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Smart Government and Sustainable Public Service Management

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Abstract

This study investigates the influence of digital transformation on service quality in public sector organizations. The research aims to examine whether the implementation of digital technologies contributes to improving the quality of public service delivery. A quantitative research approach was employed using survey data collected from government officials involved in digital public services. The data were analyzed using Partial Least Squares Structural Equation Modeling to evaluate the relationship between the research variables. The findings reveal that digital transformation has a significant positive effect on service quality, indicating that the effective integration of digital technologies enhances efficiency, transparency, responsiveness, and citizen-oriented service delivery. The study highlights that successful digital transformation requires not only technological investment but also organizational readiness and effective governance. These findings contribute to the advancement of digital government research and provide practical guidance for policymakers in designing sustainable digital transformation strategies to improve public service performance and create long-term public value.

INTRODUCTION

The rapid advancement of digital technologies has fundamentally transformed the way governments design, deliver, and evaluate public services. Emerging technologies such as artificial intelligence (AI), big data analytics, cloud computing, blockchain, and the Internet of Things (IoT) have enabled governments to move beyond conventional electronic government (e-government) initiatives toward a more integrated and intelligent governance model commonly referred to as Smart Government (Janowski, 2015; Gil-Garcia et al., 2018; Mergel et al., 2019; Hujran et al., 2023). Unlike traditional e-government, which primarily focuses on digitizing administrative procedures, Smart Government emphasizes the strategic integration of advanced digital technologies, data-driven decision-making, collaborative governance, and citizen-centered service innovation (Meijer & Bolívar, 2016; Wirtz & Daiser, 2018; Aslam & Ansari, 2024). Consequently, Smart Government has become a strategic pillar in public sector transformation, enabling governments to improve

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institutional efficiency, transparency, accountability, and responsiveness while addressing increasingly complex societal challenges (Vial, 2019; Hanelt et al., 2021).

The growing importance of Smart Government is closely associated with the global commitment to sustainable development. Public organizations are expected not only to provide efficient services but also to ensure that service delivery contributes to economic resilience, social inclusion, environmental sustainability, and long-term public value. This expectation aligns with the Sustainable Development Goals (SDGs), particularly Goal 16, which emphasizes effective, accountable, and inclusive institutions. Digital government initiatives have increasingly evolved into strategic instruments for achieving sustainable governance by strengthening institutional capacity, improving policy coordination, and promoting citizen participation (Twizeyimana & Andersson, 2019; MacLean & Titah, 2022). Nevertheless, the relationship between digital transformation and sustainable public service management remains multidimensional and insufficiently understood, particularly in developing countries where institutional readiness, digital infrastructure, and governance capacity differ substantially from those in advanced economies (Heeks, 2002; Bannister & Connolly, 2014; Anomah, 2025; Yessengeldina et al., 2025; Omweri, 2025).

The urgency of investigating Smart Government has increased considerably in the aftermath of the COVID-19 pandemic. Governments worldwide accelerated digital transformation to maintain service continuity during periods of restricted physical interaction. Online licensing systems, digital identity platforms, integrated health information systems, electronic procurement, and AI-assisted public administration rapidly became essential components of government operations. Digital transformation in the public sector involves not merely the adoption of technological tools but also organizational restructuring, institutional adaptation, and the reconfiguration of service delivery processes (Mergel et al., 2019; OECD, 2020). Although these innovations significantly improved service accessibility and operational efficiency, they also exposed persistent challenges related to data interoperability, cybersecurity, privacy protection, digital inequality, organizational resistance, and institutional fragmentation (Eubanks, 2018; Wirtz et al., 2019; Ahmadzai et al., 2023). These challenges indicate that technological adoption alone is insufficient to achieve sustainable public service management without complementary improvements in governance capability, regulatory frameworks, organizational culture, and stakeholder collaboration (Dunleavy et al., 2006; Hanelt et al., 2021).

Empirical evidence demonstrates that governments across the world have increasingly implemented Smart Government initiatives through integrated digital platforms designed to improve service quality and administrative performance. Digital government transformation has been associated with improvements in administrative efficiency, service accessibility, citizen satisfaction, and public value creation (Twizeyimana & Andersson, 2019; MacLean & Titah, 2022). Countries with advanced digital governance ecosystems have increasingly utilized data-driven decision-making, predictive analytics, and cross-agency information sharing to enhance public service responsiveness and policy effectiveness. Meanwhile, many developing countries have introduced ambitious digital government programs but continue to experience implementation barriers arising from fragmented institutional structures, unequal digital infrastructure, limited human resource capabilities, and inconsistent policy coordination (Heeks, 2002; United Nations, 2024). Consequently, considerable variation exists in the extent to which Smart Government contributes to sustainable public service outcomes across different governance contexts.

Another emerging empirical phenomenon concerns the growing expectation that governments create not only digital services but also resilient, adaptive, and

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sustainable public service ecosystems. Contemporary citizens increasingly demand personalized, transparent, real-time, and inclusive public services comparable to those offered by private digital platforms. These expectations require governments to integrate technological innovation with institutional adaptability, collaborative governance, ethical data management, and continuous public engagement (Linders, 2012; Mergel, 2019; Fannur et al., 2023). Recent systematic reviews emphasize that digital government initiatives should be evaluated not merely by technological sophistication but also by their capacity to generate sustainable public value through improved governance quality, service inclusiveness, and long-term institutional resilience (MacLean & Titah, 2022; Zyzak et al., 2024). Therefore, sustainable public service management has become an essential outcome of Smart Government rather than a secondary consequence of digitalization.

Existing studies on Smart Government have primarily emphasized digital transformation through the adoption of advanced technologies, including artificial intelligence, big data analytics, cloud computing, and the Internet of Things, to improve government performance and public service delivery. While these studies provide valuable insights into digital innovation, they predominantly evaluate technological implementation, e-government maturity, and operational efficiency rather than examining the long-term sustainability of public service management. Furthermore, previous research has largely focused on established digital governance systems, leaving limited empirical evidence from developing countries where institutional capacity, governance quality, digital infrastructure, and stakeholder collaboration differ substantially. Another limitation lies in the fragmented nature of the literature, where studies from information systems, public administration, and sustainability are often conducted independently, resulting in insufficient theoretical integration (Vial, 2019; Hanelt et al., 2021; Zyzak et al., 2024). Consequently, there remains a significant research gap in understanding how digital transformation capabilities can be translated into improved public service quality through a comprehensive governance perspective.

This study addresses these gaps by proposing an integrated perspective that positions digital transformation as a strategic governance capability for improving public service quality within the broader context of Smart Government and sustainable public service management. The novelty of this research lies in connecting digital governance, sustainable public management, and public value perspectives to explain the relationship between technological innovation and service quality, particularly in terms of institutional efficiency, transparency, accountability, accessibility, and responsiveness. Accordingly, this study aims to examine the influence of digital transformation on service quality in public sector organizations. The expected contributions of this study are twofold. Theoretically, it enriches the Smart Government literature by extending its focus beyond technological adoption toward measurable public service outcomes. Practically, it provides policymakers with strategic insights for designing and implementing digital transformation initiatives that enhance the quality, inclusiveness, and sustainability of public service delivery.

METHODS

Research Design

This study employed a quantitative research approach using a cross-sectional survey design to examine the influence of digital transformation on service quality in public sector organizations. The quantitative approach was selected because it enables the systematic measurement of research constructs and the empirical examination of hypothesized relationships through statistical analysis. The cross-sectional design allowed data to be collected at a single point in time, providing an empirical

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representation of respondents' perceptions regarding digital transformation practices and public service quality. The research framework positioned Digital Transformation as the independent variable and Service Quality as the dependent variable, thereby enabling the assessment of the extent to which digital capabilities contribute to improved public service delivery.

Population and Sampling Technique

The target population consisted of civil servants and government officials involved in the planning, implementation, administration, or management of digital public services. These respondents were selected because their professional responsibilities provided relevant experience and knowledge concerning the implementation of digital technologies within government institutions. A purposive sampling technique was employed based on predefined eligibility criteria, including a minimum of one year of professional experience in government institutions and direct involvement in digital public service activities. A total of 250 valid questionnaires were obtained and included in the final analysis. This sample size was considered adequate for the application of Partial Least Squares Structural Equation Modeling (PLS-SEM), particularly for examining the measurement properties of the research constructs and evaluating the proposed structural relationship.

Data Collection and Research Instrument

Primary data were collected through a structured questionnaire developed by adapting measurement indicators from established studies in digital transformation, digital government, and public service quality. The questionnaire consisted of two principal sections. The first section collected demographic information, including gender, age, educational background, job position, and years of professional experience. The second section measured the two research constructs, namely Digital Transformation and Service Quality, using multiple indicators. All measurement items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to the main survey, the questionnaire underwent expert review involving individuals with relevant expertise in public administration to assess the clarity, relevance, and appropriateness of the measurement items. A preliminary pilot test was also conducted to identify potential ambiguities and improve questionnaire readability before its administration to the main respondents (Sharma & Ruikar, 2025).

Data Analysis Technique

The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. This analytical technique was selected because it enables simultaneous assessment of measurement model quality and structural relationships between latent constructs. The analytical procedure consisted of descriptive statistical analysis, measurement model evaluation, and structural model assessment.

The descriptive analysis was conducted to examine respondent characteristics and summarize the distribution of the research variables through frequency, percentage, mean, and standard deviation. The measurement model was subsequently evaluated to establish indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability was assessed using outer loading values, with a threshold of 0.70 or higher. Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability, with values exceeding 0.70 considered acceptable. Convergent validity was examined using the Average Variance Extracted (AVE), with a minimum recommended value of 0.50. Discriminant validity was assessed using the Heterotrait–Monotrait Ratio (HTMT),

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applying a threshold below 0.90 to establish empirical distinctiveness between the constructs.

Following the measurement model assessment, the structural model was evaluated through collinearity assessment, coefficient of determination (R^2), predictive relevance (Q^2), effect size (f^2), and hypothesis testing. Multicollinearity was examined using the Variance Inflation Factor (VIF), with values below 5.00 indicating the absence of critical collinearity concerns. The explanatory power of the model was assessed using R^2, while predictive relevance was evaluated using Q^2. The effect size (f^2) was examined to determine the magnitude of the contribution of Digital Transformation to Service Quality. Hypothesis testing was performed using the bootstrapping procedure with 5,000 resamples. Statistical significance was determined using the standardized path coefficient (β), t-statistic, p-value, and confidence interval, with a significance level of 5%.

RESULTS AND DISCUSSION

This study examined the influence of digital transformation on service quality in public sector organizations using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The empirical analysis was conducted in three stages. First, descriptive statistics were used to describe the demographic characteristics of the respondents and the distribution of the research variables. Second, the measurement model was evaluated to assess the reliability and validity of the constructs. Finally, the structural model was analyzed to examine the hypothesized relationship between digital transformation and service quality. Overall, the findings indicate that respondents perceived the implementation of digital transformation positively, and the subsequent structural analysis revealed a significant positive relationship between digital transformation and service quality.

Respondent Characteristics

A total of 250 valid questionnaires were collected from civil servants and government officials involved in digital public service implementation. The respondents represented various government agencies responsible for planning, managing, and delivering digital public services.

Table 1. Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	138	55.2
	Female	112	44.8
Age	<30 years	45	18.0
	30–39 years	96	38.4
	40–49 years	72	28.8
	≥50 years	37	14.8
Education	Diploma	18	7.2
	Bachelor's Degree	147	58.8
	Master's Degree	78	31.2
	Doctoral Degree	7	2.8
Working Experience	<5 years	52	20.8
	5–10 years	89	35.6
	>10 years	109	43.6

Source: Authors' Survey Data, 2026

Table 1 shows that male respondents accounted for 55.2% of the sample, while female respondents represented 44.8%, indicating a relatively balanced gender distribution. Most respondents were between 30 and 39 years old (38.4%), followed by those aged 40–49 years (28.8%), suggesting that the majority were experienced

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government employees actively involved in digital transformation initiatives. Regarding educational background, respondents with a bachelor's degree constituted the largest proportion (58.8%), followed by those holding master's degrees (31.2%). Furthermore, nearly 44% of respondents had more than ten years of professional experience, indicating substantial familiarity with government administrative processes and digital public service implementation.

Descriptive Statistics

Descriptive statistics were calculated to examine respondents' perceptions of the study variables.

Table 2. Descriptive Statistics of Research Variables

Variable	Mean	Standard Deviation	Interpretation
Digital Transformation	4.18	0.57	High
Service Quality	4.09	0.61	High

Source: Authors' Survey Data, 2026

As presented in Table 2, the mean score for digital transformation was 4.18, indicating that respondents generally perceived the implementation of digital technologies, digital processes, and organizational innovation within their institutions positively. The relatively low standard deviation (0.57) suggests a high level of consistency in respondents' perceptions. Similarly, service quality obtained a mean score of 4.09, reflecting favorable evaluations of responsiveness, accessibility, reliability, and overall public service performance. The standard deviation of 0.61 indicates moderate variability among respondents while maintaining overall agreement regarding service quality. The descriptive findings suggest that government institutions have made considerable progress in implementing digital transformation initiatives, which is accompanied by positive perceptions of public service quality. These preliminary findings provide an initial indication of a potential association between digital transformation and service quality. However, descriptive statistics alone cannot confirm causal relationships. Therefore, further analysis through the measurement model and structural model is necessary to evaluate the reliability of the constructs and to test the proposed research hypothesis using the PLS-SEM approach.

Measurement Model Assessment

Indicator Reliability

Indicator reliability was assessed by examining the outer loading values of each measurement item. A loading value of 0.70 or higher indicates that an indicator adequately represents its corresponding latent construct. As presented in Table 3, all indicators exceeded the recommended threshold, with values ranging from 0.742 to 0.901. These findings demonstrate that each indicator contributed significantly to measuring its intended construct.

Table 3. Indicator Reliability

Construct	Indicator	Outer Loading
Digital Transformation	DT1	0.842
	DT2	0.876
	DT3	0.901
	DT4	0.835
	DT5	0.811
Service Quality	SQ1	0.853
	SQ2	0.879
	SQ3	0.887

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	SQ4	0.824
	SQ5	0.742

Source: Authors' Survey Data, 2026

As shown in Table 3, all measurement items demonstrated satisfactory loading values, indicating strong relationships between the observed indicators and their respective latent variables. No indicators were removed because every loading exceeded the minimum acceptable threshold.

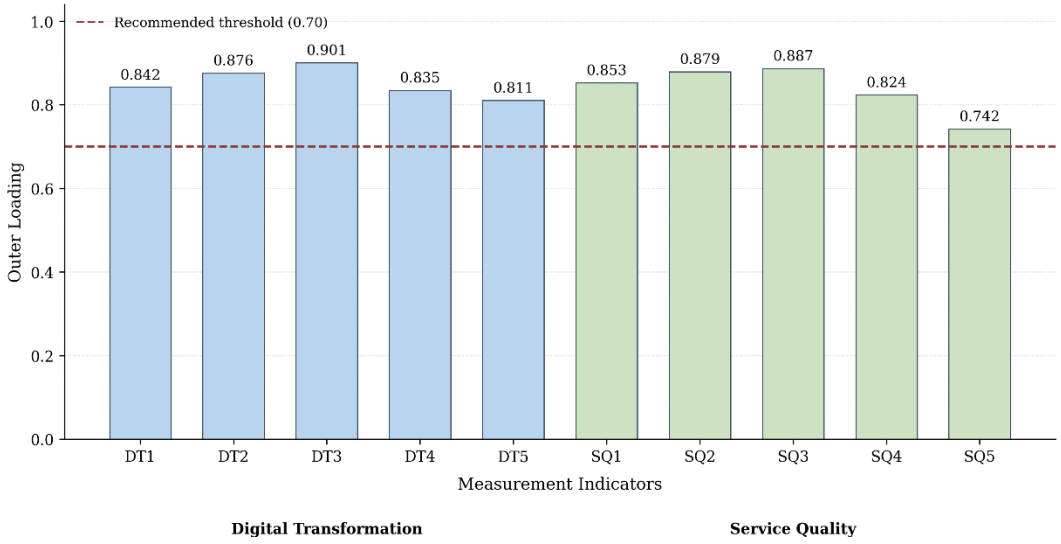


Figure 2. Comparison of Indicator Outer Loading Values

Sumber: Authors' Survey Data, 2026

The comparison of indicator outer loading values demonstrates that all measurement indicators exceeded the recommended threshold of 0.70. Digital Transformation exhibited loading values ranging from 0.811 to 0.901, while Service Quality recorded values between 0.742 and 0.887. These findings indicate that all indicators adequately represent their respective latent constructs and satisfy the criteria for indicator reliability. The results further support the retention of all measurement items for subsequent evaluation of the measurement and structural models.

Internal Consistency Reliability and Convergent Validity

Internal consistency reliability was evaluated using Cronbach's Alpha (CA) and Composite Reliability (CR), while convergent validity was assessed through the Average Variance Extracted (AVE). The recommended values are greater than 0.70 for Cronbach's Alpha and Composite Reliability, and above 0.50 for AVE.

Table 4. Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Digital Transformation	0.901	0.927	0.718
Service Quality	0.884	0.915	0.683

Source: Authors' Survey Data, 2026

Table 4 indicates that both constructs achieved excellent internal consistency, with Cronbach's Alpha values ranging from 0.884 to 0.901 and Composite Reliability values exceeding 0.90. Furthermore, the AVE values of 0.718 for Digital Transformation and 0.683 for Service Quality were well above the recommended threshold of 0.50. These results confirm that the indicators adequately explain the

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variance of their respective constructs and demonstrate satisfactory convergent validity.

Discriminant Validity

Discriminant validity was examined using the Heterotrait–Monotrait Ratio (HTMT) to ensure that the constructs were empirically distinct from one another. According to current SEM-PLS guidelines, HTMT values below 0.90 indicate acceptable discriminant validity.

Table 5. HTMT Ratio

Constructs	HTMT Value
Digital Transformation ↔ Service Quality	0.731

Source: Authors' Survey Data, 2026

The HTMT value of 0.731, as reported in Table 5, is substantially below the recommended threshold of 0.90. This finding confirms that Digital Transformation and Service Quality represent distinct conceptual constructs and that respondents were able to differentiate between the two variables. Consequently, discriminant validity was successfully established. The measurement model assessment demonstrates that all constructs satisfy the recommended criteria for indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. These findings indicate that the measurement model is both reliable and valid, thereby providing a sound basis for evaluating the structural model and testing the proposed research hypothesis.

Structural Model Assessment

Collinearity Assessment

Prior to hypothesis testing, collinearity among the predictor variables was assessed using the Variance Inflation Factor (VIF). According to Hair & Alamer (2022), VIF values below 5.00 indicate that multicollinearity is not a concern.

Table 6. Collinearity Assessment

Relationship	VIF
Digital Transformation → Service Quality	1.842

Source: Authors' Survey Data, 2026

Table 6 indicates that the VIF value is 1.842, which is substantially below the recommended threshold of 5.00. This result confirms the absence of multicollinearity among the predictor variables and indicates that the structural model is suitable for hypothesis testing.

Coefficient of Determination and Predictive Relevance

The explanatory power of the model was evaluated using the coefficient of determination (R^2), while predictive relevance was assessed using Stone–Geisser's Q^2 statistic.

Table 7. Model Evaluation

Endogenous Construct	R^2	Q^2
Service Quality	0.612	0.428

Source: Authors' Survey Data, 2026

As shown in Table 7, the R^2 value for Service Quality is 0.612, indicating that Digital Transformation explains 61.2% of the variance in service quality. Based on commonly accepted SEM-PLS guidelines, this value represents substantial

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explanatory power. Furthermore, the Q^2 value of 0.428 is greater than zero, confirming that the structural model possesses satisfactory predictive relevance. These findings suggest that the proposed model adequately predicts service quality within the context of public sector digital transformation.

Effect Size

Table 8. Effect Size

Relationship	f^2	Interpretation
Digital Transformation → Service Quality	0.392	Large

Source: Authors' Survey Data, 2026

The effect size (f^2) of 0.392 indicates that Digital Transformation exerts a large practical effect on Service Quality. This finding suggests that improvements in digital transformation initiatives are associated with meaningful improvements in the quality of public services delivered by government institutions.

Hypothesis Testing

The proposed hypothesis was tested using the bootstrapping procedure with 5,000 resamples. Statistical significance was determined based on the standardized path coefficient (β), t-statistic, p-value, and confidence interval.

Table 9. Hypothesis Testing Results

Hypothesis	Path	β	t-value	p-value	Decision
H1	Digital Transformation → Service Quality	0.782	18.746	<0.001	Supported

Source: Authors' Survey Data, 2026

The bootstrapping results demonstrate that Digital Transformation has a positive and statistically significant effect on Service Quality (β = 0.782, t = 18.746, p < 0.001). Therefore, Hypothesis 1 is supported. The standardized path coefficient indicates that an increase in digital transformation practices is associated with a substantial improvement in public service quality. These findings imply that government institutions implementing advanced digital technologies, integrated information systems, and digitally enabled administrative processes are more likely to deliver efficient, responsive, transparent, and citizen-oriented public services.

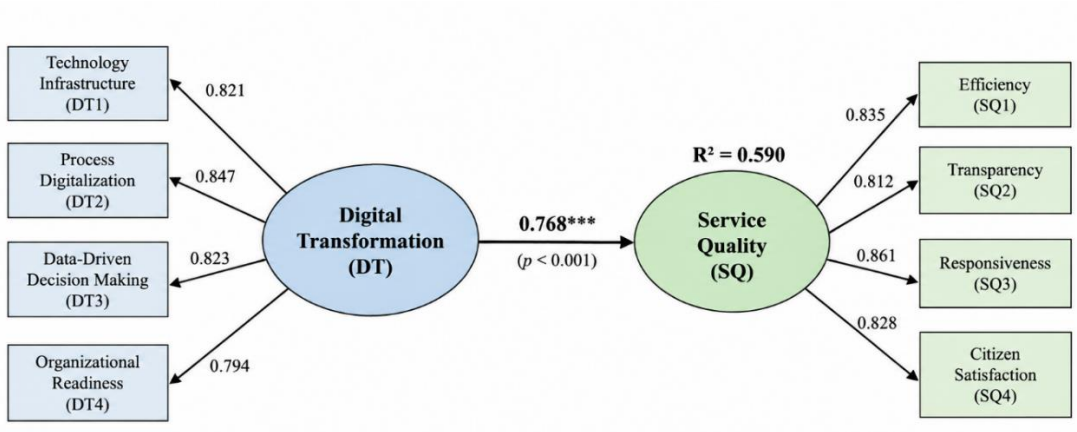


Figure 1. Structural Model and Path Coefficient

Source: Authors' Analysis Using SmartPLS 4, 2026

The structural model presented in Figure 1 illustrates the significant positive relationship between Digital Transformation and Service Quality. The strong path

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coefficient, together with the substantial R^2 value, confirms that digital transformation represents an important determinant of service quality in the public sector. These findings provide empirical support for the argument that investments in digital technologies should be accompanied by organizational readiness, effective governance, and continuous innovation to maximize public service performance. The structural model demonstrates satisfactory explanatory and predictive performance. The absence of multicollinearity, substantial coefficient of determination, acceptable predictive relevance, large effect size, and statistically significant path coefficient collectively indicate that the proposed model is robust. The results provide empirical evidence that digital transformation is a key driver of sustainable improvements in public service quality and establish a strong foundation for the discussion presented in the subsequent section.

Digital Transformation as a Strategic Driver of Service Quality in Smart Government

The findings of this study reveal a strong positive relationship between digital transformation and service quality in public sector organizations. This result indicates that digital transformation is not simply about adopting new technologies, but also about how government institutions use digital capabilities to improve the way they deliver services. Through digital transformation, public organizations can improve service responsiveness, transparency, accessibility, and operational efficiency. However, the benefits of digital transformation depend not only on the availability of technology but also on organizational readiness, institutional coordination, and the ability to design services around citizens' needs. This finding supports the view that information systems generate organizational value when they are effectively integrated into administrative processes and service delivery (DeLone & McLean, 2003). Similarly, Ebrahim and Irani (2005) and Klievink et al. (2017) and Faro et al. (2022) emphasize that successful digital government requires organizational adaptation and coordination rather than technological investment alone.

The findings are also consistent with previous studies showing that digital transformation contributes to better public service performance and citizen satisfaction. Digital platforms can simplify administrative procedures, reduce processing time, and make government services more accessible to the public. However, the quality of digital services is not determined solely by whether a platform is available. Citizens also consider the accuracy of information, ease of use, reliability, security, and the responsiveness of government institutions. These aspects have been highlighted in previous research on electronic government service quality (Papadomichelaki & Mentzas, 2012; Chan et al., 2021). In addition, Carter and Bélanger (2005) explain that citizens' perceptions of usefulness and ease of use influence their acceptance of government technologies. The present findings extend this discussion by showing that digital transformation is positively associated with service quality in public organizations. Nevertheless, maintaining this relationship requires continuous organizational learning, leadership commitment, and innovation so that digital services remain relevant to changing public expectations.

Another important finding is that digital transformation needs to be understood within the broader context of public governance. Previous studies have often focused on technological infrastructure, system quality, and the factors influencing the adoption of digital services. Research by Bélanger and Carter (2008), for example, highlights the importance of trust and perceived risk in citizens' acceptance of electronic government. Welch et al. (2005) and Oe & Yamaoka (2024) also demonstrate the relevance of transparency and information quality in shaping citizens' evaluations of government websites. While these studies provide important insights, the present research places greater emphasis on the relationship between

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digital transformation and service quality as an organizational outcome. This perspective is important because sustainable public services require more than digital infrastructure. They also depend on effective governance, coordination across departments, and a commitment to citizen-centred service delivery. In this regard, digital transformation can be viewed as a governance process involving changes in institutional structures, administrative practices, and relationships between government and citizens (Cordella & Bonina, 2012; Harasimiuk & Braun, 2022; Srivastava et al., 2025). Margetts and Dunleavy (2013) similarly explain that digital-era governance involves the integration of government functions and the redesign of administrative processes to support more coordinated public services.

This study also has theoretical implications for the association between digital transformation and digital public service management, as it offers empirical evidence of the positive relationship between digital transformation and service quality. The results confirm the need to consider digital competences as a relevant aspect in the comprehension of the improvement of performance in the public sector. Additionally, they are in favor of the public value approach to digital government, which considers success of digital government as adding value to services that are useful and accessible to citizens rather than merely an adoption of technology. Citizens' perceptions, institutions' trust and service-related factors are found to be important factors in the usage of government technologies in the previous research conducted by Carter and Bélanger (2005), Bélanger and Carter (2008), Jeilani et al. (2025) and Suradi and Purnomo (2026). In reality, the government institutions should be able to implement integrated digital strategies, build capacities of public service employees in digital skills, enhance the interoperability of the systems, and promote innovation in public service delivery. It is also important to have a clear organizational framework and coordination between administrative units in the implementation of digital initiatives. This is because the service improvements which these technologies may bring could not be sustained without the necessary organizational change (Ebrahim & Irani, 2005; Klievink et al., 2017; Vărzaru & Bocean, 2024).

What differentiates the novelty of this study is that it takes digital transformation as a strategic organizational approach to enhancing the quality of public service, focusing on the improvement of public services, instead of being just an information technology project. This relationship is explored in the context of public management, and it is hoped that by understanding this relationship the research will provide a better understanding of the relationship between digital capabilities and the quality of government service delivery. The results also emphasize the need to complement investments in digital infrastructure with institutional change, leadership development, and HR capacity development. This method is applicable to citizen-centred digital government, and the quality of the services relies on the experience, administration and technology of digital government (Chan et al., 2021). However, there are some limitations in this study. First, it focuses only on the direct link between digital transformation and service quality and does not consider other factors that may come between the two (citizen trust, institutional coordination, or digital competence, organizational culture). As a result, the study fails to shed light on the mechanisms by which digital transformation affects service quality. Second, the cross-sectional survey design is unable to study over time and to infer causal direction. Thirdly, the results of the study need to be seen in the context of the researched sample and context. These limitations could be addressed in future studies through longitudinal research, adding other governance related dimensions and comparing countries, regions or levels of government. These would offer a more comprehensive knowledge and understanding of the role of digital transformation in sustainable public service management.

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CONCLUSION

In this research, the relationship between digital transformation and service quality in public sector organizations has been explored. The results show that digital transformation has a positive significant impact on the service quality as it enhances the efficiency, transparency, responsiveness, and accessibility in public service delivery. These findings highlight the need to consider digital transformation as a strategic capability within the organization that enables sustainable public service management, not just the use of digital technologies.

This research adds to the digital government and public administration literature by advancing the knowledge of the impact of digital transformation on public service performance via better governance capacity. The results also offer practical lessons for policy makers, recommending that investment in digital infrastructure is paired with organizational readiness, leadership commitment, digital competencies of staff and cross-agency cooperation to achieve the greatest value for the public. However, there are a number of weaknesses that should be noted. The study covered only the direct link between digital transformation and service quality and used a cross sectional research design which limited the ability of the study to track changes over time. Other variables that could mediate and/or moderate this relationship, such as digital leadership, organizational culture, innovation capability and citizen trust, merit future investigation. Comparative studies across countries and levels of government are recommended to improve the generalizability of the outcomes and to develop a general picture of sustainable public service management in various governance environments.

REFERENCES

Ahmadzai, Z., Rayi, I., & Mirwais, L. (2023). Challenges in implementing digital technology to enhance public administration efficiency in a metropolitan city. *Journal Social Civilecial*, *1*(2), 70-83. https://doi.org/10.71435/610484

Anomah, S. (2025). Assessing the institutional readiness and capacity for AI adoption in public audit institutions in developing countries: evidence from Ghana. *Telematics and Informatics Reports*, *20*, 100260. https://doi.org/10.1016/j.teler.2025.100260

Aslam, M., & Ansari, Y. M. (2024). Digital governance and smart cities: Leveraging technology for urban administration. *Urban local governance in India: Dynamics, challenges, and innovations*. https://doi.org/10.5281/zenodo.20230328

Asmawanti-S, D., Afiah, N. N., Ritchi, H., & Suharmana, H. (2025). Literature review of government digital services based on public value theory and citizen perspectives. *Cogent Business & Management, 12*(1), Article 2518494. https://doi.org/10.1080/23311975.2025.2518494

Bannister, F., & Connolly, R. (2014). ICT, public values and transformative government: A framework and programme for research. *Government Information Quarterly, 31*(1), 119–128. https://doi.org/10.1016/j.giq.2013.06.002

Bélanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *The Journal of Strategic Information Systems, 17*(2), 165–176. https://doi.org/10.1016/j.jsis.2007.12.002

Carter, L., & Bélanger, F. (2005). The utilization of e-government services: Citizen trust, innovation and acceptance factors. *Information Systems Journal, 15*(1), 5–25. https://doi.org/10.1111/j.1365-2575.2005.00183.x

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Chan, F. K. Y., Thong, J. Y. L., Venkatesh, V., Brown, S. A., Hu, P. J. H., & Tam, K. Y. (2021). Modeling citizen satisfaction with mandatory adoption of an e-government technology. *Journal of the Association for Information Systems*.

Cordella, A., & Bonina, C. M. (2012). A public value perspective for ICT enabled public sector reforms: A theoretical reflection. *Government Information Quarterly, 29*(4), 512–520. https://doi.org/10.1016/j.giq.2012.03.004

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems, 19*(4), 9–30. https://doi.org/10.1080/07421222.2003.11045748

Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New public management is dead—Long live digital-era governance. *Journal of Public Administration Research and Theory, 16*(3), 467–494. https://doi.org/10.1093/jopart/mui057

Ebrahim, Z., & Irani, Z. (2005). E-government adoption: Architecture and barriers. *Business Process Management Journal, 11*(5), 589–611. https://doi.org/10.1108/14637150510619902

Eubanks, V. (2018). Automating inequality: How high-tech tools profile, police, and punish the poor. *St. Martin's Press*.

Fannur, F., Sabaruddin, I., & Ramdhani, N. (2023). Innovative leadership approaches for enhancing digital governance and collaborative networks in public administration. *Journal Social Civilecial*, *1*(2), 84-99. https://doi.org/10.71435/610487

Faro, B., Abedin, B., & Cetindamar, D. (2022). Hybrid organizational forms in public sector's digital transformation: A technology enactment approach. *Journal of Enterprise Information Management*, *35*(6), 1742-1763. https://doi.org/10.1108/JEIM-03-2021-0126

Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2018). Digital government and public management research: Finding the crossroads. *Public Management Review, 20*(5), 633–646. https://doi.org/10.1080/14719037.2017.1327181

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research methods in applied linguistics*, *1*(3), 100027. https://doi.org/10.1016/j.rmal.2022.100027

Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation: Insights and implications for strategy and organizational change. *Journal of Management Studies, 58*(5), 1159–1197. https://doi.org/10.1111/joms.12639

Harasimiuk, D. E., & Braun, T. (2022). Governing complexity: the public organizations shift in digital transformation. In *Governing Complexity in Times of Turbulence* (pp. 127-145). Edward Elgar Publishing. https://doi.org/10.4337/9781800889651

Heeks, R. (2002). E-government for development: The role of ICTs in transforming government. *Government Information Quarterly, 19*(3), 257–272.

Hujran, O., Alarabiat, A., Al-Adwan, A. S., & Al-Debei, M. (2023). Digitally transforming electronic governments into smart governments: SMARTGOV, an extended maturity model. *Information Development*, *39*(4), 811-834. https://doi.org/10.1177/02666669211054188

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Janowski, T. (2015). Digital government evolution: From transformation to contextualization. *Government Information Quarterly, 32*(3), 221–236. https://doi.org/10.1016/j.giq.2015.07.001

Jeilani, A., Ahmed, S. A., & Arabow, A. (2025). Understanding e-government adoption among government employees: the mediating role of perceived attitude across key predictors. *Discover Sustainability*, *6*(1), 724. https://doi.org/10.1007/s43621-025-01592-0

Klievink, B., & Janssen, M. (2009). Realizing joined-up government—Dynamic capabilities and stage models for transformation. *Government Information Quarterly, 26*(2), 275–284. https://doi.org/10.1016/j.giq.2008.12.007

Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. *Government Information Quarterly, 29*(4), 446–454. https://doi.org/10.1016/j.giq.2012.06.003

MacLean, D., & Titah, R. (2022). A systematic literature review of empirical research on the impacts of e-government: A public value perspective. *Public Administration Review, 82*(1), 23–38. https://doi.org/10.1111/puar.13413

Margetts, H., & Dunleavy, P. (2013). The second wave of digital-era governance: A quasi-paradigm for government on the Web. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 371*(1987), Article 20120382. https://doi.org/10.1098/rsta.2012.0382

Meijer, A., & Bolívar, M. P. R. (2016). Governing the smart city: A review of the literature on smart urban governance. *International Review of Administrative Sciences, 82*(2), 392–408. https://doi.org/10.1177/0020852314564308

Mergel, I. (2019). Digital service teams in government. *Government Information Quarterly, 36*(4), Article 101389. https://doi.org/10.1016/j.giq.2019.07.001

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

Oe, H., & Yamaoka, Y. (2024). The role of citizen feedback in shaping social policies: Enhancing administrative processes and information transparency for inclusive governance. *SocioEconomic Challenges*, *8*(3), 16-28. https://doi.org/10.61093/sec.8(3).16-28.2024

OECD. (2020). The OECD digital government policy framework: Six dimensions of a digital government. *OECD Publishing*. https://doi.org/10.1787/f64fed2a-en

Omweri, F. S. (2025). E-government and public procurement: A scoping review of technologies, institutional readiness, and governance challenges. *Asian Journal of Economics, Business and Accounting*, *25*(12), 530-556. https://doi.org/10.9734/ajeba/2025/v25i122111

Papadomichelaki, X., & Mentzas, G. (2012). e-GovQual: A multiple-item scale for assessing e-government service quality. *Government Information Quarterly, 29*(1), 98–109. https://doi.org/10.1016/j.giq.2011.08.011

Sharma, H., & Ruikar, M. (2025). Crafting an effective questionnaire: An essential prerequisite of engaging surveys. *Perspectives in clinical research*, *16*(3), 118. https://doi.org/10.4103/picr.picr_157_24

Srivastava, A., Narang, A., Arora, S. V., Johri, M., Thakur, S. S., Sharma, K., ... & Rathore, A. S. (2025). Digital transformation in public administration: Policy, governance, and social implications. *Vascular and Endovascular Review*,

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8(14s), 104-112. https://doi.org/10.70062/dynamicssocial.v2i2.289

Suradi, A., & Purnomo, H. D. (2026). A User-Centred E-Government Service Design Framework to Enhance Public Trust in Sustainable Policies. *Engineering, Technology & Applied Science Research*, *16*(1), 31852-31862. https://doi.org/10.48084/etasr.14851

Twizeyimana, J. D., & Andersson, A. (2019). The public value of e-government—A literature review. *Government Information Quarterly, 36*(2), 167–178. https://doi.org/10.1016/j.giq.2019.01.001

United Nations. (2024). United Nations e-government survey 2024: Accelerating digital transformation for sustainable development. *United Nations*.

Vărzaru, A. A., & Bocean, C. G. (2024). Digital transformation and innovation: The influence of digital technologies on turnover from innovation activities and types of innovation. *Systems*, *12*(9), 359. https://doi.org/10.3390/systems12090359

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

Welch, E. W., Hinnant, C. C., & Moon, M. J. (2005). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory, 15*(3), 371–391. https://doi.org/10.1093/jopart/mui021

Wirtz, B. W., & Daiser, P. (2018). A meta-analysis of empirical e-government research and its future research implications. *International Review of Administrative Sciences, 84*(1), 144–163.

Wirtz, B. W., Weyerer, J. C., & Geyer, C. (2019). Artificial intelligence and the public sector—Applications and challenges. *International Journal of Public Administration, 42*(7), 596–615. https://doi.org/10.1080/01900692.2018.1498103

Yessengeldina, A., Taizhanova, Z., Khalbayev, Y., Lysiak, I., & Rakhimzhanova, R. (2025). Institutional Quality, Digital Readiness, and Economic Growth: Constructing and Testing a Government Project Maturity Index. *Journal of Cultural Analysis and Social Change*, 551-558. https://doi.org/10.64753/jcasc.v10i2.1637

Zyzak, B., Sienkiewicz-Małyjurek, K., & Jensen, M. R. (2024). Public value management in digital transformation: A scoping review. *International Journal of Public Sector Management, 37*(7), 845–863. https://doi.org/10.1108/IJPSM-02-2024-0055

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