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Adaptive Organizational Culture and Digital Service Adoption: Mediating Effect of Digital Transformation and Organizational Readiness

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Abstract

Digital transformation in hospitals requires more than technology availability because sustained use depends on organizational culture, digital capability, and collective readiness for change. This study aimed to analyze the direct and indirect effects of adaptive organizational culture on successful digital service adoption through digital transformation readiness and organizational readiness for change. A quantitative explanatory cross-sectional survey among 205 employees selected from a population of 419 using proportional stratified random sampling across 15 occupational groups. Adaptive organizational culture, digital transformation readiness, organizational readiness for change, and digital service adoption success were measured using a 30-item five-point Likert questionnaire. Data were analyzed using partial least squares structural equation modeling with SmartPLS 4, including measurement evaluation, direct effect analysis, and parallel mediation testing with 5,000 bootstrap samples. The findings showed that adaptive organizational culture significantly influenced digital transformation readiness, organizational readiness for change, and digital service adoption success. Both readiness variables also significantly predicted adoption success and demonstrated complementary partial mediation. Successful hospital digitalization therefore requires adaptive cultural practices supported by technical-organizational readiness and collective preparedness for change.

Keywords

Adaptive Organizational Culture, Digital Service Adoption, Digital Transformation Readiness, Hospital, Organizational Readiness for Change.

1. Introduction

Digital transformation has become a strategic component of health-system reform because digital technologies can improve data integration, process efficiency, continuity of care, and decision-making. In Indonesia, the Ministry of Health of the Republic of Indonesia (2022) requires health-care facilities to implement electronic medical records, making hospital digitalization an organizational obligation rather than an isolated information-technology project. Kraus et al. (2021) argue that hospital transformation nevertheless remains socio-technical, as technology must be aligned with clinical workflows, human capability, governance, and organizational routines. Indonesian hospital evidence also shows that electronic medical record implementation is shaped by recordkeeping culture, infrastructure, and actual work practices, while hospital information-system acceptance varies with user and organizational conditions (Handayani et al., 2017; Hossain et al., 2025). Therefore, the effectiveness of digital transformation depends not only on the availability of digital systems but also on the organizational conditions that determine how these systems are accepted, integrated, and used in daily hospital activities.

Adaptive organizational culture provides a social foundation for digital change by shaping how employees collaborate, experiment, pursue performance targets, and follow procedures. Quinn (2011) distinguishes clan, adhocracy, market, and hierarchy orientations, which can contribute through complementary mechanisms rather than through a single cultural profile. Recent studies indicate that people-oriented and innovation-oriented cultural practices support digital culture and digital capabilities, while different cultural orientations may contribute with different strengths (Leal-Rodríguez et al., 2023; Cao et al., 2025). Digital transformation readiness represents the organization's capacity in human resources, infrastructure, leadership, governance, and processes, whereas organizational readiness for change reflects shared commitment and confidence that members can implement the required change (Weiner, 2009; Shea et al., 2014; Silva et al., 2025; Alotaibi et al., 2025). In this context, an adaptive culture may strengthen employees' ability to respond to technological changes while simultaneously creating an environment that supports organizational preparation for digital transformation.

Prior studies by Tsalits and Kismono (2019) and Safani and Ratnawati (2022) have usually examined these mechanisms separately. Organizational culture has been associated with readiness for change in Indonesia, and readiness for change has been shown to mediate culture-related organizational outcomes. Studies of health-care digital readiness identify leadership, enabling conditions, skills, and organizational support as important determinants, but many focus on readiness assessment rather than on how readiness transmits the effect of culture to sustained digital-service adoption (Alotaibi et al., 2025; Steenkamp et al., 2025). Digital-transformation research likewise emphasizes leadership, agility, strategy, and organizational capabilities, but parallel technical-organizational and social-psychological readiness mechanisms are rarely tested within one hospital model (AlNuaimi et al., 2022). Successful information-system adoption should also be assessed beyond system availability by considering routine use, integration, efficiency, and sustained organizational benefit (DeLone & McLean, 2003). This gap highlights the need for an integrated model that examines how organizational culture influences digital transformation readiness and readiness for change, and how these mechanisms ultimately contribute to digital-service adoption in hospital settings. Such an approach can provide a more comprehensive understanding of why some organizations are better able to translate digital initiatives into sustained organizational practice.

The gap addressed by this study is therefore the limited empirical evidence that simultaneously tests digital transformation readiness and organizational readiness

for change as parallel mediators between adaptive organizational culture and successful digital-service adoption in a hospital setting. The study further contributes a cross-professional perspective by sampling employees from 15 occupational groups in a government police hospital, rather than relying only on managers or one clinical profession. The study aimed to analyze the direct effect of adaptive organizational culture on digital transformation readiness, organizational readiness for change, and digital-service adoption. The effects of both readiness constructs on adoption success, and the mediating roles of the two readiness constructs.

2. Literature Review and Hypothesis Development

2.1. The Effect of Adaptive Organizational Culture

Organizations operating in volatile and technology-driven environments increasingly rely on an adaptive organizational culture characterized by flexibility, experimentation, learning, and openness to new ways of working. Recent evidence by Maslahah et al. (2025) indicates that these cultural characteristics are closely associated with an organization's ability to prepare for digital transformation. Cyfert et al. (2025) found that many contemporary organizations remain insufficiently prepared for digital transformation and emphasized the importance of soft organizational factors, including organizational culture, leadership, and digital competencies, in strengthening digital transformation capabilities. An adaptive culture can create an environment in which employees are more willing to learn, experiment with new technologies, and adjust existing work practices, making the organization more capable of developing the capabilities required for digital transformation readiness.

The influence of organizational culture also extends to employees' readiness to respond to organizational change and their acceptance of digital technologies. Engida et al. (2022) found a significant relationship between organizational culture and employees' readiness to change, indicating that cultural conditions can shape how employees perceive and respond to organizational transformation. Similarly, Cardoso et al. (2024) demonstrated a significant relationship between digital culture and the adoption of digital technologies, suggesting that organizational values supporting experimentation, flexibility, and openness can facilitate technology adoption. An adaptive culture can encourage employee involvement, knowledge sharing, and willingness to modify established routines, while reducing resistance toward new digital services. These findings indicate that culture provides an important organizational foundation for both change readiness and successful digital-service adoption.

H1: Adaptive organizational culture has a positive and significant effect on digital transformation readiness.

H2: Adaptive organizational culture has a positive and significant effect on organizational readiness for change.

H3: Adaptive organizational culture has a positive and significant effect on digital-service adoption success.

2.2. The Effect on Digital-Service Adoption Success

Beyond internal cultural antecedents, organizational readiness for digital transformation and broader organizational change represents an important foundation for successful digital-service adoption because readiness reflects the resources, capabilities, infrastructure, and employee mindset required to translate digital strategies into practice. Patabang et al. (2024) found that resource availability, cultural adaptability, and ICT infrastructure were significantly associated with the

readiness of administrative personnel to adopt digital technologies in higher education. This indicates that digital transformation readiness extends beyond technological availability and depends on whether organizations possess adequate resources and capabilities to implement digital systems effectively. Similarly, Podungge and Monoarfa (2025) demonstrated that technology readiness mediates the relationship between digital leadership and organizational performance in Indonesian state-owned enterprises, suggesting that organizational readiness serves as an important mechanism through which digital initiatives can be converted into tangible outcomes.

Organizational readiness for change likewise plays an important role in determining whether employees can successfully accept and implement new technologies. Wijaya et al. (2024) showed that readiness to change is closely related to employees' acceptance and implementation of new technologies in digital-oriented industries, emphasizing the importance of employees' willingness and capability to adjust to technological changes. Gallant et al. (2023) also found that organizational readiness for change was associated with behavioral intentions to adopt a new digital monitoring system, demonstrating that readiness can facilitate the transition from organizational preparation to actual technology adoption. These findings illustrate that both digital transformation readiness and organizational readiness for change provide essential conditions for translating digital initiatives into successful digital-service adoption.

H4: Digital transformation readiness has a positive and significant effect on digital-service adoption success.

H5: Organizational readiness for change has a positive and significant effect on digital-service adoption success.

2.3. The Mediating Effect on Digital-Service Adoption Success

The relationships proposed in the preceding discussion suggest that adaptive organizational culture may influence transformation outcomes not only directly but also through organizational readiness. Readiness represents the extent to which an organization possesses the resources, capabilities, and willingness required to translate cultural values into concrete actions. Jewapatarakul and Ueasangkomsate (2024) found that organizational readiness fully mediated the relationship between digital organizational culture and digital transformation in Thai food-manufacturing SMEs. Their findings indicate that a supportive digital culture alone may not be sufficient to produce transformation outcomes; rather, its influence becomes more effective when the organization develops the necessary readiness to implement digital initiatives (Kraus et al., 2021).

A similar mechanism is evident in the relationship between organizational culture and broader change outcomes. Safani and Ratnawati (2022) found that readiness for change significantly mediated the relationship between organizational culture and employee performance in PT PELNI (Persero). The findings demonstrate that organizational culture can strengthen employees' readiness to respond to organizational changes, which subsequently contributes to improved outcomes. Readiness therefore functions as an important pathway through which cultural characteristics are translated into organizational action and performance. In the context of hospital digitalization, an adaptive culture that promotes flexibility, learning, and openness to innovation can strengthen both digital transformation readiness and readiness for change, enabling these readiness conditions to convert cultural support into successful digital-service adoption (Quinn, 2011; Cao et al., 2025)

H6: Digital transformation readiness mediates the positive relationship between adaptive organizational culture and digital-service adoption success.
H7: Organizational readiness for change mediates the positive relationship between adaptive organizational culture and digital-service adoption success.

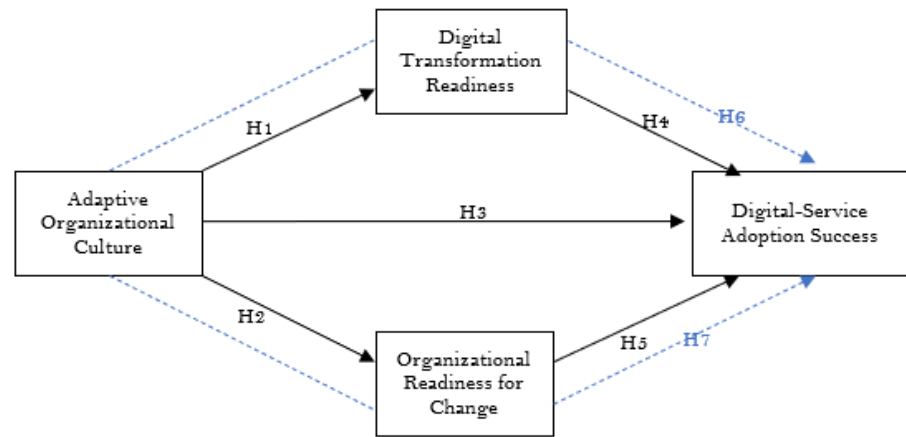


Figure 1. Conceptual Framework

Figure 1 presents the conceptual framework examining the relationships among adaptive organizational culture, digital transformation readiness, organizational readiness for change, and digital-service adoption success. Digital transformation readiness and organizational readiness for change are proposed as mediating variables linking adaptive organizational culture to digital-service adoption success. Adaptive organizational culture is expected to enhance organizational readiness, which subsequently contributes to successful digital-service adoption. The framework also proposes direct relationships between adaptive organizational culture and digital-service adoption success.

3. Methods

This quantitative study used an explanatory cross-sectional survey design to examine direct and indirect relationships among organizational constructs, while recognizing that a cross-sectional design cannot establish causality as strongly as longitudinal or experimental designs (Creswell & Creswell, 2017). The study was conducted at RS Bhayangkara Tk. III Biddokkes Polda Lampung, Bandar Lampung, Indonesia. The study population comprised 419 active employees from medical, nursing, other health, support, and nonmedical groups. Eligible employees had worked for at least six months, used or were affected by digital systems in their work, and were willing to participate.

The minimum sample was calculated from the known population using a 5% error level, yielding 205 respondents. Proportional stratified random sampling was applied using occupational group as the stratum; individual employees were randomly selected within each stratum so that all 15 occupational groups remained represented (Sekaran & Bougie, 2019). The questionnaire was distributed in electronic or printed form using anonymous codes. The dataset was screened for eligibility, completeness, duplication, implausible response patterns, inconsistent responses, and unusual completion time before analysis.

The questionnaire contained 30 five-point Likert items (1=strongly disagree to 5=strongly agree). Adaptive organizational culture was operationalized through clan, adhocracy, market, and hierarchy practices (8 items) based on the Competing Values Framework and more recent digital-culture evidence (Quinn, 2011; Leal-Rodríguez et al., 2023; Cao et al., 2025). Digital transformation readiness covered

human resources, infrastructure, leadership and governance, and work processes (8 items) (AlNuaimi et al., 2022; Silva et al., 2025; Alotaibi et al., 2025). Organizational readiness for change covered commitment, confidence, and support (6 items) (Weiner, 2009; Shea et al., 2014). Digital-service adoption success covered routine use, process integration, efficiency, and sustainability (8 items), reflecting organizational use and benefit rather than mere system availability (DeLone & McLean, 2003; Handayani et al., 2017).

Descriptive statistics summarized respondent characteristics and construct scores. Partial Least Squares Structural Equation Modeling (PLS-SEM) was performed with SmartPLS 4 because the model included multiple latent constructs and two parallel mediators. Measurement evaluation used outer loadings, Cronbach's alpha, rho_A, Composite Reliability, Heterotrait-Monotrait (HTMT), and collinearity diagnostics. Structural evaluation included path coefficients, R^2 , f^2 , predictive relevance (Q^2), and model-fit indices. Hypotheses and specific indirect effects were tested using two-tailed bootstrapping with 5,000 subsamples, a 5% significance level, and 95% confidence intervals; an indirect effect was considered significant when its confidence interval did not cross zero (Hair et al., 2022). The thesis protocol specified voluntary participation, confidentiality, anonymity, fair respondent selection, and use of data for academic purposes. It also stated that ethical approval would be requested before data collection. The ethics committee name and approval number are not reported in the thesis document available for preparation of this article and must be inserted before submission.

4. Results

The results present the empirical findings on the relationships among adaptive organizational culture, digital transformation readiness, organizational readiness for change, and digital-service adoption success using PLS-SEM. The analysis covers the measurement and structural models, including reliability, validity, predictive relevance, model fit, and hypothesis testing.

Table 1. Characteristic Respondent

Characteristic	Category	Frequency	Percentage (%)
Sex	Male	90	43.9
	Female	115	56.1
Age	≤29 years	32	15.6
	30–39 years	100	48.8
	40–49 years	65	31.7
	≥50 years	8	3.9
Employment status	Civil servant/POLRI	61	29.8
	Government contract (PPPK)	47	22.9
	Contract employee (PTT/BLU)	97	47.3
Profession	Nurse	70	34.1
	Nonmedical	63	30.7
	Other health/medical groups	72	35.1
Digital/RME/SIMRS training	Ever	132	64.4
	Never	73	35.6
RME experience	Ever	133	64.9
	Never	72	35.1
SIMRS use	<1 year	32	15.6
	1–3 years	74	36.1
	>3 years	99	48.3

Based on Table 1, all 205 targeted respondents were represented in the analytic dataset. Female respondents accounted for the larger proportion (56.1%), while the largest age group was 30–39 years (48.8%). Regarding employment status, Contract Employees (*Pegawai Tidak Tetap/Badan Layanan Umum/PTT/BLU*) constituted the largest group (47.3%), followed by civil servants/POLRI (29.8%) and Government Contract Employees (*Pegawai Pemerintah dengan Perjanjian Kerja/PPPK*) (22.9%). By profession, other health/medical groups represented the largest proportion (35.1%), followed by nurses (34.1%) and nonmedical employees (30.7%). Most respondents had attended digital/RME/SIMRS training (64.4%) and had experience using electronic medical records (64.9%). In addition, most respondents had used SIMRS for more than three years (48.3%), while 84.4% had used the system for at least one year.

Table 2. Descriptive Statistics

Construct	Mean	SD
Adaptive Organizational Culture	3.727	0.983
Digital Transformation Readiness	3.802	0.985
Organizational Readiness for Change	3.591	1.008
Digital-Service Adoption Success	3.857	0.982

Table 2 shows that all constructs had mean scores above 3.5, indicating generally positive perceptions among respondents across all study variables. Digital-service adoption success had the highest mean score (3.857), followed by digital transformation readiness (3.802) and adaptive organizational culture (3.727). In contrast, organizational readiness for change had the lowest mean score (3.591), suggesting that employees' perceived readiness to respond to organizational change was relatively weaker than the other constructs. The SD values ranged from 0.982 to 1.008, indicating a moderate degree of variation in respondents' perceptions across all constructs.

Table 3. Outer Loadings, Reliability, and Convergent Validity

Construct	Indicator	Outer Loading	Cronbach's α	rho-A	CR	AVE
Adaptive Organizational Culture	AOC1	0.891	0.956	0.958	0.963	0.765
	AOC2	0.862				
	AOC3	0.863				
	AOC4	0.878				
	AOC5	0.884				
	AOC6	0.883				
	AOC7	0.861				
	AOC8	0.876				
Digital-Service Adoption Success	DSAS1	0.888	0.958	0.959	0.964	0.771
	DSAS2	0.872				
	DSAS3	0.889				
	DSAS4	0.881				
	DSAS5	0.868				
	DSAS6	0.878				
	DSAS7	0.895				
	DSAS8	0.855				
Organizational Readiness for Change	ORC1	0.875	0.945	0.945	0.956	0.784
	ORC2	0.891				
	ORC3	0.898				
	ORC4	0.879				
	ORC5	0.889				
	ORC6	0.880				
	DTR1	0.894	0.960	0.961	0.967	0.783

Construct	Indicator	Outer Loading	Cronbach's α	rho-A	CR	AVE
Digital Transformation Readiness	DTR2	0.905				
	DTR3	0.878				
	DTR4	0.864				
	DTR5	0.882				
	DTR6	0.882				
	DTR7	0.894				
	DTR8	0.879				

Table 3 shows that all indicators meet the recommended criteria for convergent validity and indicator reliability. The outer loading values range from 0.855 to 0.905, exceeding the commonly accepted threshold of 0.70. This indicates that each indicator adequately represents its respective construct. The reliability results also demonstrate strong internal consistency, with Cronbach's α ranging from 0.945 to 0.960, Rho-A ranging from 0.945 to 0.961, and Composite Reliability (CR) ranging from 0.956 to 0.967. All values are well above the minimum criterion of 0.70. Furthermore, the AVE values range from 0.765 to 0.784, substantially exceeding the 0.50 threshold, confirming adequate convergent validity for all constructs. The measurement model demonstrates satisfactory indicator reliability, internal consistency, and convergent validity, allowing the constructs to be used for further structural model analysis (Hair et al., 2022).

Table 4. Heterotrait-Monotrait Ratio Results

Construct Relationship	HTMT
Digital-Service Adoption Success $\leftrightarrow$ Adaptive Organizational Culture	0.509
Organizational Readiness for Change $\leftrightarrow$ Adaptive Organizational Culture	0.356
Organizational Readiness for Change $\leftrightarrow$ Digital-Service Adoption Success	0.496
Digital Transformation Readiness $\leftrightarrow$ Adaptive Organizational Culture	0.540
Digital Transformation Readiness $\leftrightarrow$ Digital-Service Adoption Success	0.465
Digital Transformation Readiness $\leftrightarrow$ Organizational Readiness for Change	0.201

According to Table 4, all HTMT values ranged from 0.201 to 0.540, well below the threshold of 0.90. These results confirm that adaptive organizational culture, digital transformation readiness, organizational readiness for change, and digital-service adoption success are empirically distinct constructs (Hair et al., 2022).

Table 5. Variance Inflation Factor Test

Construct / Structural Path	VIF
Measurement Model	Adaptive Organizational Culture
	Digital-Service Adoption Success
	Organizational Readiness for Change
	Digital Transformation Readiness
Structural Model	Adaptive Organizational Culture $\rightarrow$ Digital-Service Adoption Success
	Adaptive Organizational Culture $\rightarrow$ Organizational Readiness for Change
	Adaptive Organizational Culture $\rightarrow$ Digital Transformation Readiness
	Digital Transformation Readiness $\rightarrow$ Digital-Service Adoption Success
	Organizational Readiness for Change $\rightarrow$ Digital-Service Adoption Success

According to Table 5, the indicator Variance Inflation Factor (VIF) values ranged from 3.005 to 4.369, all below the threshold of 5.00. This indicates that indicator collinearity remained within acceptable limits. IT2 had the highest VIF value at 4.369 and should therefore be monitored if the instrument is applied to different samples or contexts (Hair et al., 2022). Based on the structural model, VIF values ranged from 1.000 to 1.493, all below the threshold of 5.00. This indicates that collinearity was not a concern in estimating the relationships among constructs, allowing the path coefficients to be interpreted without substantial distortion due to linear relationships among predictors (Hair et al., 2022).

Table 6. Coefficient of Determination

Endogenous Construct	R ²	Adjusted R ²	Explained Variance	SSO	SSE	Q ²
Digital Transformation Readiness	0.270	0.266	26.97%	1,640.000	1,300.292	0.207
Organizational Readiness for Change	0.116	0.112	11.62%	1,230.000	1,122.408	0.087
Digital-Service Adoption Success	0.394	0.385	39.36%	1,640.000	1,150.237	0.299

Table 6 shows that adaptive organizational culture explains 26.97% of the variance in digital transformation readiness and 11.62% of the variance in organizational readiness for change. Adaptive organizational culture, together with the two mediators, explains 39.36% of the variance in digital-service adoption success. The model does not explain the remaining 60.64% of the variance in digital-service adoption success and may be associated with system quality, information quality, technical support, workload, user characteristics, internal regulations, or other factors not measured in this study (DeLone & McLean, 2003; Handayani et al., 2017).

All endogenous constructs had Q² values greater than zero, indicating that the model has predictive relevance for digital transformation readiness, organizational readiness for change, and digital-service adoption success. The highest Q² value was observed for digital-service adoption success at 0.299, followed by digital transformation readiness at 0.207 and organizational readiness for change at 0.087. These findings support the model's internal predictive capability, although PLSpredict results were not available in the provided file (Hair et al., 2022).

Table 7. F-Square

Structural Path	f ²	Interpretation
Adaptive Organizational Culture → Digital-Service Adoption Success	0.063	Small
Adaptive Organizational Culture → Organizational Readiness for Change	0.131	Small
Adaptive Organizational Culture → Digital Transformation Readiness	0.369	Large
Organizational Readiness for Change → Digital-Service Adoption Success	0.171	Medium
Digital Transformation Readiness → Digital-Service Adoption Success	0.079	Small

Based on Table 7, the effect of adaptive organizational culture on digital transformation readiness had the largest effect size (f² = 0.369). Organizational readiness for change had a medium effect on digital-service adoption success (f² = 0.171), whereas the direct effects of adaptive organizational culture and digital

transformation readiness on digital-service adoption success were small. This pattern indicates that organizational culture primarily plays a strong role in building digital transformation capacity, while readiness for change serves as a more direct determinant of successful digital-service adoption.

Table 8. Model Fit

Index	Saturated Model	Estimated Model
SRMR	0.035	0.035
d_ULS	0.558	0.561
d_G	0.481	0.480
Chi-square	532.436	530.885
NFI	0.917	0.917

Table 8 shows that the SRMR value for the estimated model was 0.035, which is below the recommended threshold of 0.08, while the NFI value was 0.917. These two indices provide additional support that the model demonstrates an adequate fit. However, PLS-SEM interpretation primarily emphasizes explanatory power, effect size, predictive relevance, and path significance, with model-fit indices serving as complementary information (Hair et al., 2022).

Table 9. Direct Effect and Mediation Test

Effect Type	Path	β	t	p	95% CI	Decision
Direct Effect	AOC $\rightarrow$ DTR	0.519	10.790	<0.001	-	Supported
	AOC $\rightarrow$ ORC	0.341	5.934	<0.001	-	Supported
	AOC $\rightarrow$ DSAS	0.239	3.748	<0.001	-	Supported
	DTR $\rightarrow$ DSAS	0.257	3.801	<0.001	-	Supported
	ORC $\rightarrow$ DSAS	0.343	6.508	<0.001	-	Supported
Mediation Test	AOC $\rightarrow$ DTR $\rightarrow$ DSAS	0.133	3.582	<0.001	0.064–0.209	Complementary partial
	AOC $\rightarrow$ ORC $\rightarrow$ DSAS	0.117	4.145	<0.001	0.068–0.178	Complementary partial
	Total indirect AOC $\rightarrow$ DSAS	0.250	6.223	<0.001	0.175–0.332	Significant

Note: AOC= Adaptive Organizational Culture, DTR= Digital Transformation Readiness, ORC=Organizational Readiness for Change, DSAS= Digital-Service Adoption Success.

The hypothesis testing results presented in Table 9 show that all five proposed hypotheses are supported, with positive and statistically significant relationships ($p < 0.001$). Adaptive organizational culture has the strongest effect on digital transformation readiness ($\beta = 0.519$), followed by organizational readiness for change on digital-service adoption ($\beta = 0.343$) and adaptive organizational culture on organizational readiness for change ($\beta = 0.341$). Digital transformation readiness also positively affects digital-service adoption ($\beta = 0.257$), while adaptive organizational culture has a significant direct effect on digital-service adoption ($\beta = 0.239$). All hypothesized direct relationships are empirically supported.

Both parallel mediators transmitted a significant portion of the cultural effect. The indirect effect through digital transformation readiness was $\beta=0.133$ (95% CI 0.064–0.209), and the indirect effect through organizational readiness for change was $\beta=0.117$ (95% CI 0.068–0.178). Because the direct culture-to-adoption path remained positive and significant after the mediators were included, both indirect pathways represented complementary partial mediation. The combined indirect effect was $\beta=0.250$, giving a total cultural effect on adoption of approximately 0.489.

5. Discussion

The findings show that a layered organizational mechanism shaped successful digital-service adoption in this hospital. Adaptive organizational culture was the strongest antecedent of digital transformation readiness, while organizational readiness for change was the strongest direct predictor of adoption. Both readiness constructs partially mediated the effect of culture, indicating that culture influenced digital use directly and indirectly through technical-organizational capacity and collective readiness for change. This finding supports Vial (2019), Kraus et al. (2021), and Hanelt et al. (2021), who emphasize that digital transformation involves changes in organizational structures, processes, capabilities, and routines rather than technology implementation alone.

The strongest relationship in the model was between adaptive organizational culture and digital transformation readiness. This indicates that adaptability, performance orientation, innovation, and procedural clarity substantially contribute to the hospital's preparedness for digital transformation. The finding is consistent with Leal-Rodríguez et al. (2023) and Cao et al. (2025), who show that organizational culture supports digital culture and transformation capabilities. This also agrees with Faida and Ali (2021), who found that electronic medical record readiness in Indonesian hospitals depends on human resources, organizational arrangements, governance, and infrastructure. Thus, culture appears to function as an upstream condition that strengthens the hospital's capacity to implement digital systems.

Adaptive organizational culture also had a significant effect on organizational readiness for change, although the relationship was weaker. This result is consistent with Tsalits and Kismono (2019) and Sa'ani and Ratnawati (2022), who link organizational culture with readiness for change and organizational outcomes. The modest R^2 further suggests that readiness for change is influenced by factors beyond culture, such as leadership, communication, commitment, and perceived efficacy, as emphasized by Miake-Lye et al. (2020) and van den Hoed et al. (2022).

The direct effect of adaptive organizational culture on digital-service adoption was positive but small. This suggests that culture alone cannot guarantee integrated digital-service use. The finding is comparable with Hossain et al. (2025), who highlight recordkeeping culture, infrastructure, and work practices in electronic medical record implementation, and Nurcahyani et al. (2024), who identify technology and organizational factors as important for hospital information-system outcomes. Harahap et al. (2022) similarly show that digital-health adoption is affected by organizational and health-facility barriers. Therefore, supportive culture needs to be accompanied by reliable infrastructure, access, and coordinated workflows.

Digital transformation readiness significantly predicted adoption success, although its effect was relatively small. This finding is important because 35.6% of respondents had never attended digital or electronic medical record training and 35.1% had never used electronic medical records. The result supports Ngusie et al. (2022) and Alotaibi et al. (2025), who identify skills, technological access, enabling conditions, and organizational support as important elements of digital readiness. It also reinforces Indonesian evidence from Faida and Ali (2021) concerning the importance of training, human resources, governance, and infrastructure.

Most importantly, organizational readiness for change was the strongest direct predictor of adoption, despite having the lowest mean score. This indicates that employees' commitment and confidence to implement change are particularly important for translating digital preparation into actual use. This finding supports Weiner (2009) and Shea et al. (2014), who emphasize shared commitment and collective efficacy as core dimensions of organizational readiness. The mediation results reinforce this pattern: digital transformation readiness produced a slightly larger indirect effect, whereas readiness for change produced a smaller indirect effect

but a stronger direct effect. This complementary mechanism is consistent with Warner and Wäger (2019) and AlNuaimi et al. (2022), who emphasize organizational capabilities, agility, leadership, and continuous adaptation in digital transformation.

The findings demonstrate that digital-service adoption requires both digital capability and readiness for change. Management should therefore strengthen role-based training, change champions, communication, workplace coaching, and digital-readiness monitoring while maintaining investment in infrastructure. These priorities are consistent with Ngusie et al. (2022), Alotaibi et al. (2025), and Steenkamp et al. (2025), while Salwei and Carayon (2022) emphasize the need to align people, processes, organizational structures, and technology within a socio-technical approach.

6. Conclusion

The findings demonstrate that digital-service adoption in the hospital is shaped by both organizational culture and readiness mechanisms. Adaptive organizational culture had the strongest influence on digital transformation readiness, while organizational readiness for change was the strongest direct predictor of digital-service adoption. Both readiness mechanisms partially mediated the relationship between culture and adoption, confirming that successful digitalization requires not only technical-organizational capability but also employees' commitment, confidence, involvement, and support for change. The findings suggest that hospital management should integrate digital capability development with structured change-management practices. Role-specific training should be strengthened according to the needs of physicians, nurses, support personnel, and nonmedical staff. Management should also develop unit-level change champions, improve two-way communication, provide workplace coaching, and strengthen cross-unit workflow coordination. These actions can help translate digital readiness into more consistent and sustainable digital-service use.

This study has several limitations. Its cross-sectional design limits causal interpretation, while reliance on employee perceptions may introduce subjective-response bias. The study was also conducted in a single government police hospital, limiting generalizability to private, teaching, or other regional hospitals. In addition, the study did not incorporate objective digital-performance indicators, such as electronic medical record logs, record completeness, service time, system downtime, data quality, or safety incidents. Profession-specific structural differences were also not examined. Future studies should employ longitudinal or multicenter designs to strengthen causal interpretation and improve generalizability. Combining employee perceptions with objective digital-use and performance indicators would provide a more comprehensive assessment of adoption success. Future research should also examine whether the effects of digital transformation readiness and organizational readiness for change differ across professional groups and levels of digital experience, providing more targeted evidence for hospital digital-transformation strategies.

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Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.



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