International Journal of Sustainable Applied Sciences (IJSAS)
Vol. 4, No. 5, 2026: 393-406

Digital Innovation and Public Value Creation in Healthcare: Empirical Evidence from a Regional Public Hospital in Indonesia

Kiki Reski[1]*, Andi Aslinda[2], Muhammad Daud[3], Andi Kasmawati[4]
Universitas Negeri Makassar
Corresponding Author: Kiki Reski kikireskistudent@gmail.com

A R T I C L E I N F O

Keywords: Digital Innovation; Public Value; PLS-SEM; Healthcare Services; Patient Satisfaction; Indonesia

Received : 21, March
Revised : 23, April
Accepted: 28, May

A B S T R A C T

Digital transformation has become a strategic priority in public healthcare, yet its contribution to public value creation remains underexplored, particularly in developing countries. This study examines how digital innovation shapes public value in healthcare, focusing on I Lagaligo Regional General Hospital, Indonesia. Drawing on the public value framework, digital innovation is conceptualized as a multidimensional construct encompassing efficiency, accessibility, transparency, and patient-centered care. A mixed-method approach was employed. Quantitative data were collected from 312 patients using purposive sampling, targeting individuals who had utilized digital health services. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that digital innovation significantly improves service quality ($\beta = 0.61$, $p < 0.001$) and patient satisfaction ($\beta = 0.57$, $p < 0.001$), both of which strongly contribute to public value creation ($\beta = 0.64$, $p < 0.001$), with satisfactory explanatory power ($R^2 = 0.58$).

Qualitative findings support these results, highlighting improved efficiency and reduced waiting times, while also identifying challenges related to digital literacy, infrastructure, and organizational readiness. This study provides empirical evidence linking digital innovation to public value outcomes and offers policy implications for strengthening inclusive and sustainable digital healthcare systems.

DOI: https://doi.org/10.59890/ijsas.v4i5.455
ISSN-E: 3025-5597
https://dmimultitechpublisher.my.id/index.php/ijsas

INTRODUCTION

Digital transformation has fundamentally reshaped public sector governance, particularly in healthcare systems where efficiency, accessibility, and service quality are critical determinants of societal welfare. The rapid advancement of digital technologies—such as electronic health records, telemedicine, artificial intelligence, and integrated health information systems—has significantly transformed how healthcare services are delivered and managed. These innovations enable data-driven decision-making, streamline administrative processes, and enhance patient engagement, ultimately improving healthcare outcomes (Keesara et al., 2020; Whitelaw et al., 2020).

In the context of public healthcare, digital innovation is not merely a technological shift but a strategic mechanism for creating public value, defined as the collective benefit generated through improved service delivery, transparency, and citizen satisfaction (Moore, 1995; Bryson et al., 2017). Recent studies highlight that digital transformation contributes to increased operational efficiency and broader access to healthcare services while reducing costs and service delays (Cordella & Paletti, 2019; Mergel et al., 2019). However, despite its growing importance, the relationship between digital innovation and public value creation remains conceptually fragmented and empirically underexplored, particularly in developing countries.

Existing research has largely focused on technological adoption and system performance, with limited attention to how digital innovation translates into multidimensional public value outcomes. Moreover, studies in the public sector indicate a potential "decoupling" between innovation goals and actual value realization, where efficiency gains may overshadow broader societal benefits such as equity and inclusiveness (Schou & Pors, 2019; van Dijck et al., 2018). This gap underscores the need for a more integrated analytical framework that links digital innovation to public value creation.

In Indonesia, digital transformation in healthcare has become a national priority, yet its implementation at the regional hospital level remains uneven due to disparities in infrastructure, human resource capacity, and digital literacy (Dwivedi et al., 2021). Empirical evidence from local healthcare institutions is still limited, particularly in examining how digital innovation contributes to public value outcomes.

Therefore, this study aims to analyze the role of digital innovation in creating public value in healthcare services, using I Lagaligo Regional General Hospital as a case study. By integrating the public value framework with digital innovation theory, this research provides empirical insights into how technological transformation can enhance service quality, patient satisfaction, and overall societal benefits in a regional healthcare context.

The growing integration of digital technologies in healthcare has positioned digital innovation as a central driver of transformation in public service delivery. Digital innovation in healthcare extends beyond the mere adoption of technology; it reflects a systemic shift in how healthcare organizations design, deliver, and manage services. Recent studies emphasize that digital tools—such as electronic medical records, telemedicine platforms,

and integrated health information systems—enable healthcare providers to enhance operational efficiency, improve diagnostic accuracy, and facilitate real-time decision-making (Keesara et al., 2020; Kraus et al., 2021). Moreover, the acceleration of digital health adoption in the post-pandemic era has reinforced its role in expanding service accessibility and strengthening healthcare system resilience (Iyengar et al., 2020; Whitelaw et al., 2020).

Despite these advancements, the implementation of digital innovation remains uneven, particularly in developing countries. Structural constraints such as limited infrastructure, disparities in digital literacy, and organizational resistance continue to hinder the effectiveness of digital transformation initiatives (Agarwal et al., 2022; Dwivedi et al., 2021). These challenges suggest that digital innovation should be understood not only as a technological phenomenon but also as an institutional and organizational process requiring alignment between technology, human resources, and governance structures.

Within the public sector context, the concept of public value provides a critical lens for evaluating the broader societal impact of digital innovation. Public value theory moves beyond traditional performance metrics by emphasizing outcomes such as social equity, transparency, accountability, and citizen satisfaction (Moore, 1995; Bryson et al., 2017). In healthcare, public value is created when services are not only efficient but also inclusive, responsive, and aligned with community needs. Recent scholarship highlights that digital transformation can enhance public value by improving access to healthcare services, reducing administrative burdens, and increasing transparency in service delivery (Cordella & Paletti, 2019; Mergel et al., 2019).

However, emerging evidence indicates that the relationship between digital innovation and public value creation is neither linear nor automatic. While digital technologies can improve efficiency and service quality, they may also produce unintended consequences, such as digital exclusion and unequal access to services (van Dijck et al., 2018; Schou & Pors, 2019). This has led to the growing recognition of responsible digital innovation, which emphasizes the importance of inclusiveness, ethical considerations, and sustainability in digital transformation processes (Stahl et al., 2021). In this regard, the success of digital innovation in creating public value depends on the extent to which it is embedded within supportive governance frameworks and institutional capacities.

Furthermore, recent empirical studies have begun to explore the mechanisms through which digital innovation contributes to public value outcomes. Findings suggest that digital health services can enhance patient satisfaction by reducing waiting times, improving service transparency, and facilitating better communication between patients and healthcare providers (Batko & Ślęzak, 2022; Kruse et al., 2020). At the same time, organizational readiness and user acceptance emerge as critical mediating factors that influence the effectiveness of digital transformation initiatives (Venkatesh et al., 2022).

Nevertheless, the existing literature remains fragmented, with limited empirical studies explicitly linking digital innovation to public value creation in

the context of regional public hospitals, particularly in developing countries. Most prior research has focused either on technological adoption or on service performance, without integrating these perspectives into a comprehensive analytical framework. This gap highlights the need for context-specific empirical investigations that examine how digital innovation translates into tangible societal benefits.

Building on this gap, the present study integrates digital innovation and public value theory to provide empirical evidence from a regional public hospital in Indonesia. By examining the relationships between digital innovation, service quality, patient satisfaction, and public value, this research contributes to a more nuanced understanding of how digital transformation can generate meaningful outcomes in the public healthcare sector.

LITERATURE REVIEW

Digital innovation has become a transformative force in contemporary healthcare systems, particularly in the public sector where efficiency, accessibility, and accountability are central to service delivery. Digital innovation refers to the integration and utilization of digital technologies to improve organizational processes, enhance service quality, and create new forms of value for stakeholders (Vial, 2019). In the healthcare context, digital innovation includes technologies such as electronic medical records, telemedicine, mobile health applications, integrated information systems, and artificial intelligence-based services. These technologies have significantly changed how healthcare institutions manage patient data, deliver medical services, and facilitate communication between healthcare providers and patients (Keesara et al., 2020). The increasing adoption of digital technologies in healthcare demonstrates that innovation is no longer limited to operational efficiency but also contributes to broader organizational transformation and improved patient experiences.

Recent literature highlights that digital innovation in healthcare contributes substantially to improving service effectiveness and organizational responsiveness. According to Kraus et al. (2021), digital transformation enables healthcare institutions to optimize decision-making processes, increase service speed, and enhance coordination among medical personnel. Similarly, Whitelaw et al. (2020) argue that digital healthcare technologies became increasingly important after the COVID-19 pandemic because they improved healthcare accessibility while reducing physical interaction and administrative delays. The implementation of digital systems such as online registration, digital queue management, and teleconsultation services has also contributed to reducing patient waiting times and improving service convenience (Iyengar et al., 2020). These findings indicate that digital innovation has strategic implications for enhancing healthcare performance and patient-centered services.

Despite its potential benefits, the implementation of digital innovation in healthcare also faces various structural and organizational challenges. Several studies emphasize that digital transformation requires not only technological

infrastructure but also institutional readiness, digital literacy, and organizational adaptability (Dwivedi et al., 2021). In developing countries, disparities in technological access and human resource capacity often hinder the effectiveness of digital healthcare systems. Agarwal et al. (2022) explain that resistance to technological change, limited digital competencies among healthcare workers, and inadequate infrastructure remain significant barriers to successful digital innovation. Consequently, digital transformation should be understood as a socio-technical process involving the interaction between technology, institutions, and human actors rather than merely the adoption of new technologies.

The concept of public value provides an important theoretical foundation for understanding the broader societal implications of digital innovation in public healthcare. Public value theory, introduced by Moore (1995), emphasizes that public sector organizations should focus not only on efficiency and performance but also on generating benefits that enhance societal welfare, citizen trust, and democratic legitimacy. In healthcare, public value is reflected through equitable access to services, transparency, responsiveness, accountability, and patient satisfaction. Bryson et al. (2017) further argue that public value governance extends beyond traditional public administration by prioritizing collaborative and citizen-oriented approaches to public service delivery. Therefore, digital innovation can be considered successful when it creates meaningful benefits for society and improves the quality of public services.

Several empirical studies have demonstrated the relationship between digital innovation and public value creation. Cordella and Paletti (2019) found that digital technologies in the public sector can create value by improving administrative efficiency, service transparency, and citizen engagement. Likewise, Mergel et al. (2019) emphasize that digital transformation enhances organizational agility and service responsiveness, which are essential dimensions of public value creation. In healthcare settings, digital systems can improve patient experiences by facilitating easier access to information, reducing service delays, and increasing trust in healthcare institutions (Kruse et al., 2020). These findings suggest that digital innovation contributes not only to technical improvements but also to broader societal outcomes associated with public value.

Nevertheless, scholars also warn that digital transformation may generate unintended consequences if inclusiveness and equity are not adequately considered. van Dijck et al. (2018) argue that excessive dependence on digital platforms can produce digital exclusion, particularly for individuals with limited technological literacy or inadequate internet access. Similarly, Schou and Pors (2019) found that digitalized public services may unintentionally marginalize vulnerable populations who are unable to effectively engage with digital systems. This issue is especially relevant in developing countries where socio-economic inequalities remain significant. Consequently, the success of digital innovation in creating public value depends heavily on the ability of

institutions to ensure inclusiveness, accessibility, and user-centered service design.

Another important aspect in the literature concerns the relationship between digital innovation, service quality, and patient satisfaction. Service quality remains a fundamental determinant of healthcare effectiveness and public trust. Parasuraman et al. (1988) conceptualize service quality through dimensions such as responsiveness, reliability, assurance, empathy, and tangibility. In digital healthcare environments, these dimensions are reflected through system usability, information accuracy, service efficiency, and responsiveness to patient needs. Research by Batko and Ślęzak (2022) demonstrates that digital healthcare services positively influence patient satisfaction by improving communication, accessibility, and service convenience. Similarly, Venkatesh et al. (2022) emphasize that user acceptance and satisfaction are crucial mediating factors determining whether digital innovation successfully creates public value.

The existing literature therefore indicates that digital innovation has substantial potential to transform healthcare services and generate public value. However, empirical studies examining this relationship remain limited, particularly in the context of regional public hospitals in developing countries such as Indonesia. Most prior studies have focused primarily on technological adoption or service efficiency without comprehensively integrating public value dimensions. This gap highlights the importance of conducting empirical investigations that analyze how digital innovation influences service quality, patient satisfaction, and public value simultaneously within regional healthcare institutions. Therefore, this study contributes to the literature by integrating digital innovation theory and public value theory to examine the role of digital transformation in creating societal benefits in public healthcare services in Indonesia.

METHODOLOGY

This study employs a quantitative explanatory approach to examine the relationship between digital innovation and public value creation in healthcare, supported by qualitative insights to enrich contextual understanding. A cross-sectional survey design was adopted to capture patients' perceptions of digital health services at I Lagaligo Regional General Hospital, Indonesia. Given the study's objective to test complex relationships among latent constructs and its prediction-oriented nature, Partial Least Squares Structural Equation Modeling (PLS-SEM) was selected as the primary analytical technique, as it is well suited for handling non-normal data and relatively small to medium sample sizes (Hair et al., 2021; Henseler et al., 2016).

The study population consists of patients who have accessed healthcare services at the hospital, with a focus on those who have experience using digital health services. A purposive sampling technique was applied to ensure that respondents met specific criteria, namely having used digital platforms such as online registration systems, electronic medical records, or digital queue services (Etikan et al., 2016). A total of 312 valid responses were obtained, exceeding the

recommended minimum sample size for PLS-SEM and ensuring adequate statistical power for model estimation (Hair et al., 2021).

Data were collected through a structured questionnaire distributed both online and offline within the hospital environment. Respondents were asked to evaluate their experiences using a five-point Likert scale ranging from strongly disagree to strongly agree (Likert, 1932). To complement the quantitative data, semi-structured interviews were conducted with selected healthcare professionals and hospital administrators to gain deeper insights into organizational readiness and implementation challenges associated with digital innovation (Creswell & Creswell, 2018).

All constructs in this study were operationalized as reflective latent variables adapted from prior literature. Digital innovation was measured through indicators capturing system usability, accessibility, integration, and reliability (Kraus et al., 2021; Venkatesh et al., 2022). Service quality was assessed based on responsiveness, efficiency, and transparency of healthcare services, drawing on the SERVQUAL perspective (Parasuraman et al., 1988). Patient satisfaction reflected overall service experience and the extent to which expectations were met (Kotler & Keller, 2016), while public value encompassed broader dimensions such as accessibility, equity, trust, and perceived societal benefits (Moore, 1995; Bryson et al., 2017).

The data analysis followed a two-stage PLS-SEM procedure, beginning with the evaluation of the measurement model to ensure reliability and validity. Indicator reliability was assessed through outer loadings, while internal consistency was evaluated using Cronbach's alpha and composite reliability. Convergent validity was established through average variance extracted (AVE), and discriminant validity was examined using the heterotrait-monotrait ratio (HTMT) (Henseler et al., 2015). Subsequently, the structural model was assessed by examining path coefficients, their statistical significance using bootstrapping with 5,000 resamples, and the explanatory power of the model through R^2 values (Hair et al., 2021). Effect sizes (f^2) and predictive relevance (Q^2) were also evaluated to determine the strength and predictive capability of the model (Hair et al., 2019).

In addition, mediation analysis was conducted to test the indirect effects of digital innovation on public value through service quality and patient satisfaction. The significance of mediation effects was determined using bootstrapping procedures, allowing for a robust assessment of indirect relationships (Preacher & Hayes, 2008). Ethical considerations were carefully addressed by ensuring voluntary participation, informed consent, and the confidentiality of respondents' data throughout the research process in accordance with established research ethics principles (Saunders et al., 2019).

RESEARCH RESULT

The empirical analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) confirms that the proposed model demonstrates strong measurement quality and substantial explanatory capability. All indicators exhibit outer loadings above 0.70, indicating high indicator reliability and

confirming that each item adequately represents its respective latent construct (Hair et al., 2021). Internal consistency reliability is well established, as reflected by Cronbach's alpha and composite reliability values exceeding the recommended threshold of 0.70 (Nunnally & Bernstein, 1994). Convergent validity is also achieved, with Average Variance Extracted (AVE) values above 0.50 across all constructs, suggesting that a significant proportion of variance is captured by the latent variables (Fornell & Larcker, 1981). In addition, discriminant validity assessed using the HTMT ratio remains below 0.85, confirming that the constructs are empirically distinct and free from multicollinearity issues (Henseler et al., 2015).

To further ensure the robustness of the measurement model, multicollinearity diagnostics were conducted using Variance Inflation Factor (VIF), with all values below 3.3, indicating the absence of collinearity bias (Kock, 2015). This strengthens confidence in the stability of the estimated relationships and confirms that the model is statistically reliable.

Turning to the structural model, the results reveal that all hypothesized relationships are positive and statistically significant at $p < 0.001$. Digital innovation has a strong and significant effect on service quality ($\beta = 0.61$), indicating that digital systems substantially enhance efficiency, responsiveness, and transparency in healthcare delivery. This finding underscores the role of digital platforms in optimizing service processes and reducing administrative burdens (Keesara et al., 2020; Kraus et al., 2021). Similarly, digital innovation significantly influences patient satisfaction ($\beta = 0.57$), highlighting that user-centered digital services—such as online registration and reduced waiting times—play a critical role in shaping positive patient experiences (Kruse et al., 2020).

The results further indicate that both service quality and patient satisfaction significantly contribute to public value creation. However, the magnitude of the effect differs notably between the two constructs. Patient satisfaction demonstrates a stronger impact ($\beta = 0.64$) compared to service quality ($\beta = 0.36$), suggesting that experiential and perceptual dimensions of healthcare services are more influential in generating public value than operational performance alone. This finding reinforces the importance of patient-centered approaches in digital healthcare transformation (Batko & Ślęzak, 2022; Moore, 1995).

The explanatory power of the model is substantial, with an R^2 value of 0.58 for public value, indicating that more than half of the variance in public value is explained by the model. Additionally, R^2 values for service quality (0.37) and patient satisfaction (0.32) indicate moderate explanatory power, suggesting that digital innovation is a key but not exclusive determinant of these constructs (Hair et al., 2021). Predictive relevance is confirmed through Q^2 values greater than zero for all endogenous variables, demonstrating that the model has adequate predictive capability (Stone, 1974; Geisser, 1974).

Effect size (f^2) analysis provides further insights into the relative importance of each relationship. Digital innovation exhibits a large effect on service quality ($f^2 > 0.35$) and a moderate effect on patient satisfaction ($f^2 \approx 0.25$).

In contrast, service quality shows a small-to-moderate effect on public value ($f^2 \approx 0.15$), while patient satisfaction demonstrates a large effect ($f^2 > 0.35$), further emphasizing its dominant role within the model (Cohen, 1988).

The mediation analysis reveals that the relationship between digital innovation and public value is predominantly indirect. Both indirect paths—through service quality ($\beta = 0.22$, $p < 0.001$) and patient satisfaction ($\beta = 0.36$, $p < 0.001$)—are statistically significant, indicating partial mediation. Notably, the indirect effect through patient satisfaction is stronger, suggesting that the impact of digital innovation on public value is largely channeled through improvements in user experience rather than purely technical enhancements (Preacher & Hayes, 2008).

To strengthen the robustness of the findings, additional model fit indicators were examined. The standardized root means square residual (SRMR) value falls below the recommended threshold of 0.08, indicating a good model fit (Hu & Bentler, 1999). Furthermore, the model demonstrates consistent results across bootstrapping iterations, reinforcing the stability and reliability of the estimated relationships (Hair et al., 2021).

Overall, the results provide compelling empirical evidence that digital innovation contributes to public value creation through both functional improvements in service delivery and enhanced patient experiences. The findings highlight that while technological advancement is essential, its ultimate impact depends on how effectively it translates into meaningful and satisfactory user interactions within the healthcare system (Cordella & Paletti, 2019; Mergel et al., 2019).

DISCUSSION

The findings of this study provide compelling evidence that digital innovation plays a transformative role in public healthcare, not merely as a technological upgrade but as a strategic mechanism for public value creation. By empirically validating the relationships between digital innovation, service quality, patient satisfaction, and public value, this study advances the ongoing discourse in both digital governance and public administration literature (Mergel et al., 2019; Vial, 2019).

From a theoretical standpoint, the results strongly support the Public Value Theory proposed by Mark H. Moore, which emphasizes that the ultimate goal of public sector innovation is not efficiency alone but the creation of broader societal benefits (Moore, 1995). The findings reveal that while digital innovation significantly enhances service quality, its impact on public value is largely mediated by patient satisfaction. This indicates that public value is not automatically generated through technological efficiency, but rather through how citizens perceive and experience public services. In this sense, the study reinforces the argument that public value is inherently relational and experiential, rather than purely operational (Bryson et al., 2017).

This insight aligns with recent global studies showing that digital transformation in healthcare improves service efficiency but does not necessarily translate into increased public trust or satisfaction unless

accompanied by user-centered design (Mergel et al., 2019; Venkatesh et al., 2022). For instance, research in European healthcare systems demonstrates that digital platforms often succeed in reducing administrative burdens but fail to enhance patient experience due to usability issues and digital literacy gaps. Similarly, studies in developing countries highlight that digital health initiatives frequently encounter barriers related to infrastructure inequality and limited user readiness (Dwivedi et al., 2021; Agarwal et al., 2022). The present study confirms and extends these findings by showing that patient satisfaction is the most dominant predictor of public value, surpassing even service quality.

From a Digital Transformation Theory perspective, the results underscore that digital innovation should be understood as a socio-technical process involving not only technological deployment but also organizational change and user adaptation (Vial, 2019). The significant effect of digital innovation on service quality reflects the capacity of digital systems to streamline processes and enhance efficiency. However, the stronger effect of patient satisfaction on public value suggests that technological improvements must be translated into meaningful user experiences to generate societal impact. This finding contributes to the growing literature that critiques "technology-centric" approaches to digital transformation and calls for a more human-centered paradigm (Cordella & Paletti, 2019).

Moreover, the mediation effects identified in this study provide important insights into the mechanisms through which digital innovation creates value. The indirect pathways through service quality and patient satisfaction indicate that digital innovation operates through intermediate service outcomes, rather than exerting a direct effect on public value. This finding is consistent with service-dominant logic, which posits that value is co-created through interactions between service providers and users, rather than embedded in the technology itself (Vargo & Lusch, 2008). Thus, digital platforms should be seen as enablers of value co-creation rather than as value generators per se.

In comparison with global empirical evidence, the results of this study reveal both convergence and contextual specificity. While the positive impact of digital innovation on service quality and satisfaction is consistent with findings from advanced healthcare systems, the relatively stronger role of patient satisfaction in determining public value reflects the contextual realities of developing countries. In such settings, where baseline service quality may vary and trust in public institutions is often fragile, user experience becomes a critical determinant of perceived value. This suggests that the pathway to public value in developing contexts is more perception-driven than system-driven, highlighting the importance of aligning digital innovation with local user needs and expectations (Schou & Pors, 2019).

From a governance perspective, the findings also highlight the importance of institutional readiness and digital inclusion. The effectiveness of digital innovation is contingent upon the capacity of organizations to manage technological change and the ability of users to engage with digital systems. Without adequate digital literacy and infrastructure support, digital transformation may exacerbate inequalities rather than reduce them. This

supports the emerging concept of responsible digital innovation, which emphasizes inclusiveness, equity, and sustainability as core principles of digital transformation (Stahl et al., 2021; van Dijck et al., 2018).

Practically, these findings suggest that policymakers and hospital administrators should move beyond a narrow focus on technological adoption and prioritize user experience, service design, and organizational capacity building. Investments in digital infrastructure must be complemented by training programs, user-friendly system design, and continuous feedback mechanisms to ensure that digital services are accessible and responsive to patient needs (Kruse et al., 2020).

In sum, this study contributes to the literature by demonstrating that the success of digital innovation in public healthcare is not determined solely by its technical capabilities, but by its ability to generate meaningful, inclusive, and user-centered outcomes. By integrating public value theory with digital innovation frameworks, this research offers a more comprehensive understanding of how digital transformation can create tangible societal benefits, particularly in the context of regional healthcare systems in developing countries (Moore, 1995; Vial, 2019).

CONCLUSIONS AND RECOMMENDATIONS

This study confirms that digital innovation plays a crucial role in generating public value in healthcare, primarily through its impact on service quality and patient satisfaction. The findings highlight that patient satisfaction is the strongest driver of public value, indicating that the success of digital transformation depends more on user experience than on technological performance alone.

The study contributes theoretically by extending Public Value Theory, demonstrating that public value is created indirectly through service outcomes and user perceptions rather than directly through technology. It also advances digital innovation literature by emphasizing a socio-technical perspective, where value emerges from the interaction between technology, organizations, and users.

Empirically, this research provides evidence from a regional public hospital in a developing country, addressing a gap in existing literature. Practically, the findings suggest that policymakers should prioritize user-centered design, digital literacy, and organizational readiness alongside technological investment. Overall, digital innovation creates meaningful public value only when it is inclusive, user-oriented, and aligned with societal needs.

REFERENCES

Agarwal, R., Gao, G., DesRoches, C., & Jha, A. K. (2022). Research commentary—The digital transformation of healthcare: Current status and the road ahead. Information Systems Research, 33(2), 1–15.

Batko, K., & Ślęzak, A. (2022). The use of digital technologies in healthcare and its impact on patient satisfaction. Healthcare, 10(5), 1–15. https://doi.org/10.3390/healthcare10050815

Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2017). Public value governance: Moving beyond traditional public administration and the New Public Management. Public Administration Review, 77(5), 640–649. https://doi.org/10.1111/puar.12745

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates. https://doi.org/10.4324/9780203771587

Cordella, A., & Paletti, A. (2019). ICTs and value creation in public sector: Manufacturing logic vs service logic. Information Polity, 23(2):1-17. DOI: 10.3233/IP-170061

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.

Dwivedi, Y. K., Hughes, L., Coombs, C., et al. (2021). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. International Journal of Information Management, 55, 102211. https://doi.org/10.1016/j.ijinfomgt.2020.102211

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

Geisser, S. (1974). A predictive approach to the random effect model. Biometrika, 61(1), 101–107. https://doi.org/10.1093/biomet/61.1.101

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). SAGE Publications.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer. https://doi.org/10.1007/978-3-030-80519-7

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. Industrial Management & Data Systems, 116(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6(1), 1–55. https://doi.org/10.1080/10705519909540118

Iyengar, K., Upadhyaya, G. K., Vaishya, R., & Jain, V. (2020). COVID-19 and applications of smartphone technology in the current pandemic. Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 14(5), 733–737. https://doi.org/10.1016/j.dsx.2020.05.033

Keesara, S., Jonas, A., & Schulman, K. (2020). COVID-19 and health care's digital revolution. New England Journal of Medicine, 382(23), e82. https://doi.org/10.1056/NEJMp2005835

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. International Journal of e-Collaboration, 11(4), 1–10. https://doi.org/10.4018/ijec.2015100101

Kotler, P., & Keller, K. L. (2016). Marketing management (15th ed.). Pearson Education.

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. https://doi.org/10.1016/j.jbusres.2020.10.030

Kruse, C. S., Krowski, N., Rodriguez, B., Tran, L., Vela, J., & Brooks, M. (2020). Telehealth and patient satisfaction: A systematic review and narrative analysis. BMJ Open, 7(8), e016242. https://doi.org/10.1136/bmjopen-2017-016242

Likert, R. (1932). A technique for the measurement of attitudes. Archives of Psychology, 140, 1–55.

Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. Government Information Quarterly, 36(4), 101385. https://doi.org/10.1016/j.giq.2019.06.002

Moore, M. H. (1995). Creating public value: Strategic management in government. Harvard University Press.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12–40.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods, 40(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson Education.

Schou, J., & Pors, A. S. (2019). Digital by default? A qualitative study of exclusion in digitalized welfare. Social Policy & Administration, 53(3), 464–477. https://doi.org/10.1111/spol.12470

Stahl, B. C., Antoniou, J., Ryan, M., Macnish, K., & Jiya, T. (2021). Organisational responses to the ethical issues of artificial intelligence. AI & Society, 37, 23–37. https://doi.org/10.1007/s00146-021-01148-6

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. Journal of the Royal Statistical Society: Series B, 36(2), 111–147. https://doi.org/10.1111/j.2517-6161.1974.tb00994.x

van Dijck, J., Poell, T., & de Waal, M. (2018). The platform society: Public values in a connective world. Oxford University Press. https://doi.org/10.1093/oso/9780190889760.001.0001

van Dijck, J., Poell, T., & de Waal, M. (2018). The Platform Society: Public Values in a Connective World. Oxford University Press. https://doi.org/10.1093/oso/9780190889760.001.0001

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. Journal of the Academy of Marketing Science, 36(1), 1–10. https://doi.org/10.1007/s11747-007-0069-6

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2022). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. MIS Quarterly, 46(2), 328–376. https://doi.org/10.25300/MISQ/2022/15853

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Whitelaw, S., Mamas, M. A., Topol, E., & Van Spall, H. G. C. (2020). Applications of digital technology in COVID-19 pandemic planning and response. The Lancet Digital Health, 2(8), e435–e440. https://doi.org/10.1016/S2589-7500(20)30142-4