

DIGITAL TRANSFORMATION OF EMPLOYEE SERVICES IN THE SORONG DISTRICT GOVERNMENT OF WEST PAPUA

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ABSTRACT

This study examines the digital transformation of civil service services in the local government of Sorong Regency, Southwest Papua Province. Digital transformation is a strategic effort to improve the efficiency, transparency, and accountability of the governance of state civil apparatus (ASN) through the use of information and communication technology. This research employs a qualitative method, including observations, literature studies, and interviews, to understand the digital transformation process and the factors influencing its success. The results show significant progress through the implementation of online personnel information systems such as SIMPEGDA, which facilitate personnel administration and public services. However, challenges such as uneven internet infrastructure, the need for improved digital literacy among ASNs, and data security issues remain. The theoretical contribution of this study emphasizes the importance of human resource readiness and technological infrastructure in supporting digital transformation in the public sector. Recommendations focus on strengthening technological infrastructure and enhancing human resource competencies through regular training and mentoring to ensure ASN can effectively operate digital applications and systems. The digital transformation of staffing services in Sorong Regency is not only an instrument for improving the performance of apparatus but also a key part of realizing an effective, professional, and competitive regional government in the digital era.

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INTRODUCTION

The Industrial Revolution 4.0 has driven governments to enhance the quality of public services. Public service refers to activities carried out by public institutions to provide administrative services as part of citizens' rights (Ombudsman Republik Indonesia, 2021). Alongside the rapid advancement of information and communication technology (ICT), digital transformation has become a strategic priority in bureaucratic reform and public service

improvement. Particularly in personnel management, digital transformation is seen as crucial to realizing the principles of good governance, focusing on efficiency, transparency, and accountability (Latifa & Frinaldi, 2024). The Indonesian government has shown strong commitment to utilizing digital technology (Wagola et al., 2023), with digital transformation improving bureaucratic operations to deliver better services to the public, enhance efficiency, and reduce budget expenditures (Abbas et al., 2025). The Presidential Instruction Number 3 of 2003 aimed at improving e-governance implementation further underlines this commitment (Suhendra & Santiko, 2022).

The role of ICT in government operations, including data management and public service provision, has become indispensable (Kadewandana & Kaligis, 2024). Moreover, the global rise of the internet and industrial technology has created strong incentives for governments to adopt technology in public services (Vermesan & Friess, 2022). During the administration of Jokowi-Jusuf Kalla (2014-2019), bureaucratic reform focused on improving administrative standards and increasing the efficiency of governance (Girsang, 2021), emphasizing the importance of restoring public trust in institutions (Rahmat et al., 2024). The Indonesian government's commitment to improving bureaucratic efficiency is also emphasized through the focus on creating a clean, efficient, democratic, and trustworthy administration (Bhutto, 2024).

Article 1 of Law No. 5 of 2014 on the State Civil Apparatus (ASN) defines ASN as professionals who contribute to the governance and development tasks of the state, ensuring that services are free from political intervention and corruption. For successful reform, public service satisfaction greatly depends on the integration of ICT into the operations of civil servants (Ilyasi, 2024). Digital bureaucracy is expected to improve the efficiency of administrative processes and services (Peeters, 2023).

Previous studies indicate that digital applications in personnel management have significantly improved governance quality. For instance, the implementation of the e-Leave (e-Cuti) system contributed to improved administrative discipline, reduced data errors, and enhanced transparency in human resource management decisions (Latifa & Frinaldi, 2024). These findings demonstrate that digital transformation in personnel services is not just a technical innovation but a structural reform within public administration.

However, challenges remain, particularly in regions with unequal digital access, such as Southwest Papua. Despite efforts by the Provincial Government of Southwest Papua to expand digital infrastructure, these challenges impede the full implementation of digital government initiatives (Parsaulian, 2025). The success of digital personnel services is deeply tied to the availability and reliability of digital infrastructure, which remains a significant concern in remote areas.

Sorong Regency, an important region in Southwest Papua, plays a key role in the local economy, including the oil industry, trade, and services. The community in Sorong is eager to see improvements in internet facilities, which are needed for sectors like health, education, and government services. At the local level, the Sorong Regency Government has launched the Si-ASN application to modernize personnel services, streamline personnel data management, and reduce dependence on manual administrative procedures (Nuhuyan & Lamak, 2024). This application exemplifies the practical implementation of digital transformation in local government personnel services.

The implementation of the Electronic-Based Government System (SPBE) began with Presidential Instruction No. 3 of 2003 and is seen as a milestone in modernizing public services. Sorong Regency has made strides in this area, including the use of e-office applications for electronic signatures, improving service speed and overcoming geographical limitations. In addition, the development of internet infrastructure and training for civil servants are crucial to enhance digital literacy and ensure the success of digital transformation.

Despite these efforts, challenges such as uneven internet access and the need for better technological literacy among civil servants and the public remain. Previous studies have highlighted that limited facilities and infrastructure significantly affect the productivity of civil servants in delivering public services (Giroth et al., 2022). To address these issues, the Sorong Regency Government is focusing on socialization, capacity building, and investments in technology infrastructure to ensure that digital transformation is both effective and sustainable.

Furthermore, digital transformation in the public sector faces various risks, including resistance to change, budget constraints, and data security concerns (Sari, 2025). These challenges highlight that digital transformation is

not only about adopting technology but also ensuring organizational readiness, strong institutional support, and capacity building for sustainable implementation.

Although numerous studies have examined digital transformation in public administration, limited empirical research focuses on civil service management in remote and infrastructure-constrained regions such as Southwest Papua. This study addresses this gap by examining the implementation of digital personnel services at the local government level.

METHOD

The research method employed is a qualitative approach, which includes observation, literature study, and interviews with several informants (Lamichhane & Lamichhane, 2024). Content analysis is used to analyze the content of interviews and documents in order to understand the digital transformation process and to identify the factors that influence its success. This study focuses on understanding the digital transformation process in personnel services and its impact on the government staffing services in Sorong Regency, West Papua Province. By utilizing qualitative methods, the study aims to gain insights into how digital transformation is implemented in staffing services and identify key factors contributing to its success.

The definition of public services, according to Law Number 25 of 2009 on Public Services, refers to activities that fulfill the needs of services in accordance with statutory regulations for every citizen and resident concerning goods, services, and/or administrative services provided by public service organizers. The term "goods, services, and administrative services" in this context refers to public goods provided by the government, rather than goods that are traded in daily life.

RESULT AND DISCUSSIONS

Implementation of Digital Personnel Systems

The Sorong Regency Government has made notable progress in the implementation of digital personnel systems, particularly through the introduction of the online-based Regional Personnel Information System (SIMPEGDA). This system plays a pivotal role in facilitating personnel administration, including processes such as promotion, transfer, and retirement. By digitizing these processes, SIMPEGDA has contributed to increased efficiency and reduced the potential for manual errors. Additionally, it has improved data accuracy and transparency in the management of civil servants (ASN) in the region.

Another significant initiative is the Si-ASN application, which is designed to integrate employee data and monitor performance digitally. This system aligns with the Indonesian government's mandate outlined in Law No. 20 of 2023 and Presidential Regulation No. 95 of 2018 regarding Electronic-Based Government (SPBE). The Si-ASN application enhances the efficiency of administrative tasks, helping streamline the management and monitoring of ASN performance in line with modern bureaucratic standards.

Furthermore, the local government has expanded digital services beyond personnel management with innovations such as the "Si Tinja" system, an online request service for feces suction by the Housing Office. This application exemplifies how digital transformation is broadening the scope of technology-based public services in the region, reflecting the government's commitment to modernizing services for the public.

Challenges in Digital Transformation

Despite the progress made in the implementation of digital personnel systems, several challenges remain in achieving full digital transformation in Sorong Regency. One of the primary challenges is the digital literacy and skills of government employees. Many civil servants still lack sufficient understanding and expertise in using digital systems, which affects the full potential of the technology. This gap in digital competency has led to inefficiencies in the use of these systems, limiting their effectiveness in improving administrative processes.

A second major challenge is the unequal distribution of technology infrastructure, particularly internet access. While certain urban areas within Sorong Regency have relatively good internet connectivity, rural areas suffer from

limited or unreliable access to the internet. This digital divide restricts equitable access to public services, which in turn affects the inclusivity and reach of the digital personnel services being implemented.

Another challenge is the security of employee data and personal information. As more personnel data is digitized, the risk of data breaches and misuse increases. Safeguarding this sensitive data is crucial to maintaining trust in digital government services and ensuring the privacy of civil servants.

Investments in Technology and Infrastructure

In response to these challenges, the Sorong Regency Government has implemented a series of strategic initiatives. The local government has begun to invest in improving human resource capacity through training programs aimed at increasing digital literacy among civil servants. These initiatives are critical for maximizing the potential of digital systems and ensuring that all employees are equipped to navigate the digital landscape effectively.

The government has also focused on improving technology infrastructure, particularly internet connectivity. The Sorong Regency Government is working with the Coordinating Ministry for Political, Legal, and Security Affairs to enhance regional internet access. This collaboration aims to address the digital divide in the region, ensuring that all areas, including rural communities, have reliable access to digital government services.

Moreover, steps have been taken to strengthen data security measures. The Sorong Regency Government has begun implementing advanced cybersecurity protocols to protect employee data and prevent unauthorized access, ensuring that personal information remains secure as digital services continue to expand.

Discussion

The digital transformation of personnel services in Sorong Regency has highlighted several critical factors, aligning with broader global trends in public administration and governance. The implementation of the Regional Personnel Information System (SIMPEGDA) and the Si-ASN application exemplifies how digital tools are utilized to streamline administrative processes, improve transparency, and foster accountability. These findings resonate with Agustian et al., who emphasize that digital transformation in government enhances operational efficiency and organizational structures, driving significant improvements in business models and processes (Agustian et al., 2023). By digitizing personnel management functions, the Sorong Regency government has effectively reduced manual errors, enhanced data accuracy, and improved the speed of service delivery, which are all essential aspects of modernizing bureaucratic systems.

However, despite these advancements, the study reveals persistent challenges in the form of inadequate digital literacy among government employees and infrastructure gaps, particularly in rural areas. These issues are not unique to Sorong but are widely acknowledged in digital transformation efforts in developing regions. The uneven distribution of internet access, as highlighted by Parsaulian, remains a significant barrier to the effective use of digital services, particularly in regions with limited technological infrastructure (Parsaulian, 2025). This issue echoes findings from Kadewandana and Kaligis, who note that ICT accessibility is a prerequisite for successful digital transformation, and without it, the potential benefits of such systems are severely limited (Kadewandana & Kaligis, 2024).

Moreover, the lack of sufficient digital skills among civil servants in Sorong further complicates the realization of digital governance. While the implementation of digital systems such as SIMPEGDA represents significant progress, the lack of adequate training hampers the ability of employees to maximize the capabilities of these systems. This aligns with Ilyasi, who suggests that human resource development is critical in the successful implementation of digital tools within government sectors (Ilyasi, 2024). Therefore, continuous training and capacity-building programs are essential to empower civil servants, enabling them to effectively use digital tools and enhance public service delivery.

The third major challenge identified in the study is data security. The protection of personal and sensitive information is paramount as digital systems become more integrated into public service operations. This issue has global relevance, as data breaches and cyber threats pose increasing risks to digital governance systems (Omar et al., 2024). In Sorong, ensuring data security will require the implementation of robust cybersecurity frameworks to prevent

data misuse and protect citizens' privacy. The importance of this was also highlighted by Sari, who identifies data security as a key risk in digital transformation initiatives (Sari, 2025).

On the positive side, the digital transformation of personnel services in Sorong has implications for the broader governance of ASN. By reducing bureaucratic inefficiencies and improving transparency, the implementation of systems like SIMPEGDA and Si-ASN supports the principles of good governance, which include accountability and public trust. This aligns with Latifa and Frinaldi, who argue that digital transformation in personnel management enhances governance by making administrative processes more transparent and less prone to corruption (Latifa & Frinaldi, 2024). Furthermore, the digital tools provide opportunities for data-driven decision-making, improving the quality of governance and enabling a more responsive bureaucracy, as suggested by (Peeters, 2023).

However, the potential of these systems can only be fully realized if the identified challenges are addressed. Investments in infrastructure, particularly in rural areas, must be prioritized, as unequal access to digital services can perpetuate disparities in service delivery. Additionally, building the digital capacity of government employees through training programs and ensuring strong cybersecurity practices are crucial to fostering sustainable digital governance.

The findings from Sorong Regency demonstrate that while digital transformation in government personnel services has shown significant promise, the full potential of these initiatives can only be achieved by addressing the challenges related to digital literacy, infrastructure, and data security. The integration of digital tools in public administration is a key step towards improving governance, but it requires a comprehensive approach that includes continuous training, investment in infrastructure, and robust security measures. For Sorong, and similar regions with infrastructural constraints, these elements are critical in achieving the goal of an efficient, transparent, and accountable public administration system.

In light of these challenges, the study emphasizes the need for a holistic approach to digital transformation that involves not just technological advancements but also the development of human resources and the strengthening of digital infrastructure. This multi-faceted approach will ensure that digital transformation not only improves efficiency but also fosters inclusivity and security in the delivery of public services.

CONCLUSION

The digital transformation of staffing services in the Sorong District Government represents a crucial strategic step in enhancing the quality of governance. By leveraging information technology, the staffing administration process has become more efficient, transparent, and accountable, thus reducing bureaucratic inefficiencies. This digital innovation facilitates the access to information, improves staffing management, and supports data-driven decision-making, all of which are essential for modernizing government operations. Furthermore, digital transformation fosters the development of a more adaptive, responsive, and modern work culture, aligning the public sector with the needs of the community in the digital era.

However, the success of this implementation is contingent upon several factors, such as the readiness of human resources, the adequacy of technological infrastructure, the presence of supportive regulations, and the commitment of local leadership. The digital transformation of human resource services in Sorong Regency not only serves as a mechanism for improving the performance of civil servants but also plays an essential role in achieving a professional, efficient, and competitive regional government in the digital age.

From an academic perspective, this research contributes to the growing body of knowledge on digital transformation in public administration by highlighting the specific challenges and successes encountered in a remote and infrastructure-constrained region like Sorong. It underscores the importance of addressing human resource capacity and infrastructure gaps to fully realize the benefits of digital governance.

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