

The Effectiveness of Digital Service Transformation on Public Satisfaction at The Kedondong Village office in Cirebon Regency

Afnan Adiyanti, Yanto Heryanto*

Universitas Swadaya Gunung Jati, Indonesia

Email: afnan.yanti96@gmail.com, yanto.heryanto@ugj.ac.id*

Keywords:

Digital Transformation; Village Public Services; Community Satisfaction; Service Effectiveness; Digital Literacy

Abstract

Digital transformation in public services has become an essential requirement for village governments seeking to improve the quality of services provided to communities. The Kedondong Village Government in Cirebon Regency has initiated the implementation of digital-based services to improve efficiency, transparency, and accessibility. However, the effectiveness of this digital transformation and its impact on community satisfaction require further investigation. This study aims to examine the effectiveness of digital transformation in public services and its impact on community satisfaction at the Kedondong Village Office. This research employed a qualitative approach using descriptive methods. Data were collected through observations, in-depth interviews with village officials and residents, and document analysis. The findings indicate that the digital transformation of village services improved service speed, accessibility, and administrative transparency. However, the effectiveness of implementation remained constrained by challenges, including limited digital literacy among residents and inadequate technological infrastructure. Overall, digital transformation had a positive impact on community satisfaction, particularly in terms of service timeliness and convenience. This study recommends strengthening the digital competencies of village officials and providing digital literacy programs for the community to optimize the implementation of digital-based public services.

INTRODUCTION

The Indonesian government has undertaken significant reforms in public service delivery by leveraging digital technologies to improve efficiency, transparency, and accountability. Digitalization enables communities to access government services more quickly and conveniently regardless of geographical location and time constraints. This transformation is supported by regulatory frameworks, including Law No. 25 of 2009 on Public Services and Presidential Instruction No. 3 of 2003 on the National Policy and Strategy for E-Government Development, which encourage the utilization of information technology to enhance public service quality. The adoption of digital technology at the village level is particularly important because village administrations serve as the primary point of interaction between government institutions and communities (Faozanudin, Rosyadi, and Sulistiani 2023; Sihotang et al. 2023). The Kedondong Village Office in Cirebon Regency represents one example of a village administration implementing digital transformation through the Village Information System and online administrative services to replace previously manual processes. These initiatives aim to improve service efficiency, simplify administrative procedures, and increase community satisfaction with village-level public services. The digital transformation

agenda in Indonesia has contributed to improvements in public service delivery, including at the village administrative level (Fiestiandani et al. 2026; Hajar and Arma 2024).

However, the implementation of digital public services continues to face several challenges, including limited internet infrastructure, low levels of digital literacy among government officials and community members, and resistance to organizational change. From a public administration perspective, public service effectiveness can be assessed by the extent to which services fulfill community needs, enhance satisfaction, and promote responsive and transparent governance.

To evaluate public service quality, this study applied the SERVQUAL theory developed by Zeithaml, Parasuraman, and Berry (1990), which assesses service quality through the comparison between public expectations and perceptions of actual service performance across five dimensions. The *tangibles* dimension includes physical facilities, equipment, and communication media, such as website interfaces, accessibility of digital applications, menu clarity, and the condition of supporting technological infrastructure (McMahon et al. 2024; Moon and Armstrong 2020; Petrelli, Ciolfi, and Avram 2023). The *reliability* dimension refers to the ability to provide accurate and timely services, measured through system stability, data accuracy, and completion of administrative processes. The *responsiveness* dimension reflects the willingness to assist the community promptly, including response speed to inquiries, complaint management, and staff availability. The *assurance* dimension relates to staff knowledge, professionalism, and ability to build public trust through digital competence, clear procedures, data security practices, and prevention of unofficial fees. The *empathy* dimension represents personalized attention and concern for community needs, including assistance for elderly citizens, disability accessibility, friendly service delivery, and responsiveness to public concerns (Beck and Ranchordás 2025; Feng and Li 2025; Oro 2025).

Digital transformation in public services refers to fundamental changes in the way government organizations deliver services through information technology, involving not only technology adoption but also changes in organizational culture, structures, and public servant mindsets (Westerman, Bonnet, and McAfee, 2014). Public sector digitalization aims to improve effectiveness, efficiency, and service quality (Kukkonen, 2021), with village-level implementation involving Village Information Systems, online administrative services, and digital communication platforms. Public service effectiveness refers to the extent to which services achieve organizational objectives and fulfill community needs, as reflected through service speed, accuracy, accessibility, and user satisfaction (Mahmudi, 2019). Public satisfaction serves as an important indicator of service effectiveness, measured through the comparison between expected services and actual service experiences (Kotler and Keller, 2016).

Despite extensive research on digital transformation effectiveness in public services, a research gap remains regarding the specific role and effectiveness of administrative personnel in supporting successful digital transformation from a public administration perspective. Previous studies have primarily focused on general civil servant performance (Wahid and Fatimah, n.d.), public service information systems (Abdillah, 2020), and employee work discipline (Kemalasari et al., 2019). However, limited research has examined how administrative processes, interdepartmental coordination, and information technology utilization contribute to public satisfaction regarding digital transformation effectiveness in

village public services.

Therefore, this study addresses this gap by examining the effectiveness of digital transformation implementation in improving public services and identifying factors that support or hinder its implementation at the operational level of village administration. Based on previous studies related to employee performance effectiveness and similar topics, including Abdillah (2020), *An Analysis of the Impact of the Public Service Management Information System on Service Performance at the Cirebon Regency Social Services Agency*; Wahid and Fatimah (n.d.), *Performance Analysis of Civil Servants at the Secretariat of the Cirebon City Regional People's Representative Council*; and Kemalasari, Agustina, and Zulkarnaen (2019), *The Effect of the Implementation of Fingerprint Time and Attendance Systems on the Work Discipline of Civil Servants at the Cirebon City Environmental Agency*, this study expands the discussion by focusing on digital transformation at the village government level.

The urgency of this study lies in determining the extent to which digitalization improves public service effectiveness and generates measurable impacts on community satisfaction. This phenomenon highlights a gap between the expected outcomes of digital transformation and its practical implementation. Therefore, examining digital transformation effectiveness at the Kedondong Village Office in Cirebon Regency is important as an example of technology-based public service implementation at the village level.

The purpose of this study was to identify the impact of digital transformation on community satisfaction at the Kedondong Village Office in Cirebon Regency. The findings are expected to assist local governments in developing policies for village digitalization and provide academic references for future research. This research contributes to the development of public administration studies, particularly in the field of village-level digital public services, by enhancing understanding of how digital transformation influences service quality and community satisfaction based on SERVQUAL theory and organizational effectiveness perspectives. Practically, this study provides recommendations for the Kedondong Village Government and Cirebon Regency Government in developing more effective and sustainable digital-based service systems. It also serves as an evaluation reference for improving the technological competencies and capacities of village officials. For academics and researchers, this study provides a foundation for further investigation of factors influencing successful digital transformation at the village level, particularly infrastructure readiness, community digital literacy, and the role of public officials in supporting technology-based public service implementation.

The conceptual framework of this study explains how public services should be managed, delivered, and evaluated. It incorporates key theories underlying public service development, including classical and contemporary perspectives on public management, user satisfaction, and innovation in public services. According to the Decree of the Minister of State Apparatus Empowerment No. 63 of 2003, public services include all forms of service provision conducted by central and regional government agencies, as well as state-owned enterprises (BUMN) and regionally owned enterprises (BUMD), in the form of goods or services intended to fulfill public interests and implement statutory policy provisions.

METHOD

This research employed a qualitative approach with a descriptive design to gain an in-depth understanding of digital transformation in public services and its impact on public satisfaction. This approach was selected because it enabled a comprehensive description of social realities based on the perspectives of field informants (Creswell, 2017).

The study was conducted at the Kedondong Village Office in Cirebon Regency in 2025, where digital-based service systems had been implemented. The research focused on two main aspects: the effectiveness of digital transformation in public services and residents' satisfaction with the services provided. Research subjects were selected using purposive sampling based on characteristics relevant to the research objectives. The respondents consisted of:

1. The Village Head as a decision-maker;
2. Village officials (*Kaur* and *Kasi*) as service providers; and
3. Community members as service users.

Data were collected through several methods:

- Direct observation to examine digital service processes implemented at the village office;
- In-depth interviews to explore informants' experiences, perceptions, and challenges related to digital service implementation; and
- Documentation review involving service records, activity reports, and other relevant supporting documents.

To ensure data validity, this study applied source and method triangulation by comparing information obtained from interviews, observations, and documentation. This process strengthened the credibility and reliability of the research findings. Data analysis was conducted using the interactive model proposed by Miles and Huberman, consisting of:

1. Data reduction, involving the selection, organization, and simplification of relevant data;
2. Data presentation, conducted through descriptive narratives and supporting tables; and
3. Conclusion drawing, based on identified patterns and relationships within the data.

Furthermore, this study applied organizational effectiveness theory (Steers, 1980) and the SERVQUAL service quality framework to analyze public satisfaction levels. Through this approach, the research provided a comprehensive understanding of the implementation of digital public service transformation at the village government level

RESULTS AND DISCUSSION

The following section presents the findings of a study on the effectiveness of the digital transformation of public services at the Kedondong Village Office in Cirebon Regency and its impact on public satisfaction. The presentation of the results is based on observational data, in-depth interviews, and documentation, which were analyzed using qualitative methods.

The Effectiveness of Digital Transformation in Public Services

Digital transformation at the Kedongdong Village Office is being implemented through the use of information technology-based service systems, such as computerized administration, village service applications, and digital communication platforms.

The implementation of this digital transformation aims to improve the effectiveness, efficiency, transparency, and quality of services provided to the community so that service processes can be carried out more quickly, accurately, and with greater accessibility for residents.

In addition, the use of digital technology also helps village officials manage data, store records, and convey information to the community in a more accurate and organized manner.

With the advent of digital-based service innovations, it is hoped that public services will become more modern and responsive, and better able to meet the needs of the community.

Digital transformation has also had a positive impact on improving the performance of village officials, as administrative processes have become more organized and errors in service delivery have been minimized.

The forms of digital transformation implementation are shown in the following table:

Table 1. Measures of the Effectiveness of Digital Transformation in Public Services at the Kedongdong Village Office

No	Forms of Digital Transformation	Implementation Description
1	Digital Administration System	Computer-based management of population data and correspondence
2	Online Administrative Services	Online submission of certain certificates and administrative documents
3	Digital Information Media	Dissemination of service information via social media and digital information boards
4	Digital Archive	Digital storage of service documents

Source : Researcher's 2026

Based on the table above, it can be seen that digital transformation at the Kedongdong Village Office has encompassed the aspects of administration, service delivery, and information dissemination. The implementation of digital administration and digital archiving systems has helped village officials manage data in a more organized and easily accessible manner. This is consistent with the idea put forward by Westerman et al. (2011), who state that digital transformation can improve the efficiency of work processes in public organizations. However, not all services are yet fully accessible to the public due to system limitations and user readiness.

The effectiveness of the digital transformation of public services at the Kedongdong Village Office was analyzed using the organizational efficiency concept outlined (Steers 1980), which encompasses three fundamental indicators: vision achievement, integration, and adaptation. The following analysis aims to assess the extent to which the implementation of digitalization can maximize the overall quality of public services.

Based on the research findings, in terms of achieving objectives, digital transformation has had a significant impact on improving service efficiency. Administrative processes that were previously carried out manually are now faster and more systematic thanks to computer-based systems and online services. Document processing times have been shortened, and the

rate of administrative errors has been minimized. This indicates that the primary goal of digitization—to improve the speed and accuracy of services—has begun to be achieved, although it is not yet fully optimized.

In terms of integration, the implementation of digital systems has fostered improved coordination among village officials. The use of technology-based administrative systems enables data and information to be exchanged in a more structured and organized manner. Furthermore, integration is also evident in the use of digital communication platforms, which facilitate the dissemination of information to the public. However, system integration still faces challenges due to the lack of a system that is fully and automatically interconnected across departments; as a result, manual intervention is still required in some cases.

Furthermore, in terms of adaptation, village officials have demonstrated a fairly good ability to adapt to technological changes. Most village officials have been able to operate digital systems in their daily work. However, this level of adaptation is still uneven, as some officials still require further guidance and training. This shows that the success of digital transformation depends heavily on the readiness of human resources to implement cutting-edge technology.

Overall, the findings of this study demonstrate that the effectiveness of the digital transformation of public services at the Kedongdong Village Office falls into the “fairly effective” category. This is evidenced by improvements in service speed, ease of access, and internal organizational coordination. These findings align with Mahmudi’s (2019) argument that the effectiveness of public services is influenced by an organization’s competence in managing resources and making optimal use of technology.

However, the effectiveness of these efforts still faces various limitations, particularly in terms of infrastructure readiness and human resource capabilities. Therefore, sustained efforts are needed to enhance the capacity of government officials and develop a more integrated digital system so that public services can be delivered more effectively and sustainably

Table 2. Analysis of the Effectiveness of Digital Transformation in Public Services

No	Effectiveness Indicators	Description of Findings	Analysis
1	Achievement of Objectives	Administrative services are faster, more organized, and have fewer errors than manual systems	This indicates that the primary goals of digital transformation—improving efficiency and service quality—are beginning to be achieved
2	Integration	Coordination among village officials has improved through the use of digital systems and technology-based communication tools	System integration is already underway, but it is not yet fully optimized because some processes are still done manually
3	Adaptation	Village officials are beginning to be able to operate the digital system, although they still need further training	The adaptation process is going fairly well, but it has not been uniform due to limitations in human resource capabilities

Source: Author, 2026

Based on Table 2, it can be seen that the effectiveness of the digital transformation of public services at the Kedongdong Village Office has yielded fairly positive results. In terms of the goal achievement indicator, digitization has improved the speed and accuracy of services.

This demonstrates that the implementation of information technology makes a tangible contribution to improving public service performance.

Regarding the integration indicator, the use of digital systems has helped improve coordination among village officials. However, system integration is not yet fully optimized because some service processes are still carried out manually. Meanwhile, regarding the adaptation indicator, village officials have demonstrated a fairly good ability to adapt to the use of technology, although they still need capacity building through training.

Furthermore, in terms of efficiency and ease of access, digital transformation has a positive impact by streamlining service processes and making it easier for the public to access services. However, the public's limited digital literacy and technological infrastructure remain factors that need to be addressed in order to improve the overall effectiveness of services.

The Impact of Digital Transformation on Public Satisfaction

Public satisfaction was analyzed using the SERVQUAL service quality dimensions, specifically the aspects of reliability and responsiveness, which are relevant to digital services. The findings regarding public satisfaction are presented in the table below.

Table 3. The Impact of Digital Transformation on Public Satisfaction

Dimensions of Satisfaction	Public Perception
Ease of Access	The service is more accessible than before
Punctuality	The service process has become faster
Transparency	Service information is more transparent and clearer
Responsiveness of Government Officials	Government officials are more responsive in providing services
Overall Satisfaction	The majority of the public is satisfied, although the system still needs improvement

Source: Author 2026

Based on the table above, the digital transformation of public services has had a positive impact on public satisfaction at the Kedongdong Village Office. The public has experienced easier access and faster service, indicating improvements in the dimensions of responsiveness and reliability.

These results are consistent with the SERVQUAL model (Parasuraman et al., 1988) and the research by Hidayat (2022), which states that effective digital services can increase public satisfaction and trust. However, some members of the public still experience difficulties in using digital services due to limited technological literacy, so assistance remains necessary.

Overall, the research findings indicate that the digital transformation of public services at the Kedongdong Village Office has had a positive impact on service effectiveness and community satisfaction. Nevertheless, the success of this digital transformation still requires improvements in the areas of civil servant competencies, technological infrastructure, and digital literacy education for the community so that the benefits of digitization can be realized optimally and equitably.

Factors Hindering the Digital Transformation of Public Services

First, limitations in technological infrastructure are a major obstacle to the implementation of digital services. Unstable internet access and a lack of supporting devices, such as computers and servers, prevent digital services from operating at full capacity. This situation hinders service delivery, especially during network outages.

Second, the public's low level of digital literacy poses a significant barrier to the use of technology-based services. Some members of the public, particularly the elderly, still have difficulty accessing and using online service systems. As a result, they continue to rely on manual services.

Third, the limited information technology skills of village officials. Although village officials have begun to adapt to digital systems, they still need further training to be able to operate the systems optimally and independently, without relying on specific operators.

Fourth, resistance to change is also a barrier to the implementation of digital transformation. Both government officials and the public still tend to stick with manual service systems because they are considered easier and more familiar.

Fifth, the limited village budgets for developing digital systems also affect the sustainability of digital transformation programs. The procurement of technology equipment, system maintenance, and human resources training all require significant costs.

Given these various obstacles, a comprehensive strategy—such as improving infrastructure, training human resources, and educating the public—is needed to ensure that the digital transformation of public services can proceed optimally and sustainably.

CONCLUSION

Digital transformation in public services represents a strategic initiative undertaken by village governments to improve the quality and accessibility of services provided to communities. Based on the study of the effectiveness of digital service transformation at the Kedondong Village Office in Cirebon Regency, it can be concluded that the implementation of a digital-based service system has positively contributed to improving public service effectiveness. The utilization of information technology in administrative processes has accelerated service delivery, facilitated community access to various village services, and enhanced transparency in information dissemination.

The implementation of digital services has also contributed to increased public satisfaction, particularly regarding service accessibility, timely completion of administrative procedures, and transparency of service information. However, the effectiveness of digital transformation at the village level continues to face several challenges, including limited technological infrastructure, varying levels of digital literacy among community members, and the need to strengthen the competencies of village officials in managing digital service systems. The successful implementation of digital transformation in village public services requires continuous support through human resource capacity development, technological infrastructure improvements, and digital literacy programs for the community. With sustained support, digital transformation is expected to improve public service quality and strengthen public trust in village government performance.

REFERENCES

- Abdillah, M. N. (2020). *Efisiensi pola distribusi mangga lokal di Pasar Induk Kramat Jati*.
- Beck, M., & Ranchordás, S. (2025). Empathy as a public value: Overcoming administrative vulnerability and rehumanizing (digital) government. In *Public Governance and Emerging Technologies: Values, Trust, and Regulatory Compliance* (pp. 291–314). Springer.
- Creswell, J. W. (2017). *Research design: Pendekatan metode kualitatif, kuantitatif, dan campuran*. Pustaka Pelajar.
- Faozanudin, M., Rosyadi, S., & Sulistiani, L. S. (2023). The preparedness of village governments for the digital transformation of public services in Banyumas Regency, Indonesia. *Public Policy and Administration*, 22(4), 448–462.
- Feng, G., & Li, Q. (2025). The study on innovative development of the elderly care industry under the community-based elderly care model based on the SERVQUAL model. *The Open Public Health Journal*, 18(1).
- Fiestiandani, I., Setijaningrum, E., Supeno, E., & Samad, S. (2026). Between bytes, being, and the bridging of boundaries: The human dimension of policy capacity in rural Indonesia's digital public service delivery. *Cogent Social Sciences*, 12(1), Article 2624790.
- Hajar, S., & Arma, N. A. (2024). Co-creating public value into digital-based public service innovation in the village governance. *Otoritas: Jurnal Ilmu Pemerintahan*, 14(3), 516–538.
- Heryanto, Y. (2018). Kualitas pelayanan dalam meningkatkan kepuasan pelanggan pada Perusahaan Daerah Air Minum (PDAM) Tirta Darma Ayu Kabupaten Indramayu (Studi kasus di Kelurahan Margadadi). *Jurnal Ilmiah Indonesia*, 3(10).
- Heryanto, Y. (2021). Kepemimpinan kepala desa dalam menjalankan fungsi administratif pemerintahan desa. *Syntax Literate: Jurnal Ilmiah Indonesia*, 6(9), 4789–4804.
- Heryanto, Y., Sutarjo, M., & Ramadhani, R. (2023). Kualitas pelayanan publik dalam penerbitan persetujuan bangunan gedung di Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu. *Jurnal Syntax Transformation*, 4(4), 35–43.
- Kemalasari, A. D., Agustina, H., & Zulkarnaen, I. (2019). Pengaruh efektivitas penerapan absensi fingerprint terhadap disiplin kerja pegawai negeri sipil pada Dinas Lingkungan Hidup Kota Cirebon. *Jurnal Ilmiah Publika*, 7(1), 36–50.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education Limited.
- Kukkonen, T. (2021). *Tilling the field of rural arts education in Canada: The role of intermediary organizations in brokering and supporting partnerships* (Doctoral dissertation, Queen's University).
- Mahmudi. (2019). *Manajemen kinerja sektor publik*. UPP STIM YKPN.
- McMahon, R., McNally, M. B., Nitschke, E., Napier, K., Alvarez Malvido, M., & Akçayir, M. (2024). Codesigning community networking literacies with rural/remote Northern Indigenous communities in Northwest Territories, Canada. *Journal of Computer-Mediated Communication*, 29(1), zmad042.
- Moon, Y., & Armstrong, D. J. (2020). Service quality factors affecting customer attitudes in online-to-offline commerce. *Information Systems and e-Business Management*, 18(1), 1–34.
- Oro, B. (2025). Perspective chapter: Designing for dignity—The role of esthetic empathy in assistive technologies. In *Aesthetics in Cultures, Materials, and Philosophies* (pp. 285–302).
- 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–

- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Free Press.
- Petrelli, D., Ciolfi, L., & Avram, G. (2023). Envisioning, designing, and rapid prototyping heritage installations with a tangible interaction toolkit. *Human–Computer Interaction*, 38(2), 118–158.
- Sihotang, D. M., Purwandari, B., Eitiveni, I., Putri, M. F., & Hidayanto, A. N. (2023). Factors influencing village information systems adoption in Indonesia: A qualitative study. *The Electronic Journal of Information Systems in Developing Countries*, 89(5), e12271.
- Steers, R. M. (1980). *Organizational effectiveness*. Erlangga. (Terjemahan oleh Magdalena Jamin)
- Wahid, A., & Fatimah, N. (n.d.). *Universitas Islam Negeri Walisongo Semarang*.
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.