

Improving the Local Government Performance: The Role of Digital Innovation and Digital Leadership

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Abstract. The use of digital innovation in Indonesia has not been implemented optimally and is not evenly distributed across regional governments. Optimizing the application of digital innovation can be influenced by leadership style, where digital leadership is a concept that is able to describe a leader who is more modern and open in taking advantage of existing opportunities to improve service quality in the era of digitalization. Through theoretical analysis related to digital platform dimensions that can influence improving the quality of digitalization performance, as well as using qualitative research methods with a case study approach in West Java and Bali Provinces. It was found that both regions have shown active adoption of digital innovation which is influenced by the application of digital leadership styles in each region. The digital innovation created proves the ease with which people can obtain services, the availability of powerful digital innovation features, and the innovation's ability to integrate various data can be used as value in improving local government performance. However, the obstacles and challenges in utilizing digital innovation are not far from the security of public data and the costs that must be incurred, especially in increasing professional human resources in the development of the IT sector.

Keywords: Digital Innovation, Digital Leadership, Local Government Performance.

1 Introduction

Indonesia is a country that has a decentralized government system, where regional governments have an important role in providing public services for the community. According to Law Number 23 of 2014 concerning Regional Government, regional governments are responsible for administering government affairs within their authority, including in this case the administration of public services. However, the role of regional government in providing better public services is often faced with various obstacles, such as limited human resources, underdeveloped technology, and a lack of competence in dealing with the changes that occur.

In the digital era, the application of digital innovation and technology in the public sector can be a solution to improve the performance of local governments in providing better public services to the community. The use of information technology at the regional level in Indonesia is very massive. According to data from the Indonesian Internet Service Providers Association (APJII) in 2020, the number of internet users in Indonesia reached 196.7 million people or around 73.7% of the total population. Other data from We Are Social and Hootsuite in 2021 shows that Indonesia has 173 million active social media users. Apart from that, the development of innovation in local government in Indonesia has continued to increase in recent

years. The encouragement from the community for the need for more effective and efficient services is one of the causes.

Regional governments that have implemented innovation in their public services are the cities of Bandung and Bali. From these two regions, it can be seen that massive digital innovation is being developed in Indonesian regional governments. Digital innovation can have a significant impact on local government performance. The use of digital technology and innovation can speed up and simplify the public service process, increase government transparency and accountability, and optimize the use of existing resources. Digital innovation can also help local governments overcome various challenges, such as budget problems, human resource management and effective governance. However, the success of digital innovation in improving local government performance also depends heavily on effective digital leadership. Strong and innovative digital leadership can accelerate the adoption of digital technology and innovation in local government, as well as develop policies that support the use of technology to improve public services and government performance.

This research will focus on two main aspects, namely digital innovation and digital leadership in improving the performance of local government organizations, as well as analyzing how digital leadership can influence the improvement of digital innovation services in local government. Through this analysis, it is hoped that it can be used as a guide in assessing and identifying, as well as providing understanding regarding the role of digital innovation and digital leadership in improving local government performance. The results of this research can be used as a reference by local governments in developing effective digital innovation and leadership strategies to improve performance and public services. Apart from that, this research can also be a scientific contribution for researchers interested in the field of digital innovation and digital leadership in the public sector, especially in the context of local government.

2 Theoretical Foundations

A literature review was carried out as an effort to solve problems related to the influence of digital innovation and digital leadership in improving the performance of local government organizations, as well as to see the extent of the role of digital leadership in increasing innovation in local government. This literature review is also useful for obtaining an analytical overview by referring to research that has been conducted previously. For example, in research by [1], where it was found that technological advances have an impact on all sectors, such as the financial sector and transparency, especially in the development of public service innovation. This is of course also related to organizational accountability which significantly influences government performance.

Another research from [2] which shows that support from stakeholders and elected officials influences the adoption of digital innovation in local government. To gain such support from stakeholders and legislators, local governments must pave the way to provide information about the benefits of digital innovation. Mardiana's research, 2020 entitled *The Application of Digital Leadership of Subdistrict Head on Public Service Performance With the Delegation of Regent/Major Authorities as the Moderating Variable (Case Study of Covid-19 Spread Management in Pandalungan Area)* explains the important leadership of a subdistrict head to use digital media in carrying out their duties. The leadership style that influences service performance is the application of a digital leadership style.

In research by Chung [3] entitled *Analysis of Digital Governance Transition in South Korea: Focusing on the Leadership of the President for Government Innovation*, the findings were that in order to successfully implement digital government innovation, ICT governance is needed to support sustainable digital transformation. Presidential leadership determines the success or failure of digital government innovation. The implementation of digital government is not just about computerized government but is a form of transformation of government as a whole. In Peng's journal, 2022, entitled *Digital Leadership: State Governance in the Era of Digital Technology*, it explains that the digital leadership that individuals or organizations must have in the era of digital technology is digital decision making, digital implementation and digital guidance to ensure that their goals are achieved. Digital leadership has become a key element in efforts to modernize and increase the country's governance capacity.

Based on previous research, we know that several academics agree that innovation has an impact on organizational improvement. Innovation can be carried out in various typologies, such as service innovation, process innovation, administrative innovation, system innovation, conceptual innovation and radical change. Likewise, digital leadership has a positive influence on innovation [4], [5], [6], [7], [8]. Leaders who have digital leadership skills can help organizations cope with change and create value through innovation.

The analytical theory used is to identify case studies of digital platform dimensions that can influence digitalization performance in increasing productivity, efficiency and effectiveness by [9], [10]. The first dimension is ease of use which means that an easy-to-use platform can help accelerate the adoption of digital technology by organizations and increase productivity by enabling users to utilize digital features more quickly and efficiently. The second is the dimension of feature availability which provides various features that can help increase productivity and organizational performance [10], [11], [12], [13], [14]. For example, platforms that provide collaboration features can help teams communicate and work together more effectively. The scalability dimension, which is a digital platform that is easy to upgrade and can be integrated with other digital solutions, can help increase organizational efficiency and effectiveness, especially in managing large volumes of data [15], [16], [17]. Security dimensions that can help protect an organization's data and information from security threats such as hacking or data theft. The cost dimension, which must be affordable can help organizations save costs in developing and operating their digital solutions [18], [19].

3 Methods

The research method used is a qualitative research method with a case study approach of the regional governments of Bali and West Java provinces. The results of the analysis will later describe the facts and information in the field. The data source used is a type of primary data obtained through observations and interviews or in-depth interviews with key informants, Focus Group Discussions (FGD) to see the implementation and challenges of the role of digital innovation and leadership in improving the performance of local government organizations. Secondary data is also utilized to then review documents from the target agency. Secondary data includes policy documents, statutory regulations, regional regulations, regional strategic plans, RPJPD, RPJMD, annual reports, books, literature and other documents that can support research.

4 Result and Discussion

4.1 The Role of Digital Leadership to Increase Regional Government Digital Innovation in the West Java and Bali Provincial Governments

In a case study in the West Java Provincial Government, namely through research on the West Java Diskominfo, West Java Digital Service (JDS), and Personnel and Human Resources Development (BKPSDM), produced an analysis and description regarding the role of digital leadership applied in providing digital innovation-based services which was built by the provincial government as an effort to improve the performance of local government organizations. In implementing digital leadership, West Java also applies the 3T strategy (Tracing, Testing and Treatment) which is supported by data and technology-based policies. Several interview results show that leadership in the West Java Provincial Government has grown with the application of digital leadership, such as at the West Java Diskominfo which upholds the value of collaboration with leaders who try to protect and showcase the talents that exist in each employee. The performance that has been carried out is a form of commitment that has been developed into one unit involving all units, including the secretariat, Public Communication Information (IKP), e-gov, Aptika, Encryption and even the field of statistics. Every Monday a virtual roll call is held to then carry out a performance evaluation of what has been done and what will be implemented. The application of digital leadership built by the West Java Provincial Government has certainly become the driving force for the creation of various forms of digital innovation services such as the Command Center which has been implemented by UPTD JDS and in several regional governments such as Bandung, Cirebon, Pangandaran and Garut. Other innovations include the West Java Integrated Portal (jabarprov.go.id), the Sapawarga application, Jabar Saber Hoax which is a special team for verifying information or news circulating in the community. Then, there is also the West Java Electronic Document Information System (Sidebar) for managing electronic official manuscript documents. Mapping Talent Management for West Java civil servants and digitizing architecture. In fact, currently West Java has been selected as a movement towards a smart province.

Through theoretical analysis which states that digital platforms can influence digitalization performance by increasing productivity, efficiency and effectiveness through several dimensions such as ease of use, where the use of digital innovation is felt to be able to help the government in providing services to the community as is done by the West Java Provincial Government which provides convenience for the community by utilizing digital innovation through the Jelita application to facilitate the process of managing website-based electronic licensing services. The next dimension is related to the availability of features, such as the West Java Integrated Portal (jabarprov.go.id) which has superior service features for the public such as complaint services, an overview of West Java, and details of the West Java agenda. The scalability dimension is realized by the West Java Provincial Government through the West Java data ecosystem in the form of a Data Management System platform that is interconnected with each other, which consists of Core Data, One Data, Open Data, One Map, Dashboard and Data Analytics. As for the security dimension, the issue of data security within the West Java Provincial Government is still facing obstacles, namely the lack of human resources in the IT sector, especially in managing data security. Lastly, there is the cost dimension by looking at the results of research at the West Java BKPSDM, where training is not yet connected to the competency website. Small HR development budget. Even though the Ministry of Finance provides free digital innovation, the features are limited and in the end they built the system themselves.

The application of digital leadership in increasing digital innovation in the Bali Provincial Government is demonstrated by its leadership in digital transformation. Leadership commitment is very high in accelerating digital transformation. The expertise background of selected regional heads often influences the innovation choices adopted [20]. The background of the Governor and Deputy Governor who are academics, as well as the Regional Secretary who has high attention to digitalization is the main catalyst for digital transformation in the Bali Provincial government. The Bali provincial government has also built a comprehensive framework for developing government digitalization through preparing a road map for implementing the Electronic Based Service System (SPBE) service roadmap. Through the same theoretical analysis as before, it states that digital platforms can influence digitalization performance by increasing productivity, efficiency and effectiveness through several dimensions. The first is the dimension of user convenience. The measure of ease of use is, for example, the digitization of One Data for the Province of Bali, in 2022. It can be seen that the number of visitors reached 47,921, then 208 requests for information and 2409 number of document downloads. The second dimension, namely the availability of features, via <https://balisatudata.baliprov.go.id/> is a form of data management policy in the Bali Provincial Government which aims to create quality data, easy to access, integrated and can be shared and used between agencies in Provinces, Regencies/Cities throughout Bali. Next is the scalability dimension which was developed by integrating various services that can be accessed via Single Sign On. So that management and access to information technology is integrated and has the ability to manage large volumes of data. There are also dimensions related to the security of information and protection of user data. Every application in the Bali Provincial government that will be launched will be submitted to Sector IV Encryption and BSSN to confirm and retest its security. The last dimension relates to costs. In 2022, it will be recorded that the existence of this information system has saved 500 million in savings in the attendance system. Apart from that, almost 90% of office stationery spending was reduced.

4.2 Innovation and Digital Leadership in Improving the Performance of Local Government Organizations

Since 2022, digitalized personnel services have been able to reach 81.3% or 39 digitalized personnel services with 18.8% indicated as not yet digital or 9 services that have not been digitized. There are several aspects that have changed before 2018 and after 2022, including the Employee Aspect through the West Java Apparatus Information System (SIAP Jabar), where previously the employee database was still separate and not yet integrated, now it is more integrated and up to date with a system that is integrated with other applications.

Furthermore, namely the Performance Aspect through Performance Allowances & Remuneration (TRK) and Mobile Attendance (K-MOB) changing the conditions where previously the provision of allowances was still unfair, employees were not motivated, recording employee attendance was inefficient, and the widespread phenomenon of leaving absenteeism turned into an application much better performance by providing fair allowances, growing employee motivation at work, efficient employee attendance, and eliminating the culture of leaving absences. Aspects of Employee Transfers through the West Java Juara HR Management System (Sim Jawara Structural) change the conditions that previously often saw employee transfers carried out subjectively, and many entrusted employees changed with more objective employee transfers by placing employees in the right positions. The aspect of

Employee Mapping through the Online Assessment Center (OAC) changes the conditions that previously occurred where employee competency mapping had not been carried out on a massive scale with applications that had not been integrated, changing to an employee competency mapping model that is faster, more effective and efficient and is maximally integrated into the application. Lastly, it is related to Employee Service Aspects including E – Transfer, E – Functional, E – Rank, E – KGB, E – Card, E – Retirement. These various systems change the situation where previously work took a long time and had to be done offline, and waste of paper and human resources changed to a work process that was relatively faster in a place that could be done flexibly, and was able to reduce paper usage and save human resources.

5 Conclusion

From the research conducted, it is known that digital leadership has a significant role in increasing innovation in local government. Digital leadership is a leadership concept related to a leader's ability to manage and utilize digital technology to achieve organizational goals. The influence of digital leadership on innovation is very significant, because digital technology has become one of the main drivers of change and innovation in various sectors and industries. Some of the influences of digital leadership in innovation are to motivate teams to innovate, optimizing business processes, building partnerships and collaboration, integrating data and analytics, managing risk and helps in adoption of new technology.

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