



# Analysis of Factors Affecting the Effectiveness of Public Services in the Digital Era

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**Abstract:** The digital era has changed the way public services are delivered, but its effectiveness depends on a variety of factors. This study uses a qualitative approach to analyze these factors, combining literature review with interviews with public service stakeholders. The study identifies three main factors influencing the effectiveness of digital public services: infrastructure and technological readiness, human resources and organizational culture, and regulations and policies. Adequate technology and digital readiness are critical, as are skilled government employees and a culture that supports innovation. Flexible regulations and supportive policies are also necessary for the success of digital public services. Research shows that increasing the effectiveness of public services in the digital era requires a holistic approach that focuses on infrastructure, human resources, and regulations. This has important implications for policymakers in developing sustainable digital transformation strategies for public services.

**Keywords:** Effectiveness; Digital Era; Public Service.

## 1. Introduction

The digital era has revolutionized the delivery of public services, impacting the way governments interact with the public and shaping people's expectations for efficient and high-quality services (Saputra, Kharisma, Rizal, Burhan, & Purnawati, 2023), (Nugraha, Sjoraida, & Novianti, 2022). Manual processes have been replaced by faster and more convenient digital platforms, demanding responsive, transparent, and accountable services. The use of information technology in public administration is very important to improve service quality and simplify bureaucratic procedures (Pratiwi, Nahrudin, Aina, & Arifin, 2023), (Katharina, 2021).

In today's technology-driven world, the effectiveness of public services is essential to measure the success of government administration in meeting the needs of society. It is important for governments to provide services that are efficient, fast, and accessible to everyone (Satibi, 2023), (Sukmana, 2022). Research on the effectiveness of public services in the digital era can provide valuable insights into how well technology is used and its impact on community satisfaction. This analysis can be an input for future policies to improve the quality of public services (El-Haddadeh, Weerakkody, Osmani, Thakker, & Kapoor, 2019), (Agostino, Saliterer, & Steccolini, 2022).

The integration of digital technology in public services offers the potential for greater operational simplification and accessibility, there are several obstacles that must be overcome (Castelnovo & Sorrentino, 2021), (Brynskov et al., 2022). Issues such as the availability of technological resources, employee skill levels, regulatory constraints, and

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the existing organizational environment all have an impact on the success of digital initiatives in the public sector. A thorough understanding of these factors is essential to develop a successful approach to improving public services in an increasingly digital world (Sepriano et al., 2023), (Anisah et al., 2023).

Previous research conducted by Syukur et al. (2021), has investigated various aspects of public services in the digital era, but a comprehensive understanding of the factors that affect the effectiveness of these services is still lacking. (Rachmad et al., 2023), (Putra, 2021) Although existing studies often concentrate on the technicalities of technology integration or their influence on public perception, a more holistic study of the fundamental dynamics that govern the effectiveness of public services in the digital world is needed (Taali, Darmawan, & Maduwinarti, 2024), (Suaedi, 2019).

This article aims to comprehensively examine the factors that affect the success of public services in today's digital era, taking into account technology, people, organizations, and regulations (Bairizki, 2020), (Djani, 2022). Through qualitative research, this research will investigate the viewpoints of various stakeholders, such as public service providers, users, and public administration and IT experts. By gathering insights from various circles, the goal is to uncover the challenges and possibilities in the use of digital technologies in the public sector, and to develop effective approaches to improve public services (Sagena, Lawelai, & Dema, 2023), (Siahaan & Pardede, 2022).

This analysis aims to offer a new understanding of the challenges and opportunities in providing public services in the digital era. These findings can be used by policymakers and public administrators to improve the design and implementation of digital solutions (Anurogo, 2023). In addition, the study could stimulate further discussion about the impact of technology on public services and how various factors such as technological readiness, human resources, organizational structure, and regulations can affect the success of digital projects in the public sector (Wibowo & Pratomo, 2021).

The results of this study will not only contribute to the development of public administration theory in the context of the digital era, but also provide an empirical foundation for policymakers in designing effective strategies to improve public services. By understanding the interaction between factors that affect the effectiveness of public services, it is hoped that a more integrated and adaptive approach can be formulated in facing challenges and taking advantage of the opportunities offered by the digital era in the context of public administration.

## 2. Materials and Methods

This research approach refers to the analysis and synthesis of information from various literature sources relevant to the research topic. The method used is literature study or literature review, which utilizes various literature sources to explore and analyze factors that affect the effectiveness of public services in the digital era. This approach was chosen because of its ability to provide a comprehensive understanding of the research topic through a systematic review of various perspectives and findings that exist in the literature. In its implementation, this research uses two types of literature materials: primary and secondary. The primary material that is the main basis is the Constitution

of the Republic of Indonesia, which provides a legal and constitutional framework for the implementation of public services in Indonesia. Meanwhile, secondary materials consist of various sources such as books, newspapers, scientific journals, official documents, and information from the internet or websites. All of these secondary sources are selected based on their relevance to the research topic, especially those related to efforts to improve the efficiency of public services through the use of technology in the digital era.

The main focus of this literature analysis is on the aspect of improving the efficiency of public services by utilizing technology in the digital era. The analysis process involves identifying, evaluating, and synthesizing information from various sources to uncover patterns, trends, and key factors that affect the effectiveness of public services in the context of digitalization. Through this approach, the research aims to generate a deep and integrated understanding of how digital technologies can be optimized to improve the quality and efficiency of public services, as well as the challenges and opportunities that arise in the implementation process.

### 3. Results and Discussion

Public service is the provision of facilities and services to the community by considering various factors. These services are related to activities that meet the needs of the community, are essential, and are guided by the principles of effectiveness, efficiency, and economy. Constitutional institutions were formed to ensure the implementation of public services to the general public, the community, and independent institutions. Individuals involved in the organization are responsible for carrying out these public service activities (Diana, 2019).

Law Number 25 of 2009 provides a sense of legal certainty in the relationship between the community and the internal public service providers. This law ensures that organizers are dedicated to providing high-quality services to the community. In addition, this law also establishes clear guidelines regarding the rights, responsibilities, obligations, and authorities of all parties involved in the implementation of public services. The public service law aims to simplify operations and improve communication between stakeholders (Wiranti, 2023).

#### 3.1 Technology Infrastructure and Digital Readiness

In the modern era, the effectiveness of public services is highly dependent on existing technological infrastructure. Research shows that the presence and quality of information and communication technology (ICT) infrastructure plays a crucial role in enabling government agencies to provide digital services that are efficient and easily accessible to a wide audience. Dependence on technology is the foundation for improving public services in the digital era.

The efficiency and reliability of internet connectivity play an important role in facilitating the integration of digital public services. Areas with strong internet access usually experience increased use and satisfaction with digital public services. In contrast, regions that do not have a strong internet infrastructure face major obstacles in providing effective digital public services.

Having the right hardware and software is essential for public services to run effectively. Government agencies with modern technology can improve data

management and service delivery, resulting in faster and more accurate administrative processes. Integrated information systems also allow for better communication and data exchange between departments, resulting in more comprehensive and responsive services for the community. The issue of inequality of access to digital public services due to disparity in technological infrastructure is still a significant challenge. This results in varying levels of service quality and speed in different regions, especially in remote or underdeveloped areas where there is limited access to technology and skilled IT personnel. This digital divide needs to be overcome so that all members of society can benefit from the advancement of digital public services (Sepriano, 2023).

The cybersecurity aspect is the main concern in the development of digital infrastructure for public services. Investing in a robust security system not only protects sensitive citizens' data, but also builds public trust in government digital services. Institutions that prioritize cybersecurity tend to be more successful in implementing and maintaining effective digital public services (Istyanto and Nasrullah, 2019).

Government agencies need to work together and have a system that can easily share data to provide more integrated and responsive digital public services. However, there are challenges in implementing this interoperability. The effectiveness of digital public services also depends on people's readiness for technology, and digital literacy and accessibility improvement programs have proven beneficial. Governments that educate and empower the public in digital technology tend to be more successful in implementing digital public services.

### **3.2 Human Resources and Organizational Culture**

In today's technology-driven era, the digital skills of government employees are essential for the effectiveness of public services. Digital literacy has become a fundamental need and not just an additional skill in modern public administration. Government agencies that prioritize and maintain a high level of digital competence among their employees will experience greater success in innovation and efficiency when implementing digital solutions. Employees with strong digital skills can quickly adapt to new technologies, create user-friendly interfaces, and analyze data effectively for informed decision-making. They are also able to identify and implement improvements in the service process, which ultimately improves the quality of services provided to the community.

Ongoing training and capacity building programs are essential to improve employees' digital skills. Government agencies that invest in long-term human resource development, particularly in IT and change management, will be better able to adapt to digital transformation in public services. Training should focus not only on technical skills, but also on understanding the strategic implications of technology, ethical use of data, and problem-solving in a digital context. Institutions that prioritize regular training and adapt to technological advances will create a culture of continuous learning, resulting in more competent and adaptable employees and a more digitally prepared organization.

In the digital era, visionary leadership and support for digital innovation are essential to improve the effectiveness of public services. Leaders who understand the benefits of digital technology and promote its use in their organizations will be more successful in implementing and sustaining digital initiatives. This type of leadership is able to communicate a clear vision of the long-term role of technology.

Employee resistance to change is the main obstacle to the successful implementation of digital public services. However, through the utilization of effective change management techniques such as transparent communication regarding the benefits of digitalization and employee involvement in the transition process, rejection can be minimized and the use of digital technology can be increased. In addition, fostering collaboration between government staff and external technology professionals plays an important role in improving the effectiveness of digital public services. By forming strategic alliances with the private sector and academia to develop cutting-edge digital solutions, government agencies can leverage the latest knowledge and technology to improve the quality and efficiency of services provided to the community.

#### **4. Conclusions**

The effectiveness of public services in the digital era is greatly influenced by three main factors that are closely interrelated: technological infrastructure and digital readiness, human resources and organizational culture, and supporting regulations and policies. The availability of adequate technological infrastructure, including a stable internet network and an integrated information system, is an important foundation for the efficient implementation of digital public services. However, infrastructure alone is not enough without being supported by people's digital readiness and guaranteed cybersecurity. This shows that a holistic approach in the development of digital infrastructure is urgently needed to achieve optimal public service effectiveness.

Human resources and organizational culture play a crucial role in determining the success of the digital transformation of public services. The digital competencies of government employees, enhanced through capacity building programs and ongoing training, have proven to be key in implementing and optimizing digital solutions for public services. Visionary leadership and supporting digital innovation also play an important role in creating an organizational culture that is adaptive to technological changes. This emphasizes that investment in human resource development and the formation of an innovative organizational culture is a strategic step in increasing the effectiveness of public services in the digital era.

Supportive regulations and policies are significant enabling factors in realizing effective digital public services. Regulatory frameworks that are adaptive to technological developments, comprehensive data protection policies, and incentives for digital innovation in the public sector have been proven to facilitate the adoption and optimization of technology in public services. Harmonization of regulations between sectors and government levels is also an important aspect to create an integrated and effective digital ecosystem. This conclusion emphasizes the importance of a holistic and responsive policy approach to technological dynamics in supporting the digital transformation of public services.

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