



The effectiveness of digital transformation in the administrative governance of the Medan City Regional House of Representative

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Article Info	ABSTRACT
Article history: Received Jul 20, 2026 Revised Jul 30, 2026 Accepted Aug 6, 2026 Keywords: Digital Transformation; Effectiveness; Medan City DPRD; Public Administration; SMARTWAN.	Digital transformation is a form of bureaucratic reform aimed at improving the effectiveness of public administration through information technology. This study examined the process, effectiveness, and challenges of digital administrative transformation in the Medan City Regional People's Representative Council (DPRD). A qualitative case study approach was used, with data collected through interviews, observation, and documentation. The findings showed that digital transformation was implemented through the SARANA application, followed by SIMANJA in 2020, which was later renamed SMARTWAN. The system provides features such as e-Invitations, e-Activities, e-Letters, e-Salary, Documentation, Legal Products, e-SPPD, e-Follow-up, and Attendance. Its implementation improved administrative effectiveness by accelerating work processes, simplifying document archiving, increasing transparency, and facilitating integrated data access. However, several challenges remained, including unstable internet connections and the need for approximately 2–3% of employees to adapt from manual to digital systems. Overall, digital administrative transformation in the Medan City DPRD was considered effective, although infrastructure improvements and continuous employee training were still required. <i>This is an open access article under the CC BY-NC license.</i>



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1. INTRODUCTION

Digital transformation is a process of fundamental organizational change through the utilization of information technology to improve the effectiveness, efficiency, transparency, and accountability of performance. In the public sector, digital transformation has become an important part of bureaucratic reform aimed at establishing modern governance. The concept of Digital Era Governance emphasizes system integration, optimal data utilization, and digitally based public services (Dunleavy et al., 2006). In addition, the New Public Management paradigm highlights the importance of effectiveness, innovation, and performance orientation in public service delivery (Hood, 1991). Digital transformation also involves comprehensive changes in organizational culture and bureaucratic work patterns (Mergel et al., 2019). Thus, digital transformation in public organizations should not be understood merely as the replacement of manual procedures with electronic processes, but also as a transformation of work systems, personnel competencies,

organizational coordination, and decision-making processes. Changes in work culture from manual to digital practices require openness to innovation, collaboration, disciplined data management, and adaptability. Without such cultural changes, digital systems risk being used only partially and may fail to produce sustainable improvements in performance.

Effectiveness is an important aspect of digital transformation implementation because the success of a digital system is not only measured by the availability of technology, but also by the extent to which the technology is able to achieve organizational objectives. According to Steers (1985), effectiveness refers to the degree of success achieved by an organization in accomplishing predetermined goals through the optimal utilization of resources. Mahmudi (2015) explains that effectiveness reflects the relationship between the results achieved and organizational objectives, while Mardiasmo (2018) states that effectiveness in the public sector is measured by an organization's ability to achieve its planned service targets. Therefore, the implementation of digital transformation in public administration needs to be evaluated from the perspective of effectiveness in order to determine the extent to which digital systems are capable of improving the quality of administrative services. The evaluation should encompass the achievement of administrative objectives, the speed of task completion, ease of access to information, accuracy in data management, employees' adaptability, and the sustainability of digital system utilization. Therefore, the effectiveness of digital transformation is determined not only by the sophistication of the applications used, but also by human resource readiness, infrastructure availability, system integration, and organizational support. Effectiveness evaluation must extend beyond the implementation of technology because the mere availability of an application does not guarantee the achievement of organizational objectives. The assessment should also cover changes in work processes, service quality, employee readiness, and the sustainability of system use.

Based on field conditions at the Secretariat of the Medan City Regional People's Representative Council (DPRD), digital administrative transformation initially began through the use of the SARANA application as an internal administrative support system. Subsequently, in 2020, the SIMANJA application (Performance Information System) was introduced as a system for administration and employee performance management. Over time, the application was renamed SMARTWAN and has continued to be used until the present. The SMARTWAN application provides several key features, including e-Invitations, e-Activities, e-Letters, e-Salary, Documentation, Legal Products, e-SPPD, e-Follow-up, and Attendance, which are used to support administrative activities and internal organizational services. The implementation of this application has simplified administrative processes because most correspondence activities, work agenda management, documentation, and archiving are now carried out digitally. In addition, the system also helps employees access data and archives more quickly, practically, and in an integrated manner. This condition indicates a shift in administrative practices from processes previously dominated by manual mechanisms toward administration based on digital systems.

Although the implementation of SMARTWAN has demonstrated benefits in supporting administrative activities, these conditions cannot immediately be used as a basis for concluding that digital transformation has been fully effective. Its effectiveness must be demonstrated by assessing the alignment between the objectives of the system's implementation, the implementation process, and the outcomes achieved by the organization. Based on preliminary field information, several obstacles remain, including occasional instability in the internet connection and approximately 2–3% of employees who still require adjustment in using the digital system because they are accustomed to manual procedures. Network limitations may hinder access to the application, delay task completion, and encourage employees to revert to manual procedures. Meanwhile, differences in employees' digital competencies may result in the application's features not being utilized evenly across all organizational units.

Another issue concerns the need to improve training and assistance in the use of the application. Without continuous training, employees tend to use only the basic features and may not optimally utilize all of the application's functions. This condition indicates that the success of digital

transformation depends not only on the availability of applications, but also on the organization's ability to develop employee competencies, provide technical support, maintain network stability, and continuously evaluate and improve the system. If these obstacles are not addressed, digital transformation may merely become the digitization of administrative procedures without producing significant improvements in organizational effectiveness.

Previous studies have shown that digital transformation within legislative institutions can improve the quality of administrative services and the effectiveness of government administration, although various implementation challenges remain. Djohari's (2025) study on the digitalization of public administration at the Secretariat of the West Java Provincial DPRD showed that the implementation of digital systems improved bureaucratic efficiency, transparency, and the quality of administrative services. However, its implementation was still constrained by low levels of employee digital literacy and suboptimal integration between systems. Furthermore, the study by Dzulfahira and Nur Wahyu (2024) on the utilization of the e-RO'TA application at the Secretariat of the Makassar City DPRD found that the digitalization of public services facilitated the delivery of public aspirations and improved service efficiency. However, the study focused more on public services for citizens than on the organization's internal administration. The study by Pratama and Yamin (2025) at the Secretariat of the West Sumbawa Regency DPRD also showed that digital innovation in administration improved efficiency, transparency, and the quality of administrative services, although it still faced challenges related to limited technological infrastructure and human resource competencies. In addition, the study by Silitonga et al. (2025) at the Expertise Agency of the Secretariat General of the House of Representatives of the Republic of Indonesia demonstrated that digital transformation improved administrative effectiveness and accelerated work processes. However, its success was strongly influenced by organizational readiness and the ability of government personnel to adapt to digital systems.

Based on the previous studies, several research gaps can be identified. First, prior research has predominantly examined digitalization in terms of improving efficiency, transparency, service innovation, and service quality, while studies specifically analyzing the effectiveness of digital transformation as the extent to which administrative objectives in legislative institutions are achieved remain limited. Second, several studies have focused more on external public services, the communication of public aspirations, or the general implementation of digital systems, and therefore have not examined digital transformation in the internal administration of legislative institutions in sufficient depth. Third, previous studies have tended to examine technological infrastructure, digital literacy, employee competencies, and organizational readiness as separate factors. In practice, however, these factors are interconnected in determining the success and sustainability of digital transformation. Fourth, research examining the use of an integrated administrative system within the context of a municipal-level Regional People's Representative Council Secretariat remains limited, particularly research on the SMARTWAN application at the Secretariat of the Medan City Regional People's Representative Council. Consequently, it has not yet been comprehensively established whether the application merely accelerates administrative procedures or genuinely improves overall organizational effectiveness.

These research gaps indicate the need for a study that does not merely describe the existence and use of technology, but also analyzes the implementation process, the outcomes achieved, the obstacles encountered, and the factors affecting the sustainability of digital transformation. This study places effectiveness as its primary focus by assessing the extent to which digital transformation supports the achievement of administrative objectives, improves the quality of work processes, facilitates access to information, strengthens organizational coordination, and enhances employees' adaptability at the Secretariat of the Medan City Regional People's Representative Council.

Based on the preceding discussion, the principal research problem is that the effectiveness of digital transformation in the administration of the Secretariat of the Medan City Regional People's Representative Council has not yet been comprehensively understood, despite the implementation of various digital applications that have demonstrated potential benefits for administrative processes.

This study therefore needs to analyze the digital transformation process, the extent to which the objectives of system implementation have been achieved, its contribution to administrative effectiveness, and the obstacles encountered during its implementation. According to Denhardt (2015), public services should be oriented toward the interests of society and managed professionally.

In the context of regional legislative institutions, effective internal administration is also an essential element in supporting the performance of institutional functions, the provision of services to council members, and the administration of regional government. Therefore, this study is important for addressing the research gap concerning the effectiveness of digital transformation in the internal administration of regional legislative institutions. It is expected to provide a more comprehensive understanding of the implementation of the SMARTWAN application, its contribution to administrative effectiveness, the influence of human resource readiness and network infrastructure, and the strategies required to ensure the sustainability of digital transformation at the Secretariat of the Medan City Regional People's Representative Council.

2. RESEARCH METHOD

This study employed a qualitative approach using a case study method focusing on the digital transformation of administration processes at the Secretariat at the Medan City DPRD. A qualitative approach was selected because this study aimed to gain an in-depth understanding of phenomena occurring in the field, particularly those related to the process of administrative digitalization and its effectiveness from a public management perspective. According to Creswell (2016), qualitative research is a method used to explore and understand meanings derived from social problems or specific phenomena. In addition, Yin (2014) states that a case study is used to investigate a phenomenon in depth within its real-life context, especially when the boundaries between the phenomenon and its context are not clearly evident. The effectiveness of digital transformation is assessed through indicators such as the achievement of administrative objectives, speed of task completion, ease of data access, organization and accuracy of document management, process transparency, employee adaptability, and the sustainability of system use.

This research was conducted at the secretariat of the Medan City DPRD an organization that has implemented digital transformation in its administrative activities through the use of the SMARTWAN application. The digital transformation covers correspondence management, activity scheduling, documentation, archiving, official travel administration, follow-up actions, and personnel administration. The selection of this research site was based on the ongoing transition from manual to digital systems, which continues to face challenges related to system integration, network stability, and human resource readiness. According to Moleong (2017), in qualitative research, the selection of a research site is based on the consideration that the location is capable of providing relevant and in-depth information related to the focus of the study.

The data sources in this study consisted of primary and secondary data. Primary data were obtained directly through interviews with informants involved in the administrative processes at the Medan City DPRD. Informants were selected using a purposive sampling technique, in which participants were deliberately chosen based on their knowledge, experience, responsibilities, and involvement in the implementation of administrative digital transformation. This technique was employed because not all employees have the same level of involvement in and understanding of the implementation of the SMARTWAN application. These informants were selected because they had direct roles and experience in the implementation of digital-based administration within the Medan City DPRD. The characteristics of the research informants are presented in Table 1.

Table 1. Research informants

No.	Informant Name	Age	Position
1.	Lydiawati Kacaribu, S.T	42 years old	Assistant General Treasurer of the Medan City DPRD
2.	Okky Manurung	28 years old	Operational Services Administrator

Source: Processed by the Researcher, 2026

Meanwhile, secondary data were obtained from documents, archives, and literature related to digital transformation in public administration. According to Sugiyono (2019), primary data are sources that provide data directly to researchers, whereas secondary data are indirect sources obtained through documents or other relevant sources.

Data collection techniques in this study included interviews, observation, and documentation. Interviews were conducted to obtain in-depth information regarding the digital transformation process and the challenges encountered during its implementation. Observation was carried out by directly examining administrative activities, particularly the management of incoming and outgoing correspondence. Documentation was used to complement the data through available records and documents. According to Creswell (2016), in qualitative research, the use of multiple data collection techniques is intended to obtain comprehensive and in-depth data.

3. RESULTS AND DISCUSSIONS

The Process of Digital Administrative Transformation at the Medan City DPRD

Based on the findings at the Secretariat of the Medan City Regional People's Representative Council (DPRD), digital administrative transformation began with the implementation of the SARANA application as an internal administrative support system. Subsequently, in 2020, the use of digital systems was further developed through the SIMANJA application (Performance Information System), which was later renamed SMARTWAN. The SMARTWAN application is used to support various administrative activities, including e-Letters, e-Invitations, e-Activities, Documentation, Legal Products, e-SPPD, e-Follow-up, and Attendance. The implementation of this digital system aims to improve the effectiveness of administrative services and facilitate employees' work within the Medan City DPRD.

Documentation of the SMARTWAN application interface was used to strengthen the research findings regarding the implementation of digital administrative transformation at the Medan City DPRD. The application interface is presented in the following figure.

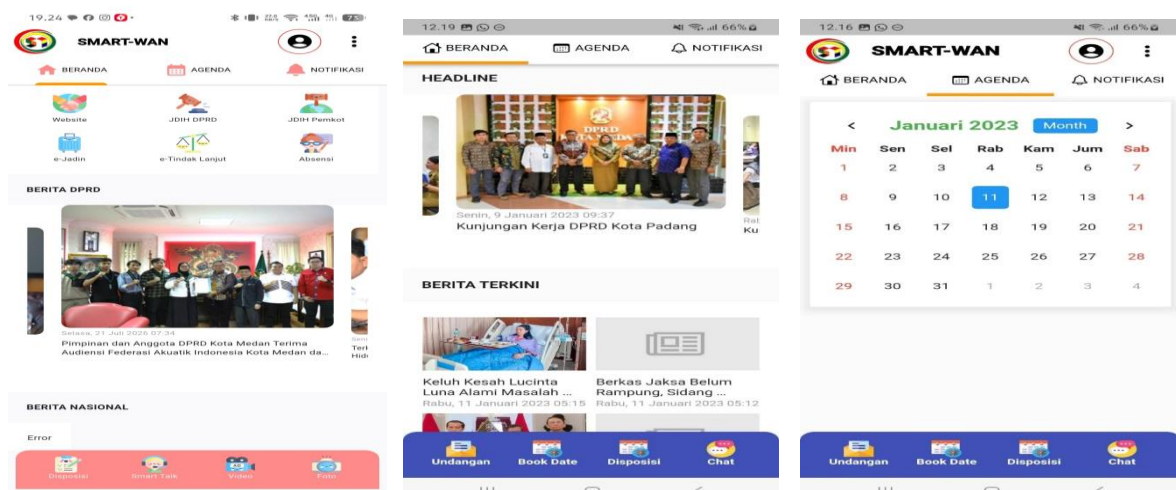


Figure 1. SMARTWAN Application Interface of the Medan City DPRD

Source: Research Documentation, 2026

Based on the interviews conducted by the researcher, the use of digital systems at the Medan City DPRD has generally been implemented successfully and has had a positive impact on administrative processes. Lydiawati Kacaribu explained that before the implementation of digital systems, many administrative processes were still carried out manually, requiring considerable time, particularly in managing correspondence and retrieving archived documents. The informant stated:

“Previously, many administrative processes were still carried out manually, so searching for letters or documents took quite a long time. After using SMARTWAN, the work became easier

because the data are already stored in the system and can be accessed directly” (Interview with Lydiawati Kacaribu, May 7, 2026).

In addition, Oky Manurung explained that the use of digital systems helps employees access administrative information more quickly and in a more organized manner than before. The informant stated:

“With SMARTWAN, administrative work has become faster because letters, activity schedules, and other data are already stored in the system. Therefore, employees no longer need to search for documents manually as they did before” (Interview with Oky Manurung, May 7, 2026).

Based on these interview findings, it can be understood that digital administrative transformation at the Medan City DPRD has brought changes to administrative work patterns. The use of digital systems helps improve employee work effectiveness and accelerate administrative service processes. This finding is consistent with Fitzgerald et al. (2014), who state that digital transformation involves the use of technology to improve organizational performance and enhance organizational service processes. Furthermore, Verhoef et al. (2021) explain that digital transformation is not only related to the use of technology but also involves changes in organizational work patterns toward more effective and modern systems.

The process of digital administrative transformation at the Medan City DPRD is reflected in the transition from manual administration to digital-based administration through the use of the SARANA, SIMANJA, and SMARTWAN applications. These digital systems are used for correspondence management, activity scheduling, document archiving, documentation, and employee attendance. The use of digital systems has made administrative processes faster, more practical, and better organized. Based on an interview with Lydiawati Kacaribu, the e-Letter feature in the SMARTWAN application helps accelerate the distribution of correspondence and the leadership disposition process.

“Currently, incoming letters are directly entered into the system, so the leadership can immediately review and process the disposition without having to wait for physical documents to be distributed one by one. The process has become faster than before” (Interview with Lydiawati Kacaribu, May 7, 2026).

Lydiawati Kacaribu also explained that digital archiving makes it easier for employees to locate required documents.

“In the past, letter archives were stored in folders and filing cabinets, so it took a long time to find older documents. Now everything is stored in the digital system, making it more practical and easier to locate” (Interview with Lydiawati Kacaribu, May 7, 2026).

A similar view was expressed by Oky Manurung, who explained that the use of digital systems helps make administrative work more organized.

“The use of SMARTWAN greatly supports administrative work because all data are stored in the system. As a result, the work is more organized, and employees can access the information they need more easily” (Interview with Oky Manurung, May 7, 2026).

From a deeper perspective, the achievement of this effectiveness cannot be separated from the optimal management of organizational input components, which are capable of generating valuable administrative outputs. The input components in this transformation include the time required for adaptation, employees' physical effort, the allocation of technological infrastructure, and financial resources from the regional budget invested since 2020. These inputs have ultimately been converted into beneficial work outputs, including faster bureaucratic processes, improved archiving accuracy, and substantial savings in office operational expenditures.

“When discussing our initial inputs or resources, it is clear that at the beginning of 2020, employees had to invest considerable time and physical effort to learn the new system. When administration was still carried out manually, staff had to spend substantial energy walking between floors carrying physical documents for leadership disposition, and paper expenses were also high. However, those initial inputs have now produced comparable outputs. The output we experience today is remarkable work efficiency because the system is online,

disposition processes can be completed within minutes, and there is no longer unnecessary time being wasted” (Interview with Lydiawati Kacaribu, May 7, 2026).

In addition to the physical effort required from employees, investment in operational costs also experienced a significant shift in order to achieve public organizational objectives. Regarding the relationship between financial investment as an input and the resulting savings in routine expenditure as an output, Oky Manurung described his experience during the interview as follows:

“The initial investment, or financial input, required to build the server and the SMARTWAN application system did require a relatively substantial allocation from the regional budget. However, this expenditure has been compensated for by the savings in routine office expenses that we now experience. Since the system has been implemented, one of the most visible outputs has been a significant reduction in spending on office stationery, such as paper, folders, and printer ink, because almost all correspondence has shifted to digital formats. Therefore, the initial input costs have generated highly beneficial long-term budget efficiency for the organization’s finances” (Interview with Oky Manurung, May 7, 2026).

Digital Transformation in Improving the Effectiveness of Administrative Services at the Medan City DPRD

Based on the interview findings, it can be concluded that digital administrative transformation has contributed to improving the effectiveness of administrative management at the Medan City Regional People’s Representative Council (DPRD). The use of digital systems has made correspondence management and document archiving faster and more efficient. This finding is consistent with the digital transformation theory proposed by Mergel et al. (2019), which states that digital transformation in the public sector is a process of organizational change through the utilization of technology to improve service quality and organizational effectiveness.

The effectiveness of digital administrative transformation at the Medan City DPRD can be observed through the increased speed of administrative services and easier access to data for employees. The use of digital systems has helped accelerate administrative processes, particularly in correspondence management, document archiving, and the dissemination of internal organizational information.

Based on an interview with Lydiawati Kacaribu, the use of SMARTWAN has had a positive impact on the effectiveness of administrative work. She stated:

“With SMARTWAN, administrative work has become faster because the data are already available in the system. Employees can also find documents and check activity schedules more easily without having to search through manual archives” (Interview with Lydiawati Kacaribu, May 7, 2026).

Lydiawati Kacaribu also explained that the use of digital systems has contributed to improving administrative order and organization.

“Now all administrative work is more organized because incoming letters, dispositions, and activities are recorded in the system, making them easier to monitor” (Interview with Lydiawati Kacaribu, May 7, 2026).

Meanwhile, Oky Manurung explained that the digital system helps employees complete their work in a more practical and efficient manner.

“The digital system makes work more practical because all data are already stored in the application. As a result, administrative services have also become faster than before” (Interview with Oky Manurung, May 7, 2026).

Based on these interview findings, it can be understood that digital administrative transformation at the Medan City DPRD has had a positive impact on the effectiveness of administrative services. The use of digital systems helps accelerate work processes, improve administrative organization, and facilitate access to data and information. This finding is in line with the New Public Management theory proposed by Hood (1991), which emphasizes that public organizations need to apply the principles of effectiveness, efficiency, and results orientation in public service delivery. In addition, Denhardt and Denhardt (2015) explain that public services

should be managed professionally in order to improve the quality of organizational service delivery. Improved effectiveness is indicated by faster correspondence and disposition processes, easier retrieval of archived documents, more organized and transparent data, reduced use of physical documents, and faster access to information.

Challenges in the Implementation of Digital Administrative Transformation at the Medan City DPRD

Although digital administrative transformation at the Medan City Regional People's Representative Council (DPRD) has generally been implemented well, several challenges remain in its implementation, particularly in terms of infrastructure and human resources. One of the main challenges is the instability of the internet connection, which can hinder the use of digital systems in daily administrative activities.

Based on an interview with Lydiawati Kacaribu, internet connectivity issues are still frequently experienced, especially when the system is accessed simultaneously by many employees.

"Sometimes the internet connection is unstable, causing the system to become slow, especially when many employees access the application at the same time" (Interview with Lydiawati Kacaribu, May 7, 2026).

These conditions indicate that limited network capacity and stability can hinder access to the SMARTWAN application, delay task completion, and disrupt the delivery of administrative services. If network disruptions occur repeatedly, employees may revert to manual procedures as a temporary alternative. This may lead to inconsistent use of the digital system and hinder the sustainability of digital transformation. In addition, Oky Manurung explained that several employees are still not fully accustomed to using digital systems because they previously relied more heavily on manual procedures.

"There are still some employees who are not fully accustomed to using the digital system because they previously used manual methods more often. However, so far, employees have gradually begun to adapt and learn how to use the application" (Interview with Oky Manurung, May 7, 2026).

Based on these interview findings, it can be concluded that the challenges encountered in implementing digital transformation are part of the organizational adaptation process toward technological change. Mergel et al. (2019) state that the success of digital transformation is influenced by human resource readiness and adequate technological infrastructure. Furthermore, Kotarba (2018) explains that digital transformation requires individuals to have the ability to adapt to the use of new technologies. Thus, network infrastructure limitations affect not only the speed of application use but also the sustainability of digital transformation. An unstable network may reduce the consistency of system use, weaken employees' confidence in the application, and encourage a return to manual procedures. Therefore, improvements in network capacity and stability, the provision of technical support, and continuous employee training are necessary to ensure that SMARTWAN is implemented effectively and sustainably at the Secretariat of the Medan City Regional People's Representative Council.

4. CONCLUSION

Based on the findings, digital administrative transformation at the Medan City Regional People's Representative Council (DPRD) has been implemented through the use of the SARANA application, followed by the SIMANJA application in 2020, which was later renamed SMARTWAN. The implementation of these digital systems has supported various administrative activities, including correspondence, agenda management, documentation, archiving, and employee attendance. The use of digital systems has had a positive impact on administrative effectiveness by making work processes faster, more practical, better organized, and more accessible to employees.

The effectiveness of digital administrative transformation at the Medan City DPRD can be seen in the increased speed of administrative services, easier access to data, reduced use of physical documents, and improved transparency and administrative order. Employees perceived that the

SMARTWAN application helped accelerate the completion of administrative tasks compared with the previous manual system. In addition, the document archiving process became easier because data are stored digitally and can be retrieved quickly whenever needed. The primary contribution of digital transformation to DPRD governance is the acceleration of administrative processes, the improvement of data organization and transparency, the facilitation of work supervision, and the support of more effective and accountable institutional services.

Although digital transformation has been implemented quite effectively, several challenges remain. These include occasionally unstable internet connections and approximately 2–3% of employees who still require adjustment in using the digital system because they are accustomed to manual procedures. Therefore, the strategic recommendations include improving network capacity and stability, providing regular training and assistance for employees, ensuring the availability of technical support, and conducting continuous application evaluations. These measures are necessary to ensure that the use of SMARTWAN becomes more optimal, consistent, and sustainable at the Secretariat of the Medan City Regional People's Representative Council. Future research should involve more diverse informants and organizational units and combine qualitative and quantitative approaches to measure the long-term impact of SMARTWAN on organizational performance, cost efficiency, user satisfaction, and the quality of public services.

REFERENCES

- Creswell, J. W. (2016). *Research Design: Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Pustaka Pelajar.
- Denhardt, J. V., & Denhardt, R. B. (2015). *The new public service: Serving, not steering* (3rd ed.). Routledge.
- Diana, D., Azzahara, R. V., & Nurbaiti. (2021). Analisis proses transformasi e-business entrepreneurship bagi pelaku UMKM dalam membangun keunggulan bersaing (UMKM Kawasan Medan). *Ekonomi Bisnis Manajemen dan Akuntansi (EBMA)*, 2(2).
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). *Digital era governance: IT corporations, the state, and e-government*. Oxford University Press.
- Fajriantina Lova, & Amaliyah, R. (2022). Manajemen pelayanan publik dalam meningkatkan kualitas layanan masyarakat. *Jurnal Administrasi Publik*, 10(2), 123–134.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2014). Embracing digital technology: A new strategic imperative. *MIT Sloan Management Review*, 55(2), 1–12.
- Hasanah, M. A., Aslami, N., & Nasution, M. I. P. (2025). Pengaruh daya tarik perusahaan, citra perusahaan dan ekspektasi kerja terhadap keputusan melamar pekerjaan alumni angkatan 2020 FEBI UINSU. *Jurnal Manajemen Terapan dan Keuangan*, 14(4), 1642–1657.
- Heeks, R. (2006). *Implementing and managing e-government: An international text*. SAGE Publications.
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3–19. <https://doi.org/10.1111/j.1467-9299.1991.tb00779.x>
- Hutasoit, R. B. M., Atika, A., & Harahap, M. I. (2025). Pengaruh hybrid learning dan self directed terhadap kesiapan kerja mahasiswa FEBI UINSU. *Jurnal Manajemen Terapan dan Keuangan*, 14(4), 1629–1641.
- Indrajit, R. E. (2016). *Electronic government: Strategi pembangunan dan pengembangan sistem pelayanan publik berbasis teknologi digital*. Andi.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). *Strategy, not technology, drives digital transformation*. MIT Sloan Management Review and Deloitte University Press.
- Kotarba, M. (2018). Digital transformation of business models. *Foundations of Management*, 10(1), 123–142. <https://doi.org/10.2478/fman-2018-0011>
- 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>
- Mahmudi. (2015). *Manajemen kinerja sektor publik*. UPP STIM YKPN.
- Mardiasmo. (2018). *Akuntansi sektor publik*. Andi.
- 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>
- Moleong, L. J. (2017). *Metodologi penelitian kualitatif*. PT Remaja Rosdakarya.
- Nugroho, R. (2017). *Public policy: Teori, manajemen, dinamika, analisis, konvergensi, dan kimia kebijakan*. Elex Media Komputindo.

- Nur 'Alimah, Marliyah, & Rahma, T. I. F. (2022). Faktor-faktor yang mempengaruhi minat mahasiswa FEBI UINSU dalam menggunakan uang elektronik pada aplikasi DANA. *Jurnal Manajemen*.
- Osborne, D., & Gaebler, T. (1992). *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. Addison-Wesley.
- 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), 12–40.
- Ramadhani, R. M., Imsar, I., & Tambunan, K. (2023). Pengaruh sikap, norma subjektif dan persepsi kontrol perilaku terhadap intensi mahasiswa FEBI UINSU menggunakan LinkAja Syariah. *AL-Muqayyad*, 6(1), 17–28.
- Ritonga, R. H., Rokan, M. K., & Irham, M. (2023). Pengaruh pengetahuan dan lingkungan sosial terhadap job preference pada alumni Perbankan Syariah FEBI UINSU. *Jurnal Manajemen Akuntansi (JUMSI)*.
- Sedarmayanti. (2017). *Manajemen sumber daya manusia: Reformasi birokrasi dan manajemen pegawai negeri sipil*. Refika Aditama.
- Sinambela, L. P. (2016). *Reformasi pelayanan publik: Teori, kebijakan, dan implementasi*. Bumi Aksara.
- Steers, R. M. (1985). *Efektivitas organisasi*. Erlangga.
- Sugiyanto. (2025). Kesiapan sumber daya manusia dalam transformasi digital sektor publik. *Jurnal Manajemen Publik*, 10(2), 77–89.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Tangi, L., Janssen, M., Benedetti, M., & Noci, G. (2021). Digital government transformation: A structural equation modelling analysis of driving and inhibiting factors. *International Journal of Information Management*, 60, Article 102356. <https://doi.org/10.1016/j.ijinfomgt.2021.102356>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- 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>
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Review Press.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). SAGE Publications.
- Yusuf, M., & Daris, L. (2019). Analisis implementasi e-government dalam meningkatkan pelayanan publik di Indonesia. *Jurnal Ilmu Administrasi*, 16(1), 45–56.