

Innovative Culture as the Key to the Success of Electronic-Based Government Systems

Jorry Karim¹, Rauf A. Hatu², Moh. Hidayat Koniyo³, Zuchri Abdussamad⁴

¹Public Administration, Postgraduate, Gorontalo State University, Indonesia.
(email: oyie.potlot@gmail.com)

^{2,4}Public Administration, Faculty of Social Sciences, Gorontalo State University, Indonesia.

³Engineering, Faculty of Engineering, Gorontalo State University, Indonesia.

Abstract

This study aims to analyze how organizational culture plays a role in successfully implementing the Electronic-Based Government System in Gorontalo Province. Bureaucratic reform through digitalization is the main focus in efforts to improve the quality of public services. However, its implementation faces various internal challenges, such as resistance to change, lack of adequate training, and weak digital infrastructure. This study uses a qualitative approach with a case study method, where data is collected through in-depth interviews, field observations, and documentation at the Gorontalo Provincial Regional Apparatus Organization. The study results show that an organizational culture that supports innovation and professionalism plays an important role in accelerating the implementation of Regional Apparatus Organizations that implement transformational leadership and have strong cultural values, such as integrity and commitment, show an increase in the implementation of digitalization. However, the decline in scores in 2021 and 2022 indicates resistance to change and a lack of inadequate training and digital infrastructure. This study concludes that the success of implementation does not only depend on the technological aspect, but also on the readiness of organizational culture, employee competence, and leadership support. Strengthening organizational culture, increasing training, and developing better digital infrastructure are key factors to ensure the sustainability of digital-based bureaucratic reform in Gorontalo Province.

Keywords:

organizational culture; electronic-based government system; bureaucratic transformation

Introduction

Bureaucratic reform in Indonesia has become one of the main agendas of the government to improve the efficiency and effectiveness of public services. Bureaucratic reform in Indonesia has become one of the main agendas of the government to improve the efficiency and effectiveness of public services. Bureaucracy in Indonesia is often criticized for being considered slow, unresponsive, and inefficient, which ultimately has an impact on the low quality of public services (McLeod, 2005). This condition is the main obstacle to the implementation of good and effective government, thus encouraging more comprehensive reforms. In recent years, the Government of Indonesia has encouraged bureaucratic transformation through digitalization, with the implementation of an Electronic-Based Government System as one of the main steps. The Electronic-Based Government System is designed to integrate digital technology into government

processes to improve the efficiency, transparency, and accessibility of public services (Dzvinchuk et al., 2022).

Through digitalization, the government hopes to present a faster, more efficient, and accountable system for the community. Bureaucratic transformation through digitalization is a priority in many developing countries, including Indonesia. By introducing the Electronic-Based Government System, the Indonesian government hopes to improve the bureaucracy that has been considered slow and ineffective. The Electronic-Based Government System aims to accelerate administrative processes, reduce bureaucratic complexity, and increase transparency in public services. However, the success of the implementation of the Electronic-Based Government System does not only depend on advanced technology but also highly depends on organizational readiness, especially from the aspect of organizational culture within related government institutions (Imanbekova, 2024).

Organizational culture plays a very important role in supporting the dynamics of change within an institution, especially when the institution has to deal with technological innovation. The values, norms, and behaviors that have been embedded in the organization greatly determine how employees adapt to the changes that arise through the process of digitalization (Peters & Waterman, 1982). Many government agencies in Indonesia still maintain a hierarchical and rigid organizational culture, which is often a major obstacle to the adoption of new technologies and bureaucratic reforms. This slows down efforts to improve the efficiency and effectiveness of public services through initiatives such as the E-Based Government System (McLeod, 2005).

In the context of bureaucracy in Gorontalo Province, transformation through digitalization has been adopted as part of sustainable bureaucratic reform. This province is one example of a region that is trying to implement an Electronic-Based Government System seriously. The Electronic-Based Government System Index in Gorontalo Province showed an increase from 148 in 2018 to 318 in 2019, indicating significant improvement. However, the decline in 2021 and 2022, with scores of 251 and 248, respectively, shows that there are challenges in maintaining the consistency of the implementation of the Electronic-Based Government System (Ministry of PANRB, 2022).

The decline indicates that the problems that occur are not only in the technology used but also in the readiness of the organization and work culture that has not fully supported digital transformation. Based on the theory of Planned Organizational Change by Kurt Lewin (1951), changes in organizations, especially those related to technology, must be supported by mental readiness and the ability of organizations to adapt. Employees who are comfortable with old working methods often resist change, especially when the organizational culture does not provide

enough encouragement to embrace innovations (B L Ish E D B Y et al., 2023) Previous research has also shown that resistance to change is one of the common challenges often faced in the digitalization process in the public sector (Edelmann et al., 2023).

This resistance often arises from a lack of understanding of the importance of digitalization and the fear that change will threaten the previously considered stable work position. In Gorontalo Province, resistance to new technologies also arises from the conventional organizational culture, especially at the middle managerial level who are more comfortable with manual procedures compared to the use of digital technology (Turner & Merriman, 2022). In addition to resistance to change, the lack of technical training and employee competency development is also a major challenge in the implementation of the Electronic-Based Government System in Gorontalo. From interviews with employees in several Regional Apparatus Organizations, it was found that many employees felt that they did not have enough skills to operate digital systems (Guest et al., 2006). This condition is further exacerbated by the limited technological infrastructure in several Regional Apparatus Organizations which has an impact on the quality of the electronic-based services they provide.

External factors such as the limitations of digital infrastructure also have a significant impact on the implementation of the Electronic-Based Government System in Gorontalo Province. Some Regional Apparatus Organizations face limitations in terms of inadequate hardware and internet networks, especially in remote areas (Nica et al., 2024). This inadequate infrastructure slows down the digitalization process, which is ultimately one of the reasons why the E-Based Government System index has declined in recent years. In addition, leadership also plays an important role in facilitating organizational culture changes that support digitalization. (Turner & Merriman, 2022) emphasized that transformational leadership that drives innovation and employee empowerment is critical in creating an environment conducive to change.

In Regional Apparatus Organizations that have leaders with a clear vision and support change, the implementation of the Electronic-Based Government System runs more smoothly with employees who are more motivated to learn and adapt to new technologies. In contrast, in Regional Apparatus Organizations led by less progressive leaders, employees often feel stuck in old work procedures and do not have enough motivation to switch to digital systems. Leadership that does not support innovation tends to hinder the digital transformation process needed in the context of an Electronic-Based Government System. The fluctuation of the Electronic-Based Government System index in Gorontalo Province shows that despite a significant increase in 2019, the challenge of maintaining consistency in the implementation of digitalization is still great. The decline in 2021 and 2022 underscores the need for more systematic improvements, both in terms

of employee training, infrastructure strengthening, and increased policy support (Dzvinchuk et al., 2022).

Resistance to change driven by rigid organizational cultures also requires serious attention to ensure the sustainability of digital transformation. According to (Baleviciene, 2021) Organizations that succeed in implementing technological innovations are those that are able to create a flexible work culture, are open to change, and support employee skill development. To ensure the long-term success of the Electronic-Based Government System in Gorontalo Province, efforts are needed to change the organizational culture from conventional to more adaptive to technology. Thus, local governments need to focus on developing an organizational culture that supports innovation and change as one of the foundations for successful digital transformation.

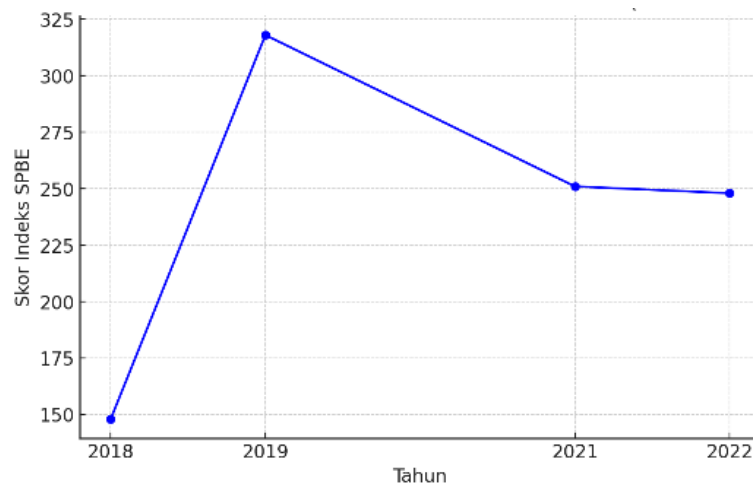
Another strategy to consider is to strengthen employee training and technical competency development related to the use of digital technology. Research (Imanbekova et al., 2024) emphasized that continuous training is key in ensuring the successful implementation of digitalization in the public sector. In addition to continuous training, technology infrastructure also needs to be improved to optimally support the digitalization process. (NICA et al., 2024) shows that one of the main obstacles in the digitalization of the public sector is the lack of adequate infrastructure. Therefore, the development of sustainable and equitable digital infrastructure across Regional Apparatus Organizations in Gorontalo is important to ensure that the Electronic-Based Government System can be implemented properly at all bureaucratic levels.

Overall, the implementation of the Electronic-Based Government System in Gorontalo Province is an important part of bureaucratic transformation. However, the success of the implementation of the Electronic-Based Government System does not only depend on technology, but is also greatly influenced by the readiness and adaptation of organizational culture in each Regional Apparatus Organization involved. Organizational culture, which includes values such as integrity, professionalism, and commitment, plays a key role in supporting the success of bureaucratic transformation through digitalization (Peters & Waterman, 1982; Baleviciene, 2021).

In Gorontalo Province, the implementation of the Electronic-Based Government System has fluctuated in recent years, indicating the existence of various factors that affect the transformation process. Data from the Ministry of PANRB shows that the Electronic-Based Government System Index of Gorontalo Province in 2018 was in the "Poor" category with a score of 148, but increased to "Good" with a score of 318 in 2019. However, in 2021 and 2022, the score again decreased to the "Adequate" category with scores of 251 and 248 (Ministry of PANRB, 2022). The diagram showing the fluctuations in the score of the Gorontalo Province Electronic-Based

Government System Index from 2018 to 2022 as well as Secondary Data as a result of the evaluation of the Ministry of PAN-RB RI is as follows:

Diagram 1,
Fluctuations in the Score of the Electronic-Based Government System Index
of Gorontalo Province, 2018-2022



Employee performance, which ultimately has a negative impact on the successful implementation of digitalization programs such as the Electronic-Based Government System (Turner & Merriman, 2022). This indicates that an organizational culture that does not support innovation can be the main obstacle in the implementation of digital transformation in the bureaucracy. Research shows that organizations that successfully cultivate a culture that supports diversity, inclusivity, and innovation tend to achieve improved organizational performance and employee job satisfaction (Platania et al., 2022; Zohra et al., 2023). On the other hand, if the organizational culture is more inclined to resistance to change, then the digitalization process will be difficult to implement optimally. Therefore, a deeper understanding of how organizational culture can support or hinder the successful implementation of the Electronic-Based Government System, especially in Gorontalo Province.

The following domains or aspects of the Electronic-Based Control System Policy Domain in 2018-2021:

Table 1.
Electronically-Based Government System Policy Domain

Domain/ Aspect	Value		
	2018	2019	2021
1. Electronic-Based Government System Policy Domain	1,48	2,35	3,80
Internal Policy related to Electronic-Based Government System Governance	1,29	2,00	3,80
Electronic-Based Government System Service Policy	1,00	2,60	
2. Domain: Electronic-Based Government System Governance	2,29	3,57	2,20

Strategic Planning of Electronic-Based Government Systems	1,50	5,00	1,50
Institutional	1,00	2,00	
Information and Communication Technology	2,67	3,67	2,50
3. Electronic-Based Government System Management Domain			1,00
Electronic-Based Government System Operator			3,00
Implementation of Electronic-Based Government System Management			1,00
ICT Audit			1,00
4. Electronic-Based Government System Service Domain	1,12	3,24	2,87
Electronic-Based Government Administration Services	1,00	3,57	3,00
Public Service	1,33	2,67	2,67

One of the efforts that can be made by the Gorontalo Provincial Government is to strengthen the training and development of technical competencies of employees in the use of digital technology. This skill improvement will provide a significant boost in overcoming resistance to change and increase employee readiness to face the challenges of digitalization. Imanbekova (2024) emphasized that continuous training and skill adaptation are important elements in ensuring the success of digital transformation in the public sector. In addition to focusing on improving employee competence, it is also important to improve coordination between Regional Apparatus Organizations to create synergy in the implementation of the Electronic-Based Government System. Effective coordination between Regional Apparatus Organizations will help reduce the obstacles that often arise due to unclear roles and responsibilities. Thus, digitalization can be carried out more consistently and in a targeted manner, in accordance with the goals of bureaucratic reform.

In addition, the development of digital infrastructure must also be a priority. As mentioned by (Nica et al., 2024), the availability of adequate infrastructure is very important to support the overall digitalization process. In many regions, especially in remote areas, limited technological infrastructure is still a major obstacle that hinders the effective implementation of Electronic-Based Government Systems. Therefore, the Gorontalo Provincial Government needs to pay more attention to the provision of adequate hardware and internet networks throughout the Regional Apparatus Organization.

Leaders within Regional Apparatus Organizations must also play a more active role in supporting digital transformation. Transformational leadership, which drives innovation and employee empowerment, proves to be crucial in facilitating organizational culture change (Turner & Merriman, 2022). With visionary leadership, employees will be more motivated to adopt new technologies and adapt to changes that occur in their work environment. Overall, the success of the implementation of the Electronic-Based Government System in Gorontalo Province depends not only on the digital technology used, but also on the readiness of the organizational

culture, employee competence, and strong leadership support. To achieve sustainable success, the Gorontalo Provincial Government must consistently strengthen its organizational culture that supports innovation, improve employee skills through training, and build better digital infrastructure.

With the right strategy, it is hoped that the Electronic-Based Government System can be an effective transformation tool in improving the quality of public services in Gorontalo Province. Bureaucratic reform through digitalization is not only about the adoption of technology, but also how all elements in the bureaucracy work together to support these changes. Through the support of a strong organizational culture and innovation-oriented leadership, bureaucratic transformation in Gorontalo Province can run more efficiently and produce better public services for the community.

Methods

This study uses a qualitative approach with a case study method, which was chosen to explore in depth the dynamics of organizational culture in the implementation of the Electronic-Based Government System in the Gorontalo Provincial Government, especially in the Regional Apparatus Organization of the Regional Apparatus Organization. This method provides space to further explore various aspects related to perceptions, attitudes, and challenges that arise during the implementation process of the Electronic-Based Government System, which is difficult to explain in detail through a quantitative approach (Creswell, 2013). The qualitative approach allows researchers to understand the phenomenon more comprehensively from the perspective of actors in the field, as well as explore how organizational culture shapes behavior patterns and decisions related to the digitalization process in Regional Apparatus Organizations.

Research Location

This research was carried out in several Regional Apparatus Organizations within the Gorontalo Provincial Government, which have a strategic role in the implementation of the Electronic-Based Government System. The selection of this location is based on the fluctuation of the Electronic-Based Government System Index score experienced by Gorontalo Province, so this qualitative research aims to delve deeper into the factors that contribute to the achievement and decline of the score (Ministry of PANRB, 2022).

Research Subject and Informant

The subject of this study includes employees in Regional Apparatus Organizations who are directly involved in the implementation of the Electronic-Based Government System in Gorontalo Province. The purposive sampling technique is used to select informants who have a

deep understanding of the implementation process and the obstacles that arise in the implementation of the Electronic-Based Government System. The selected informants consist of officials responsible for the implementation of the Electronic-Based Government System in each Regional Apparatus Organization, technical employees involved in the digitization of public services, and managerial parties who play a role in decision-making related to the implementation of the Electronic-Based Government System and organizational culture. The number of informants is estimated to range from 15 to 20 people, in accordance with the saturation point principle in qualitative research, which is when the data obtained is considered sufficient and no new information emerges from the interview (Guest et al., 2006). This approach allows researchers to get a more comprehensive picture of the perceptions and challenges in the implementation of Electronic-Based Government Systems from a variety of different perspectives within the organization.

Data Collection Techniques

Data collection is carried out through several methods, namely in this study, data is collected through three main methods. First, In-Depth Interviews are conducted in a semi-structured manner to explore in-depth information about how organizational culture affects the implementation of Electronic-Based Government Systems in Regional Apparatus Organizations. This interview focuses on the informant's perception of values such as integrity, professionalism, and commitment in the implementation of the Electronic-Based Government System (Patton, 2002). Second, observation is carried out in a participatory manner to directly observe the interaction between employees and digital systems in the implementation of public services, as well as to see how organizational culture is reflected in daily work practices. Finally, Documentation is used by collecting various official documents related to policies, guidelines, reports on the implementation of the Electronic-Based Government System, as well as assessment reports on the Electronic-Based Government System Index issued by the Ministry of PANRB. These methods provide a comprehensive overview of the influence of organizational culture on the implementation of the Electronic-Based Government System.

Data Analysis Techniques

The data collected was analyzed using thematic analysis methods (Braun & Clarke, 2006), which allows researchers to identify key themes that emerge from the results of interviews, observations, and documentation. This analysis process is carried out through several stages. First, data from interviews, observations, and documentation are collected and organized systematically. Furthermore, the researcher conducts a coding process to find important topics or patterns that are relevant to the role of organizational culture in the implementation of the

Electronic-Based Government System. After the coding process is completed, key themes such as integrity, professionalism, commitment, as well as challenges faced in the implementation of the Electronic-Based Government System are identified and analyzed in depth. Finally, the data that has been grouped by theme is then interpreted to understand how organizational culture plays a role in the success or obstacles that arise during the implementation process of the Electronic-Based Government System.

Validity and Reliability

In this study, several validity and reliability techniques are applied to ensure the quality of the data obtained. The Source Triangulation technique is used by utilizing various data sources such as interviews, observations, and documentation to verify the consistency of the findings (Denzin, 2012). This approach allows researchers to compare information from different points of view and ensure data accuracy. In addition, Member Checking is carried out by confirming the results of interviews with informants to ensure that the researcher's interpretation of the data submitted is correct in accordance with the informant's understanding (Lincoln & Guba, 1985). To maintain the transparency and reliability of the research process, Audit Trail is implemented by recording and documenting all stages of research in detail so that it can be audited by other parties if necessary, thus ensuring that the research process can be repeated and checked to evaluate the reliability of the findings.

Research Limitations

The limitation of this study is that it focuses only on Regional Apparatus Organizations in Gorontalo Province, so the results may not be fully generalizable for all regions in Indonesia. Additionally, because the study focuses on aspects of organizational culture, other factors such as technology and national policies may be less deeply accommodating.

Results

The success of the electronic-based government system is increasingly recognized as closely related to the development of an innovative culture in public administration. This innovative culture is essential for encouraging stakeholder engagement, improving service delivery, and ensuring transparency and accountability in governance.

First, the integration of technological and institutional innovation is very important for the successful implementation of e-government. Myeong emphasized that increased institutional innovation can significantly increase stakeholder satisfaction and instill trust among citizens in their local government (Myeong, 2023). This is in line with the findings of López-Sisniega et al., who argue that e-government facilitates innovative interactions between public institutions and

citizens, thus encouraging a more engaged and informed society (López-Sisniega et al., 2016). Furthermore, the study by Kesuma highlights that public enthusiasm for accessible information and services is the driving force behind the implementation of innovative governance practices (Kesuma, 2023). This shows that an innovative culture not only supports the technological aspects of e-government but is also in line with the expectations and needs of the public.

In addition, the role of transparency and accountability in e-government cannot be overstated. Mislawaty et al. pointed out that e-government improves the quality of public services and fosters a culture of openness, which allows citizens to access information and participate in governance processes (Mislawaty et al., 2022). This was echoed by Astawa, who noted that the implementation of e-government in Bali has significantly improved the quality of public services and contributed to regional economic growth through increased transparency (Astawa, 2023). The emphasis on transparency is essential, as it builds trust between governments and their citizens, which is a fundamental component of an innovative governance culture.

In addition, the cultural characteristics of local governments play an important role in the adoption and utilization of e-government services. Nurdin et al. identified key cultural traits such as adaptability and engagement that influence the way local governments embrace e-government initiatives (Nurdin et al., 2010). This is further supported by the work of Connolly et al., which shows that cities with greater financial resources and supportive governance structures are more likely to adopt innovative e-government services (Connolly et al., 2018). Thus, fostering an innovative culture in local government can result in a more effective implementation of e-government.

The results of this study show that organizational culture has a significant role in the successful implementation of the Electronic-Based Government System in the Regional Apparatus Organization of Gorontalo Province. Based on the results of interviews, observations, and analysis of documents collected during the study, it can be seen that elements of organizational culture significantly affect the digitalization process. This is in line with the theory put forward by Schein (2010), which explains that organizational culture includes assumptions, values, and norms that play a role in shaping individual behavior in organizations. In this context, values such as integrity, professionalism, and strong commitment are found to play an important role in accelerating the implementation of the Electronic-Based Government System.

Respondents said that an organizational culture that encourages innovation and openness to technological changes plays a major role in supporting the digitization of public services. However, there are obstacles in some Regional Apparatus Organizations that show resistance to change, which is associated with the concept of organizational resistance as explained by Lewin

(1951) in the theory of *Force Field Analysis*. Lewin emphasized that resistance arises when the driving force of change is weaker than the force that maintains the status quo. In this case, resistance to change can be seen from the lack of clear division of duties, lack of technical training for employees, and resistance to the use of new technology in some parts of the Regional Apparatus Organization.

Other findings related to the fluctuation of the Electronic-Based Government System Index in Gorontalo Province over the past few years also provide an understanding of the relationship between organizational culture and digitalization performance. Based on data from the Ministry of PANRB, there is a significant variation in the score of the Electronic-Based Government System. In 2018, Gorontalo Province received a score of 148, in the "Poor" category, but increased in 2019 with a score of 318, which was included in the "Good" category. This improvement is in line with the theory of digital transformation put forward by (Edelmann et al., 2023) which states that organizational culture readiness and leadership support are the main factors in driving the success of digitalization.

However, the decline in the score of the Electronic-Based Government System in 2021 and 2022, with scores of 251 and 248, respectively, indicates that there are challenges in maintaining the quality of the implementation of the Electronic-Based Government System. This can be linked to the theory *organizational inertia* submitted by (Hannan & Freeman, 2019), where organizations that have been operating for too long with old patterns tend to have difficulty adapting to new innovations. This decline highlights internal problems such as weak professionalism and lack of commitment in several Regional Apparatus Organizations which are factors hindering the implementation of the Electronic-Based Government System.

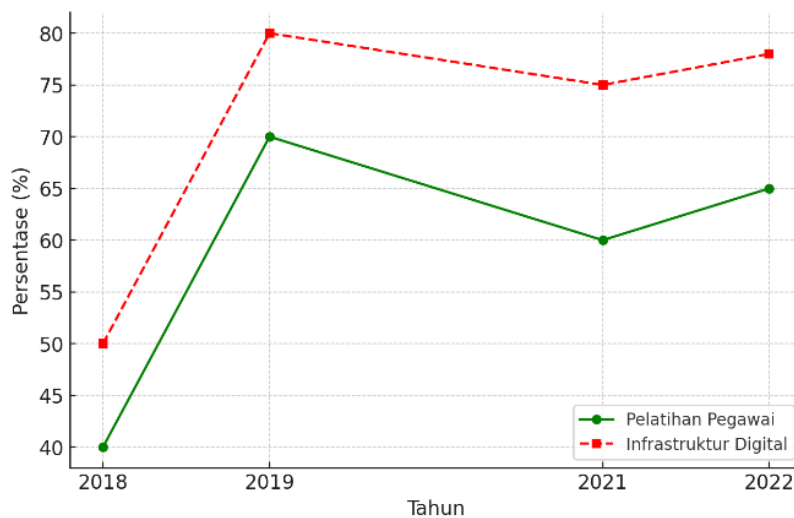
Through the results of interviews and further observations, several factors inhibiting the implementation of the Electronic-Based Government System were identified. Among them, the lack of training and competency development of employees in the use of digital systems, as well as resistance to change, especially in senior employees who are not familiar with new technology. This is in line with the view of Kotter (1996) who stated that the lack of training and skills is one of the biggest obstacles in the implementation of technological change in organizations. The limitations of digital infrastructure are also a significant obstacle, affecting the speed and quality of services provided. In line with the findings (NICA et al., 2024) Inadequate infrastructure is often a major obstacle to the success of digital transformation in the public sector.

In addition, policy uncertainty and lack of coordination between Regional Apparatus Organizations lead to a lack of synergy in the implementation of digitalization. According to Mintzberg (1993), poor coordination in an organization can result in inconsistency in the

implementation of policies, which ultimately hinders the effectiveness of innovation. This is one of the reasons why the implementation of the Electronic-Based Government System has not run optimally in several Regional Apparatus Organizations.

Diagram 2

Development of Employee Training and Digital Infrastructure



The data of this study also illustrates the fluctuations in the score of the Electronic-Based Government System Index of Gorontalo Province from 2018 to 2022, which shows the challenges faced by Regional Apparatus Organizations in maintaining the quality of the implementation of the Electronic-Based Government System. This score decline reflects obstacles influenced by weak employee commitment and professionalism as well as suboptimal digital infrastructure. This study supports the view that the success of the implementation of digital technology such as Electronic-Based Government Systems is greatly influenced by the readiness of the organizational culture, as stated by Peters and Waterman (1982), who stated that organizations that have an innovative culture are more likely to succeed in implementing new technologies.

In general, the fluctuations in the score of the Electronic-Based Government System that occurred in Gorontalo Province during the period 2018 to 2022 reflect the challenges in maintaining the continuity of digitalization implementation in the public sector. The significant increase in 2019 shows great potential in the implementation of the E-Based Government System, especially when supported by innovative leadership and an organizational culture that supports change. However, the decline in subsequent years highlights the need for more systematic improvements, both in terms of training, infrastructure, and sustainable policy support. Improving the quality of employee training in the field of digital technology, improving coordination between Regional Apparatus Organizations, and strengthening digital infrastructure throughout the region are important elements to ensure a more effective and sustainable

implementation of the Electronic-Based Government System. This is in accordance with the view of Kotter (1996) who emphasized the importance of strategic planning in dealing with organizational change, especially related to the adoption of new technologies.

For this reason, the recommendations proposed by this study include strengthening organizational culture that encourages innovation and openness to change, increasing synergy between institutions to encourage the implementation of consistent digitalization policies, and developing better infrastructure to support the smooth digitalization process. Peters and Waterman (1982) stated that the success of digital transformation in bureaucracy is highly dependent on the support of a strong organizational culture and proactive leadership in directing change.

In addition, resistance to change needs to be overcome through a transformational leadership approach that is able to empower employees and create a work environment that supports technological innovation. According to (Turner & Merriman, 2022), inclusive and visionary leadership plays a key role in helping employees face the challenges of digitalization and adapt to new technologies. This approach will help overcome the obstacles that currently hinder the effectiveness of the implementation of the Electronic-Based Government System in Gorontalo Province.

Finally, there needs to be a long-term commitment from local governments in developing continuous training and building adequate digital infrastructure. Policy support that focuses on improving technical competence and technological updates must continue to be implemented to avoid a decline in the score of the Electronic-Based Government System in the future, as well as ensure a sustainable and successful digital transformation in Gorontalo Province. Employee training needs to be improved so that they have adequate abilities and skills in operating digital systems, so that they are able to adapt to changing technological developments. Thus, this skill improvement will not only improve employee performance in supporting the implementation of the Electronic-Based Government System, but also strengthen an organizational culture that is adaptive and open to technological innovation (Baleviciene, 2021).

In addition to skill improvement, the development of adequate digital infrastructure is a crucial factor to ensure the smooth digitalization process in all Regional Apparatus Organizations. The equitable availability of infrastructure in various regions will minimize technical obstacles in the implementation of the Electronic-Based Government System, so that all regions can optimally participate in digital transformation efforts. The development of this infrastructure, both in terms of hardware and internet networks, must continue to be carried out so that the quality of electronic-based services is increasingly improved and evenly distributed (NICA et al., 2024).

Furthermore, transformational leadership has an important role to play in creating an environment that supports change and innovation. Leaders who are able to encourage openness to new technologies and motivate employees to continue to grow, will facilitate the creation of an organizational culture that is proactive towards digitalization. Inclusive leadership, as conveyed (Turner & Merriman, 2022), it is indispensable to ensure that every individual in the organization actively participates in the change process, so that internal obstacles can be overcome more effectively.

The long-term success of the Electronic-Based Government System in Gorontalo Province will largely depend on the synergy between strengthening organizational culture, infrastructure development, improving employee competence, and supporting innovation-oriented leadership. If all these elements are managed properly, digital transformation through the Electronic-Based Government System can run more efficiently, have a positive impact on improving the quality of public services, and strengthen the sustainability of bureaucratic reform in the region.

In the end, the successful implementation of the Electronic-Based Government System in Gorontalo Province is not only a matter of technology adoption, but also how the organization adapts to cultural changes and how leadership and infrastructure support the process. Effective change requires the involvement of all parties, from leaders to employees, as well as infrastructure support that allows the smooth process of digitizing public services.

Conclusion

This study found that the success of the implementation of the Electronic-Based Government System in Gorontalo Province is greatly influenced by the organizational culture that supports innovation and the readiness of employees to adapt to technological changes. A culture that prioritizes integrity, professionalism, and commitment plays an important role in encouraging faster adoption of digital technology in several Regional Apparatus Organizations. However, the decline in the score of the Electronic-Based Government System in 2021 and 2022 indicates resistance to change, limitations of digital infrastructure, and a lack of adequate technical training, which hinders the effectiveness of the implementation of the system (Ministry of PANRB, 2022).

The main strength of this research lies in its in-depth qualitative approach through interviews, observations, and document analysis, which allows researchers to understand the complexity of organizational culture and how it affects the success of Electronic-Based Government Systems. However, the weakness of this study is that this study only focuses on one region, namely Gorontalo Province, so the results may not fully describe the conditions in other

regions of Indonesia. In addition, the lack of an in-depth study of the influence of national policies on the successful implementation of Electronic-Based Government Systems in the regions is also a limitation of this study (Guest et al., 2006; Braun & Clarke, 2006).

Based on the results of the research, it is recommended that the Gorontalo Provincial Government strengthen an organizational culture that supports innovation by encouraging proactive transformational leadership. In addition, capacity building through continuous technical training and the development of better digital infrastructure needs to be a priority to ensure the smooth implementation of the Electronic-Based Government System. Finally, better coordination between Regional Apparatus Organizations is urgently needed to create synergy in the implementation of consistent digital policies throughout the province. Thus, digital-based bureaucratic reform in Gorontalo Province can run more effectively and sustainably (Turner & Merriman, 2022; Nica et al., 2024).

References

- Astawa, I. P. P. (2023). E-Government: Integrated, Fast, Certain and Easy Public Service Quality Management in Bali. *Management and Applied Social Studies Review*, 1(1), 29–35. <https://doi.org/10.32795/massiv.v1i1.3892>
- B L Ish E D B Y, P. U., Lal Bajracharya, S., Kumar Basyal Udaya Raj Paudel, D., & Rijal, R. (2023). Managing Editors Management and Social Sciences Quest Journal of Quest Research Management Cell The Impact of Workforce Diversity Management on Organizational Performance: A Study in Nepalese Hospitality Sector. *ISSN Quest Journal of Management and Social Sciences*, 5, 148–164. <https://doi.org/10.3126/qjmss>.
- Baleviciene, D. (2021). Cultural Diversity Management Models And Organizational Innovativeness. *Світова економіка та міжнародні відносини*, 5–12.
- Braun, V., & Clarke, V. (2006). Qualitative Research in Psychology Using thematic analysis in psychology Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <http://www.tandfonline.com/action/journalInformation?journalCode=uqrp20>
<http://www.tandfonline.com/action/journalInformation?journalCode=uqrp20>
- Connolly, J. M., Bode, L., & Epstein, B. (2018). Explaining the Varying Levels of Adoption of E-Government Services in American Municipal Government. *State and Local Government Review*, 50(3), 150–164. <https://doi.org/10.1177/0160323x18808561>
- Denzin, N. K. (2012). Triangulation 2.0*. *Journal of Mixed Methods Research*, 6(2), 80–88. <https://doi.org/10.1177/1558689812437186>
- Dzvinchuk, D., Borshch, H., Tsygylkyk, N., Dobosh, Z., & Dziubynska, O. (2022). Public management

- hr/>
- for sustainable development: current challenges and future trends. *Cuestiones Políticas*, 40(73), 741–753. <https://doi.org/10.46398/cuestpol.4073.42>
- Edelmann, N., Mergel, I., & Lampoltshammer, T. (2023). Competences That Foster Digital Transformation of Public Administrations: An Austrian Case Study. *Administrative Sciences*, 13(2), 44. <https://doi.org/10.3390/admsci13020044>
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Hannan, M. T., & Freeman, J. (2019). Structural Inertia and Organizational Change. *Organizational Ecology*, 49(2), 66–90. <https://doi.org/10.2307/j.ctvjz813k.7>
- Imanbekova, A. M., Fyliuk, H. M., & Stavbunik, E. A. (2024). Some aspects of digitalization on public administration. *Bulletin of the Karaganda University Economy Series*, 11329(1), 45–54. <https://doi.org/10.31489/2024ec1/45-54>
- Kesuma, A. A. (2023). E-Government as a Form of Smart Governance Implementation at Bandung Smart City. *Indonesian Journal of Social Technology*, 4(12), 2469–2480. <https://doi.org/10.59141/jist.v4i12.831>
- López-Sisniega, C. L., Gutiérrez-Diez, M. del C., Arras-Vota, A. M. de G., & Bordas-Beltrán, J. L. (2016). Barriers to the Use of Electronic Government as Perceived by Citizens at the Municipal Level in México. *International Journal of Management Excellence*, 7(3), 846–854. <https://doi.org/10.17722/ijme.v7i3.859>
- Mcleod, R. (2005). The struggle to regain effective government under democracy in Indonesia. *Bulletin of Indonesian Economic Studies*, 41(3), 367–386. <https://doi.org/10.1080/00074910500117289>
- Mislawaty, S. E., Harahap, R., & Anisyah, S. (2022). Digitalizing Governance in South Sumatra: An Introduction "E-Sumsel" System Reforming Public Service Management. *Journal of Bina Praja*, 14(3), 399–411. <https://doi.org/10.21787/jbp.14.2022.399-411>
- Myeong, S. (2023). Building Participative E-Governance in Smart Cities: Moderating Role of Institutional and Technological Innovation. *Sustainability*, 15(20), 15075. <https://doi.org/10.3390/su152015075>
- NICA, E., MIŞA, A., & MELENCIUC, M. (2024). How Do We Ensure the Qualification of Civil Servants With Digital Skills in Europe? a Comparative Study. *Applied Research in Administrative Sciences*, 4(3), 40–50 <https://doi.org/10.24818/aras/2023/4/3.04>
- Nuridin, N., Stockdale, R., & Scheepers, H. (2010). *Examining the Role of the Culture of Local Government on Adoption and Use of E-Government Services*. 79–93.

https://doi.org/10.1007/978-3-642-15346-4_7

- Platania, S., Morando, M., & Santisi, G. (2022). Organisational Climate, Diversity Climate and Job Dissatisfaction: A Multi-Group Analysis of High and Low Cynicism. *Sustainability (Switzerland)*, 14(8). <https://doi.org/10.3390/su14084458>
- Turner, L. A., & Merriman, K. K. (2022). Cultural intelligence and establishment of organisational diversity management practices: An upper echelons perspective. *Human Resource Management Journal*, 32(2), 321–340. <https://doi.org/10.1111/1748-8583.12407>
- Zohra, D., Naas Said, A., Karima, K., Al-hamdany Saba, N., & aldeen Essa Eshag, E. (2023). The Effect of Organisational Citizenship Behavior on Cultural Diversity: A Case Study of Ophthalmological Hospital Friendship Algeria-Cuba. *Business Ethics and Leadership*, 7(1), 25–36. [https://doi.org/10.21272/bel.7\(1\).25-36.2023](https://doi.org/10.21272/bel.7(1).25-36.2023)