

## OPPORTUNITIES AND CHALLENGES OF PUBLIC ADMINISTRATION TRANSFORMATION IN THE DIGITAL ERA

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### Abstract

Changes in the delivery of government services are driven by digital transformation in public administration, which involves utilizing technologies such as data analytics, artificial intelligence, and process automation to enhance the quality of public services. This research employs a descriptive approach based on a literature review from various sources, including books, scientific articles, and relevant journals, aiming to present a holistic overview of digital transformation in public administration, its opportunities, and challenges. The opportunities include ease of communication and accessibility through the implementation of e-government, open government, and broader data utilization. On the other hand, challenges include limitations in managing digital technology and issues related to data security. The digital revolution in public administration has significantly impacted government operations and public services. Digital technology enhances accessibility in various sectors such as politics, governance, health, education, and economics. This transformation fosters transparency, effectiveness, public participation, and data-driven decision-making. Moreover, digital transformation creates opportunities to establish a more open and transparent government, while simultaneously raising challenges related to human rights, privacy, and data protection.

**Keywords:** Digital Transformation, Public Administration, Opportunities, Challenges.

### A. INTRODUCTION

Information technology is currently developing very rapidly, impacting every part of life. Access to information and ease of communication are two of the many advantages of advances in information technology. This opens up opportunities to increase accessibility in various fields, including social, political, medical, educational, and economic fields (Saputra et al., 2023).

Based on data released by wearesocial.com, the implementation of digitalization in Indonesia in early 2023 reached 212.9 million internet users with a penetration of 77.0%. In addition, there are 167.0 million social media users from 60.4% of the total population. Then, around 353.8 million people are active in using cellular networks with an average of 128.0% of the total population in Indonesia. From these data, it can be assessed that most people have opened themselves up to digital implementation in their daily lives.

The collection, analysis, and exchange of information have undergone significant changes as a result of the integration of advanced information and communication technologies. This can speed up the decision-making process and increase the effectiveness and transparency of administrative processes (Myeong & Jung, 2019). The Internet of Things (IoT), cloud computing, big data, and artificial intelligence (AI) have all changed the way people learn, connect, conduct business, and even engage in politics in this digital era.

Therefore, in order to stay relevant and encourage better governance, governments have begun to implement various information technologies (Haris et al., 2023).

Based on the principle of autonomy and assignment tasks, the Indonesian government system provides autonomy to regions to organize and manage their own households. This is in line with the framework of the Unitary State of the Republic of Indonesia (Ashari & Sallu, 2023). There are several benefits of digitizing public services, including increasing public access to information and services, increasing government openness, and increasing the effectiveness and quality of services provided (Tasyah et al., 2021). Digitalization can also encourage technology-based community empowerment, accelerate growth, and increase community involvement. Public services must become more effective, transparent, and responsive to community needs as a result of digitalization, thus supporting the implementation of good governance (Maryanah et al., 2024).

Digital change is the process of adopting and implementing digital technology through organizations to create new or modified products, services, and run affairs using digital formats (Musta'in et al. 2022). Digital transformation is not only about technology, but also about people and culture. It prioritizes digital and customer-based in all aspects of the business such as analysis models, customer experience, and implementation processes. The use of digital technology creates new experiences for its users, rapid product creation, and new business models in response to change (Sukmawati et al., 2022).

The process of transferring data or information from physical format to digital form that can be handled by information technology is known as digitalization. The government must use social media, mobile applications, and websites, among other online channels, to improve the quality of public services (Wiranti, 2023). By doing this, the public will have easier access to government information and services while strengthening the e-government system. Therefore, digitalization is very important for the advancement of public services and improving the relationship between the public and the government (Indah, 2023).

Digitalization creates the potential to produce new and creative services that can improve human life and make it possible to store, process, and exchange data faster and more efficiently (Mayasari et al., 2022). Therefore, using the idea of digitalization can provide a number of benefits, including increasing productivity, cutting costs, and improving the quality of services (Nanda & Fitryani, 2022).

Digital transformation brings fundamental changes in the traditional ways public administration is carried out. Digital transformation includes the application of information and communication technology in all aspects of public administration, from data collection, analysis, decision making, to efficient public services. Digital transformation is a multifaceted strategy that is more than just converting analog public services to digital or developing online forms (Djatkiko, 2023).

Digital transformation not only includes new technologies but also changes in corporate culture and attitude. Businesses that adopt digital transformation must be ready to innovate, change rapidly, and adapt (Aisha, 2022). Increased productivity, better customer service, flexibility, and operational efficiency are just some of the benefits of the digital transition. In addition, implementing digital transformation can create new opportunities to create state-of-the-art goods and services (Roblek et al., 2021). Online-based applications, e-government systems, and big data analysis in the realm of public administration provide governments and communities with digital opportunities to provide public services (Hendriyaldi et al., 2022). Both internal and external parties have a significant impact on the digital transformation process, requiring continuous adjustment of processes, services, and products to meet external needs (Pangandahen et al., 2022). Digital transformation facilitates public access to various types of information through services, data, and solutions supported

by technology. Digital transformation provides opportunities for people to innovate through the use of online applications (Firdaus et al., 2021).

Data security and privacy are important assets in digital transformation. The biggest challenge is protecting data from cyber threats such as hacking, malware, and phishing attacks as well as privacy issues that arise due to the storage, collection and use of personal data. In addition, dependence on digital technology poses a risk to organizations, governments and communities in the form of being vulnerable to system disruptions or failures, power outages that can stop technology operations, internet addiction, and can ignore social interactions.

The digital transformation of public administration may cause a digital divide, which may limit people's access to technology and information. These gaps may have an impact on the adoption of digital services in the public sector. Therefore, the analysis of the digital transformation of public administration: opportunities and challenges finds an important relationship between the use of technology and identification. Based on this, the author intends to raise the title of the research, namely "**Opportunities and Challenges of Public Administration Transformation in the Digital Era**"

## **B. LITERATURE REVIEW**

### **Introduction to Public Administration Transformation in the Digital Era**

The transformation of public administration in the digital era involves the integration of information and communication technology (ICT) into government processes to improve efficiency, transparency, and public participation. The application of e-government and big data analytics is key to modernizing public services (Romdana et al., 2021).

### **Opportunities in Digital Transformation of Public Administration**

Some of the key opportunities identified in the literature are:

- **Increased Public Access and Participation:** Digital technology makes it easier for people to access information and participate in government decision-making processes. This increases government transparency and accountability (Sari, 2021).
- **Operational Efficiency and Cost Savings:** Automation of administrative processes reduces red tape and speeds up public services, thereby saving time and operational costs.
- **Improving the Quality of Public Services:** Utilizing big data and analytics enables the government to understand the needs of the community more deeply, so that it can provide more targeted and responsive services.

## **C. RESEARCH METHODOLOGY**

This study uses a descriptive approach with a literature study method. This study was conducted to examine the opportunities and challenges of public administration transformation to realize digital transformation. Which is sourced from journal references - then reviewed and to draw conclusions.

## **D. RESULT AND DISCUSSION**

Public administration is undergoing changes and adaptations in facing the challenges and opportunities offered by information and communication technology. Digitalization brings public administration to blend with technology related to the management, implementation, and implementation of policies, programs, and public services organized by the government to achieve certain goals in providing services to the community. Public administration aims to achieve efficiency, effectiveness, and accountability in the implementation of public services and government policies. It can be said that public administration is inseparable from change.

Therefore, the opportunities and challenges faced become one of the benchmarks of success in making changes that can have an impact on every field in public administration, especially in providing services.

Opportunities that arise through digital transformation include ease in transacting, shopping, and communicating. The implementation of digital technology can change existing processes, creating opportunities to find new values, methods, or innovations that provide different experiences for the community as users (Lukman, 2022). One important element in digital transformation is e-government, which is an internet-based information system and digital technology designed to increase the efficiency, effectiveness, transparency, and accountability of government management (Lukman, 2022). Presidential Instruction Number 3 of 2003 concerning E-government Development Policy and Strategy sets out several strategic objectives, such as the development of a reliable and affordable service system, the arrangement of regional government operational systems and procedures, and the increase in the capacity of government human resources.

Open government is also an important aspect in the digital transformation of public administration. This concept involves transparency of government actions, ease of access to government information and services, and responsiveness to community ideas and needs (Wirtz et al., 2018). To be successful, open government requires a commitment to transparency, greater public participation, and collaboration between government and various parties. These elements support accountability, policy success, and inclusive socio-economic development. Big data is one of the great opportunities in the digital transformation of public administration by providing large and diverse data. Big data technology enables the government to make smarter and evidence-based decisions. Data collected from various sources, such as sensors, mobile devices, and social media, can help the government understand community conditions, behavior, needs, and problems faced (Nur, 2020). In-depth data analysis allows for more targeted public policy making.

Cybersecurity is both an opportunity and a challenge in the digital transformation of public administration. Implementation of cybersecurity policies and regulations, increasing awareness of government employees, training on good security practices, adoption of advanced security technologies, and effective identity and access management can protect people's personal data and public infrastructure from the threat of cyber attacks.

Another key factor in maximizing the opportunities for digital transformation is the development of human resources and increasing cyber literacy. The application of information and communication technology that pays attention to security and privacy aspects can have a positive impact on organizational governance and public services. In addition, a strong commitment from the leaders of public sector organizations is essential to ensure the success of digital transformation to meet the needs and expectations of the community.

Big data presents both great opportunities and challenges in its implementation. The huge volume of data requires high-bandwidth storage, processing, and network capacity, thus presenting challenges related to capacity. The speed of data that must be generated, processed, and analyzed in real-time requires very fast processing capabilities, creating challenges in terms of speed. The diversity of data sources, both structured, semi-structured, and unstructured, poses challenges in managing data variations. In addition, the aspect of data accuracy (veracity) is an important element, because data quality directly affects various business applications such as risk management and customer analysis (Sepriano et al., 2023).

Data security is a critical issue in the digital era. The risk of data or personal information theft is increasing, while cybercrime is a major concern. Therefore, comprehensive, integrated, and sustainable steps are needed from all parties to address the threat of

cybercrime. Budget limitations are an obstacle to implementing digital transformation in the government sector. The process of developing information and communication technology requires a large allocation of funds, including for periodic system maintenance and updates to maintain the sustainability of digitalization (Nuryanto, 2021).

Human resources (HR) are also a major challenge in digital transformation. Workers must have analytical and creative skills, as well as skills in using computers and digital platforms. Education and training are needed to improve HR competencies so that they can adapt to developments in digital technology (Sepriano et al., 2023). Thus, digital transformation has a significant impact on organizations, both in creating new opportunities and facing challenges that require special attention. These obstacles require collaborative efforts to ensure the success of digital transformation implementation, especially in public administration.

## E. CONCLUSION

The digital transformation process in public administration greatly affects how public services are delivered and how government functions as a whole. Leveraging digital technology is an opportunity to increase accessibility in various fields such as government, health, education, economy, social and politics. Public administration can increase transparency, efficiency, public participation, and data-based decision-making. Organizations pursuing digital transformation must be flexible, innovative, and able to adapt quickly. Digital transformation opens up opportunities to increase public involvement and participation through digital platforms such as e-government. In addition, there is also an open government that can collaborate between the government and the community. Through digitalization, the government can build public trust with transparency such as information that is easily accessible and understood and increase government accountability.

Although it provides many opportunities, digital transformation brings challenges in the form of data security and privacy, budget and also human resources that are not yet literate in technology. Therefore, the government needs to provide digital literacy to the community and commit to protecting sensitive public data, as well as maintaining the security of information systems for the community. Opportunities and Challenges of Public Administration Transformation in the Digital Era need to be given maximum attention because it is very important in government activities because digital transformation is the process of utilizing technology to create new products and change processes, culture, and customer services in response to shifts in customer desires and business models.

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