultural challenges, especially in institutions prioritizing interpersonal service. Hospital X has implemented limited digital services, such as WhatsApp teleconsultation, despite increasing patient demand—mainly from pre-elderly individuals—for digital accessibility. Using an exploratory qualitative approach, this study interviewed seven employees from clinical, administrative, and IT functions. Findings reveal limited digitalization due to strong humanistic values, low digital competency, the absence of a structured transformation plan, and minimal employee involvement in innovation. Resistance stems not only from technical issues but also from cultural and emotional factors. To address this, a five-pillar integrative model is proposed: (1) recontextualizing values, (2) engaging employees in innovation, (3) gradual digital literacy training, (4) transparent communication, and (5) feedback-driven evaluation. This model offers a practical framework for balancing human-centered values with digital advancements in healthcare institutions.

Keywords

Digital Transformation, Employee Engagement, Healthcare Services, Organizational Culture.

1. Introduction

Indonesia's healthcare sector is undergoing a significant transformation, driven by the imperative to enhance service quality, accessibility, and efficiency. Marques and Ferreira (2020) proposed that digital transformation in healthcare has been increasingly more relevant over the previous two decades. The integration of digital technologies—such as electronic medical records (EMRs), telemedicine, and health information systems—has been accelerated by the COVID-19 pandemic, which underscored the need for resilient and adaptable healthcare infrastructures (Tortorella et al., 2022). Initiatives like the *SATUSEHAT* platform exemplify the government's commitment to digitalizing health services across the archipelago (Efdison et al., 2023).

Despite these advancements, challenges persist. A substantial proportion of healthcare facilities, particularly in rural and remote areas, face infrastructural limitations, including inadequate internet connectivity and insufficient technological resources (Corny et al., 2020; Rolls et al., 2020). Moreover, the adoption of digital tools is often hindered by a lack of digital literacy among healthcare professionals and resistance to change rooted in established organizational cultures. These factors contribute to a digital divide that hampers the equitable delivery of healthcare services nationwide.

Hospital X, a private healthcare institution in Indonesia, embodies these challenges. Historically emphasizing human-centered care, the hospital has been cautious in integrating digital solutions, limiting their use to administrative functions and basic teleconsultations via messaging applications. The absence of a comprehensive digital transformation roadmap and limited staff training further impede progress (Baskoro et al., 2023).

This study aims to explore the interplay between organizational culture and employee engagement in the context of digital transformation at Hospital X. Through qualitative interviews with staff members, the research seeks to identify cultural and operational barriers to digital adoption. Furthermore, the study proposes an integrative model comprising five pillars: (1) recontextualizing organizational values to align with digital innovation, (2) actively involving employees in the innovation process, (3) implementing gradual digital literacy training, (4) fostering transparent and participatory internal communication, and (5) establishing continuous feedback mechanisms for evaluation and adjustment. The findings aim to provide actionable insights for healthcare institutions facing similar challenges, offering a framework to navigate the complexities of digital transformation while preserving core organizational values.

2. Literature Review

The digital transformation of healthcare systems has garnered significant attention in recent years, emphasizing the need for organizations to adapt their cultures (Dal Mas et al., 2023) and engage employees effectively to ensure successful implementation (Pihir et al., 2019). This literature review synthesizes current research on organizational culture, employee engagement, and digital transformation within the healthcare context.

Organizational culture plays a pivotal role in the adoption and integration of digital technologies in healthcare settings (Sony et al., 2023). A supportive culture that fosters innovation, learning, and adaptability is essential for embracing digital change (Kraus et al., 2021; Ting et al., 2020). Studies have shown that organizations with a developmental culture are more likely to successfully implement Industry 4.0 technologies, highlighting the importance of cultural readiness in digital transformation efforts (Wiese et al., 2024).

Employee engagement is another critical factor influencing the success of digital initiatives. Engaged employees are more likely to embrace new technologies and contribute to the transformation process. Research indicates that factors such as self-efficacy, openness to experience, and conscientiousness positively impact employee engagement during digital transitions (Zhang et al., 2023). Conversely, technostress and resistance to change can hinder engagement and impede transformation efforts (Jurnalita, 2024).

The interplay between organizational culture and employee engagement is complex and multifaceted. A culture that promotes psychological safety, open communication, and continuous learning can enhance employee engagement and facilitate digital transformation. In the healthcare sector, where patient care is paramount, balancing technological advancements with human-centric values is crucial. Studies have emphasized the need for healthcare organizations to align their cultural values with digital strategies to ensure a seamless transition (Deep, 2023).

Furthermore, leadership plays a significant role in shaping organizational culture and influencing employee engagement. Transformational leadership styles that encourage participation, provide support, and communicate a clear vision are associated with higher levels of employee engagement and successful digital transformation (Rahmadani & Schaufeli, 2022).

In summary, the literature underscores the importance of a supportive organizational culture and active employee engagement in facilitating digital transformation in healthcare. By fostering a culture of innovation, ensuring psychological safety, and promoting effective leadership, healthcare organizations can navigate the complexities of digital change while maintaining their commitment to patient-centered care (Kuswanto, 2024).

3. Methods

This study employed a qualitative exploratory design to investigate the interplay between organizational culture and employee engagement in the context of digital transformation at Hospital X. The methodology was structured to ensure transparency, replicability, and alignment with established qualitative research practices in healthcare settings. A purposive sampling strategy was utilized to select participants who could provide rich, relevant insights into the hospital's digital transformation processes. The target population comprised healthcare professionals across various departments within Hospital X, including administrative staff, nurses, and physicians. The inclusion criteria required participants to have a minimum of one year of tenure at the hospital to ensure familiarity with its operational and cultural dynamics. Seven participants were recruited, representing a diverse cross-section of roles and experiences. This sample size aligns with qualitative research norms, which prioritize depth of information over breadth (Smith et al., 2009). The selection aimed to capture a comprehensive understanding of the organizational culture and employee engagement related to digital initiatives.

Data were collected through semi-structured interviews, allowing for flexibility in exploring participants' perspectives while maintaining a consistent framework across interviews. An interview guide was developed, encompassing topics such as experiences with digital tools, perceptions of organizational support for digital initiatives, and suggestions for enhancing digital engagement. Interviews were conducted in a private setting within the hospital premises to ensure confidentiality and encourage openness. Each interview lasted approximately 45 to 60 minutes and was audio-recorded with the participants' consent. The recordings were transcribed verbatim for subsequent analysis. The interview guide was informed by existing literature on digital transformation in healthcare, organizational culture, and employee engagement (Wiese et al., 2024; Deep, 2023). Questions were designed to elicit detailed narratives about participants' experiences and perceptions, facilitating

an in-depth understanding of the phenomena under study. To enhance the reliability and validity of the findings, member checking was employed, wherein participants reviewed their transcripts for accuracy. Additionally, triangulation was achieved by comparing data across different participant roles and departments, identifying common themes and divergent viewpoints. The methodological rigor of this study ensures that the findings are credible and transferable to similar healthcare settings undergoing digital transformation.

4. Results

This section presents the findings from our qualitative study at Hospital X, focusing on the interplay between organizational culture, employee engagement, and digital transformation. The data were collected through semi-structured interviews with seven healthcare professionals, encompassing administrative staff, nurses, and physicians. Thematic analysis was employed to identify recurring patterns and insights relevant to the study's objectives. The interviews revealed that Hospital X's digital engagement is predominantly limited to administrative functions and basic teleconsultations conducted via messaging applications. There is an absence of advanced digital tools such as electronic medical records (EMRs), telemedicine platforms, or integrated health information systems. This limited integration indicates a nascent stage of digital transformation within the hospital. A recurring theme across the interviews was the hospital's strong emphasis on human-centric care. Participants highlighted a deeply ingrained organizational culture that values personal interactions and face-to-face consultations. This cultural orientation has fostered a cautious approach towards adopting digital solutions, with concerns that technology might compromise the quality of patient care.

The lack of a comprehensive digital transformation strategy emerged as a significant barrier. Participants noted the absence of clear guidelines, objectives, or timelines for implementing digital initiatives. This strategic void has resulted in fragmented efforts, with digital tools being adopted on an ad-hoc basis without cohesive planning or alignment with organizational goals. The interviews highlighted considerable variability in digital literacy levels among staff members. While some employees expressed confidence in using digital tools, others reported discomfort and a lack of familiarity with technology. This disparity poses challenges for uniform adoption of digital solutions and underscores the need for targeted training programs to enhance digital competencies across the workforce. Participants observed that the hospital's patient demographic is predominantly composed of pre-elderly individuals who often prefer traditional, in-person consultations. However, there is a growing segment of patients, particularly among younger demographics, who are open to and even prefer digital interactions. This shift in patient preferences indicates an opportunity for the hospital to expand its digital services to meet evolving expectations.

Infrastructure limitations were identified as a significant impediment to digital transformation. Participants cited issues such as inadequate internet connectivity, outdated hardware, and insufficient technical support. These constraints hinder the effective implementation and utilization of digital tools, affecting both staff efficiency and patient experience. The study found that employee engagement in digital initiatives is limited. Staff members reported a lack of involvement in decision-making processes related to digital tool adoption and implementation. This lack of participation has led to feelings of disconnection and resistance among employees, further complicating the hospital's digital transformation efforts. Participants emphasized the absence of structured feedback mechanisms to assess the effectiveness of digital tools and initiatives. Without regular evaluations and opportunities for staff input, the hospital struggles to identify areas for improvement and to make informed decisions regarding digital strategies.

Table 1. Summary of Key Findings

Theme	Observations
Digital Integration	Limited to administrative tasks and basic teleconsultations
Organizational Culture	Emphasis on personal, face-to-face interactions
Strategic Planning	Absence of a comprehensive digital transformation roadmap
Digital Literacy	Varied levels among staff; need for targeted training
Patient Demographics	Predominantly pre-elderly; growing openness to digital services among younger patients
Infrastructure	Inadequate internet connectivity and outdated hardware
Employee Engagement	Limited involvement in digital decision-making processes
Feedback Mechanisms	Lack of structured evaluations and staff input channels

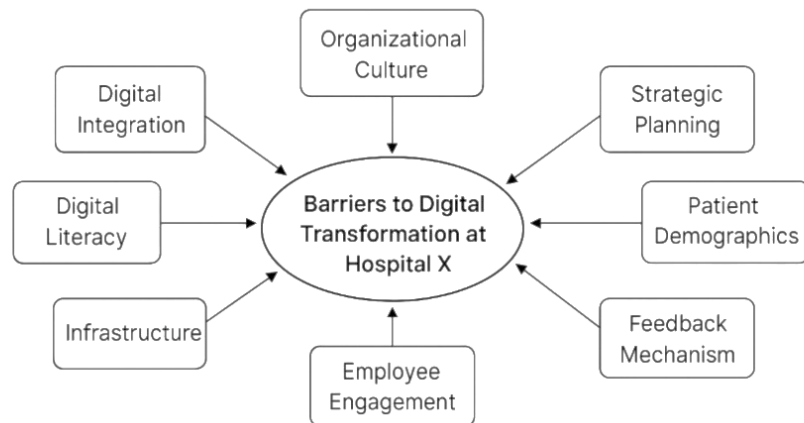


Figure 1. Thematic Map of Identified Barriers to Digital Transformation at Hospital X

These findings provide a comprehensive overview of the current state of digital transformation at Hospital X. They highlight the multifaceted challenges the hospital faces, ranging from cultural and infrastructural barriers to issues related to staff engagement and strategic planning. Addressing these challenges requires a holistic approach that considers the interplay between organizational culture, employee engagement, and technological readiness.

5. Discussion

The findings from Hospital X underscore the multifaceted challenges faced by Indonesian healthcare institutions in embracing digital transformation. To address these challenges, we propose an integrative model comprising five pillars: (1) Reframing Organizational Culture, (2) Employee Co-Creation, (3) Progressive Digital Literacy, (4) Transparent Internal Communication, and (5) Continuous Feedback Mechanisms. This model aims to align digital initiatives with the unique cultural, infrastructural, and demographic contexts of Indonesian healthcare settings.

The entrenched human-centric culture at Hospital X, while fostering strong patient-provider relationships, has inadvertently impeded the adoption of digital tools. This phenomenon is not isolated; studies indicate that organizational culture significantly influences technology adoption in healthcare settings. For instance,

Sutrisno et al. (2021) found that organizational culture influences service quality by up to 65% in Indonesian public health centers. Similarly, Wiese et al. (2024) highlighted that developmental organizational cultures are more conducive to adopting Industry 4.0 technologies in Swiss businesses, emphasizing the universal relevance of culture in digital transformation. To navigate this, it's imperative to reframe the organizational culture to view digital tools as enhancers rather than replacements of human interaction. Emphasizing the role of technology in augmenting patient care can facilitate a cultural shift conducive to digital integration.

Engaging employees in the co-creation of digital solutions ensures that the tools developed are user-centric and address actual workflow needs. This participatory approach not only enhances the relevance of digital tools but also fosters a sense of ownership among staff, thereby reducing resistance to change. Research highlights the positive correlation between engaging leadership and successful digital transformation. For example, Rahmadani and Schaufeli (2022) demonstrated that engaging leadership positively influences work engagement among Indonesian employees. Their study emphasized the role of "diuwongke," a Javanese-Indonesian concept referring to treating people with dignity and respect, as a moderating factor that strengthens the relationship between engaging leadership and work engagement. In the context of Hospital X, involving staff in the design and implementation phases can bridge the gap between technological solutions and practical application.

The variability in digital literacy among Hospital X staff mirrors a broader national trend, where digital competence levels are uneven across the healthcare workforce. Implementing tiered training programs that cater to varying proficiency levels can facilitate a smoother transition to digital systems. Moreover, integrating digital literacy into continuous professional development ensures that staff remain adept at utilizing evolving technologies, thereby sustaining the momentum of digital transformation. The Indonesian Ministry of Health's Blueprint for Digital Health Transformation Strategy 2024 emphasizes the need for enhancing digital literacy among healthcare workers to support the successful implementation of digital health initiatives (Ministry of Health, 2024).

Effective communication is pivotal in managing change and mitigating uncertainties associated with digital transformation. At Hospital X, the lack of a clear strategic roadmap has contributed to fragmented digital initiatives. Establishing transparent communication channels can disseminate the vision, objectives, and progress of digital projects, thereby aligning staff efforts and expectations. Furthermore, open dialogues can surface concerns and suggestions, fostering a collaborative environment conducive to change. Philips (2023) underscores that healthcare leaders must empower their teams through ongoing training and adopt agile ways of working to foster a culture receptive to digital transformation.

The absence of structured feedback loops at Hospital X has hindered the iterative improvement of digital tools and processes. Implementing mechanisms such as regular surveys, focus groups, and performance metrics can provide insights into the efficacy of digital initiatives. This data-driven approach enables timely adjustments, ensuring that digital solutions remain aligned with user needs and organizational goals. Moreover, feedback mechanisms can identify training needs, inform policy revisions, and enhance overall system resilience. The integration of the Hepatitis Information System (SIHEPI) with Puskesmas and hospital e-registries in Jakarta serves as an example of how feedback mechanisms can enhance digital health initiatives (World Health Organization, 2023).

Indonesia's diverse demographic landscape necessitates tailored digital health solutions. The predominance of pre-elderly patients at Hospital X, who may prefer traditional consultations, contrasts with the growing digital affinity among younger

populations. Therefore, adopting a hybrid model that offers both digital and in-person services can cater to varying preferences. Additionally, addressing infrastructural disparities, particularly in rural areas, is crucial for equitable digital health access. The Indonesian Ministry of Health's blueprint for digital health transformation emphasizes the need for inclusive digital health strategies that consider demographic diversity.

The integrative model proposed not only addresses the specific challenges at Hospital X but also offers a framework applicable to similar healthcare institutions in Indonesia. By aligning digital transformation efforts with organizational culture, employee engagement, and demographic needs, healthcare providers can enhance service delivery and patient outcomes. Future research could explore the longitudinal impact of implementing this model, assess its scalability across different healthcare settings, and examine its applicability in other sectors undergoing digital transformation.

6. Conclusion

This study has examined the multifaceted challenges and opportunities associated with digital transformation in Indonesia's healthcare sector, particularly through the lens of Hospital X. By proposing and analyzing five strategic pillars—Reframing Organizational Culture, Employee Co-Creation, Progressive Digital Literacy, Transparent Internal Communication, and Continuous Feedback Mechanisms—we have outlined a comprehensive framework aimed at facilitating effective digital integration within healthcare institutions. The research underscores that successful digital transformation is not solely a technological endeavor but also a human-centric process that necessitates cultural shifts, employee engagement, and continuous learning. The findings suggest that while technological infrastructure is vital, the attitudes, skills, and collaboration of healthcare professionals play a pivotal role in the adoption and sustainability of digital initiatives.

Despite the insights gained, this study has several limitations that may affect the generalizability and applicability of its conclusions. Firstly, the research focused on a single institution, Hospital X, which may not represent the diverse contexts of other healthcare facilities across Indonesia. Secondly, the study primarily utilized qualitative methods, which, while rich in detail, may lack the statistical power to establish broader trends. Additionally, the rapidly evolving nature of digital technology means that some findings may become outdated as new innovations emerge. These limitations suggest that caution should be exercised when extrapolating the results to different settings or over extended periods.

To build upon this study, future research should consider a multi-institutional approach to capture a more representative picture of digital transformation across various healthcare settings in Indonesia. Incorporating quantitative methods could provide statistical validation of the proposed framework and its effectiveness. Longitudinal studies would also be beneficial to assess the sustainability and long-term impact of digital initiatives. Furthermore, exploring patient perspectives on digital healthcare services could offer valuable insights into user acceptance and satisfaction, thereby informing more patient-centered digital strategies. In conclusion, while digital transformation presents significant challenges, it also offers substantial opportunities to enhance healthcare delivery in Indonesia. By addressing cultural, educational, and communicative aspects alongside technological advancements, healthcare institutions can navigate the complexities of digital integration and move towards more efficient, effective, and patient-centered care.

References

- Baskoro, F., Pancakusuma, M. B., & Raharjo, S. T. (2023). Designing And Evaluating Training Models for Human Resource Competencies in The Digital Era. *Arthatama*, 7(2), 49-62.
- Corny, J., Rajkumar, A., Martin, O., Dode, X., Lajonchère, J.-P., Billuart, O., Bézie, Y., & Buronfosse, A. (2020). A machine learning-based clinical decision support system to identify prescriptions with a high risk of medication error. *Journal of the American Medical Informatics Association*, 27(11), 1695-1704.
- Dal Mas, F., Massaro, M., Rippa, P., & Secundo, G. (2023). The challenges of digital transformation in healthcare: An interdisciplinary literature review, framework, and future research agenda. *Technovation*, 123, 102716.
- Deep, G. (2023). Digital transformation's impact on organizational culture. *International Journal of Science and Research Archive*, 10(2), 396-401.
- Efdison, Z., Lova, A., Yelnim, Y., Sudirman, S., & Pramurza, D. (2023). Fostering Economic Empowerment and Child Protection in Sungai Penuh City: The Role of Dharma Wanita Association's Socialization and Entrepreneurship Training. *Research Horizon*, 3(3), 198-203.
- Jurnalita, A. C. (2024). The Impact of Digital Transformation on MSME Competitiveness and Economic Growth. *Arthatama: Journal of Business Management and Accounting*, 8(2), 95-106.
- Kraus, S., Schiavone, F., Pluzhnikova, A., & Invernizzi, A. C. (2021). Digital transformation in healthcare: Analyzing the current state-of-research. *Journal of Business Research*, 123, 557-567.
- Kuswanto, N. M. (2024). The Role of Social Media in Online Marketing for MSMEs. *Economic and Business Horizon*, 3(2), 84-89.
- Marques, I. C. P., & Ferreira, J. J. M. (2020). Digital transformation in the area of health: Systematic review of 45 years of evolution. *Health Technology*, 10, 575-586.
- Philips. (2023). How healthcare leaders can foster a culture of digital transformation. *Philips Innovation Matters Blog*. Available at: <https://www.philips.com/a-w/about/news/archive/blogs/innovation-matters/2023/20230320-how-healthcare-leaders-can-foster-a-culture-of-digital-transformation.html>.
- Pihir, I., Tomičić-Pupek, K., & Tomičić Furjan, M. (2019). Digital transformation playground – Literature review and framework of concepts. *Journal of Information and Organizational Sciences*, 43(1), 33-48.
- Rahmadani, V. G., & Schaufeli, W. B. (2022). Engaging leadership and work engagement as moderated by “diuwongke”: An Indonesian study. *The International Journal of Human Resource Management*, 33(7), 1267-1295.
- Rolls, D. A., Khanna, S., Lloyd, N., Reeson, A. F., Jayasena, R., McCormick, C., & Hakkennes, S. (2020). Before-after evaluation of patient length of stay in a rehabilitation context following implementation of an electronic patient journey board. *International Journal of Medical Informatics*, 134, 104042.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. SAGE Publications.
- Sony, M., Antony, J., & Tortorella, G. L. (2023). Critical success factors for successful implementation of Healthcare 4.0: A literature review and future research agenda. *International Journal of Environmental Research and Public Health*, 20(5), 4669.
- Sutrisno, H., Kholis, N., & Hidayat, R. (2021). The influence of organizational culture on the improvement of health services at the Telaga Murni Public Health Center. *Lejea: Jurnal Pendidikan Islam*, 3(1), 1-10.
- Ting, D. S. W., Carin, L., Dzau, V., & Wong, T. Y. (2020). Digital technology and COVID-19. *Nature Medicine*, 26(4), 459-461.
- Tortorella, G. L., Fogliatto, F. S., Kurnia, S., Thürer, M., & Capurro, D. (2022). Healthcare 4.0 digital applications: An empirical study on measures, bundles and patient-centered performance. *Technological Forecasting and Social Change*, 181, 121780.
- Wiese, S. A., Lehmann, J., & Beckmann, M. (2024). Organizational culture and the usage of Industry 4.0 technologies: Evidence from Swiss businesses. *arXiv preprint arXiv:2412.12752*.

Zhang, Y., Wang, Y., & Li, X. (2023). Personality traits and employee engagement during digital transformation: A study in the healthcare industry. *Journal of Organizational Behavior*, 44(2), 123–140.



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>).