IMPLEMENTATION DIGITALIZATION OF PUBLIC SERVICE IN WEST JAVA PROVINCE: A STUDY OF THE *SAPAWARGA* PROGRAM

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ABSTRACT

This research was motivated by the technological development of the Industrial Revolution 4.0, which then gave rise to digitalization products. The digitalization process has also penetrated the public sector, so that the public's need for the presence of technology-based public services is increasing. This study is intended to analyze how the implementation process of digitizing public services, especially in West Java Province through the *Sapawarga Jabar Super* App program, which is seen from several success factors. The research design used in this study uses a descriptive method using a qualitative approach. Then the data collection technique used in this study is in the form of a literature study. While the data analysis technique in this study uses the data triangulation method. Then the process of presenting the data, carried out by filtering data that researchers consider important regarding how the implementation of the *Sapawarga Jabar Super* App program. Then finally, the conclusion on how the implementation of the *Sapawarga Jabar Super* App program in the context of digitizing public services in West Java Province. While the analysis of the results and discussion in this study is focused on analyzing data reviewed from the factors of Digital Leadership, Culture, and ICT Infrastructure.

Keywords*: Implementation; Digitalization; Public Services; Sapawarga*

A. INTRODUCTION

Digital transformation is an effort to change a work process from analog to digital (Pasaribu, Widjaja, 2020, p.100). With its broad scope, digital transformation can be used and implemented in many aspects, both related to agencies and individuals/individuals. As in the public sector, when a government agency utilizes Information Communication Technology (ICT) in its government process in one of its functions, namely to provide public services to the community, then, it is certain that digital transformation will allow people to get services quickly, accurately, payless, and more easily. In fact, in addition to providing positive benefits and impacts on the community, the government can also benefit from the use of ICT, especially for the implementation of internal performance, both in the form of monitoring and evaluation, promotion, to providing wages for ASN (State Civil Apparatus).

All of these things are certainly very possible to happen, considering that one of the advantages provided by technology is its speed and ease, so that it can cut the bureaucratic process that exists in the body of government agencies, so that it can be simpler, faster, precise, cheaper, and effective and efficient, so that it will accelerate the implementation process of the concept of Good Governance. The concept of using ICT in the process of governance is also referred to as e-Government, or electronic Government. E-Government itself is the concept of governance by utilizing ICT or electronic-based (Hadiono, Santi, 2020, p. 81-83). While in Indonesia, the concept of e-Government is also known as SPBE or Electronic-Based Government System, which is regulated in the *Peraturan Presiden Nomor 95 Tahun 2018*.

Of course, this is in line with the government's vision to be able to improve the quality of regulation and implementation of SPBE in Indonesia, West Java Province has a vision that is in line with becoming a leading region in the use of ICT in its governance process. Of course, with the authority of the Regional Government, in this case the Regional Government of West Java Province has a vision for West Java, so that West Java becomes a Digital Province, which can present innovations in the process of public services based on technology. The Regional Government of West Java Province is under the commitment and political will of a Governor of West Java, Ridwan Kamil and Deputy Governor of West Java, Uu Ruzhanul Ulum who seeks to be able to create innovations in the public sector, especially public services in West Java Province based on ICT, to be able to realize West Java Digital Province (JabarProvGoID Portal, 2022).

The West Java Province Government built a special unit that deals with digitalization and implementation of e-Government. The unit is under the coordination and responsibility of the West Java Provincial Communication and Information Service. The institution is the Technical Implementation Unit for Managing Digital Services, Data, and Geospatial Information or West Java Digital Service. West Java Digital Service was formed on July 1, 2019, as a unit that can realize the ideals or vision of the Governor and Deputy Governor of West Java Province to make West Java Province a Digital Province by narrowing the digital divide, helping to be able to streamline and curate data- and technology-based decision-making processes, and transforming the use of ICT in every aspect of

public and Government life Local Government of West Java Province. As for one of the programs carried out by West Java Digital Service, to realize West Java to become a Digital Province, namely the *Sapawarga Jabar Super* App program. The *Sapawarga Jabar Super* App program is one of the flagship programs that have been created by West Java Digital Service in order to digitize public services in West Java Province. The *Sapawarga Jabar Super* App program is a program as well as an application that makes it easier for people in West Java to get public services easily and efficiently online.

There are several features in the *Sapawarga Jabar Super* App Program application program, such as a menu to convey aspirations to the government, features to submit proposals, and a survey of public satisfaction with the performance of the West Java Provincial Government apparatus. In addition, there is a forum for RW chairmen throughout West Java, then there is an important, actual, and trusted news/information portal for people in West Java, and of course there is the West Java *SaBer* (Clean Sweep) Hoax feature. In addition, there are also other public services, such as information about motor vehicle taxes, as well as information about community population administration in West Java Province. Where a service can be accessed by the people of West Java only from one program, one device, and one application.

Of course, this research is expected to be used as a development of thought while adding to the treasury of knowledge in Government Science, especially those related to theories related to digital transformation, e-Government, public services, and digitalization of public services. This research is also expected to be used as literature reference material, literature reference, as well as comparison material for anyone who will develop this research. In addition, this research is also expected to develop insights in implementing researchers' knowledge on how to implement the *Sapawarga Jabar Super* App program as an effort to digitize public services in West Java Province. Not only that, the researcher also intends to make a comparison, between the concept that the researcher used in this study with conditions that are in accordance with reality in West Java Province. Through this research, it is also expected to revolutionize public services in West Java Province to be more qualified, so as to improve the position of West Java Province in the most innovative regional level based on electronics / technology.

B. LITERATURE REVIEW
Digital Transformation

The digital transformation as stated by Stolterman and Forst in Pasaribu and Widjaja defines digital transformation as changes that affect digital technology used in all aspects of human life (Stolterman and Forst in Pasaribu and Widjaja, 2020, p.88). In line with Stolterman and Forst, Lankshear and Knobel say that digital transformation is the final level of digital literacy. At this level, digital technology enables innovation and creativity, and stimulates significant changes in the professional and knowledge environment (Lankshear and Knobel in Pasaribu and Widjaja, 2020, p.88-89). Indrajit also expressed his views on digital transformation, digital transformation can be interpreted as a process of change towards the future (irreversible change) which is then based on the significant use

of ICT to be able to provide added value for companies and corporations (Indrajit, 2020, p. 3).

Then, Tangi in Tulungen also stated that digital transformation is important for all employees of industry and the government sector which are highly dependent on ICT systems, strategies and human resources. Digital transformation is a process of a way to unleash value from business processes and return it to customers and data, as well as analytics to create innovative new experiences. The journey of digital transformation can make analytics-driven organizations reflect Artificial Intelligence (AI) technology that can be done as a process of habituation. Digital transformation is extensively regarded as a driver of change in all contexts, especially those related to the business context and affecting all aspects of human life based on the use of ICT and its digitization process. Digital technologies have transformed the public sector by influencing applications, cultural processes, structures, and responsibilities and include the duties of civil servants (Tulungen et al., 2022, p. 1.117).

Public Service

Based on the *Surat Keputusan Menteri Pemberdayaan Aparatur Negara Nomor 63 Tahun 2003* concerning public services which defines public services, as a form of service carried out by government agencies. Both at the central and regional levels. In fact, it does not even affect the possibility of State-Owned Enterprises (BUMN) and Regional-Owned Enterprises (BUMD) in the form of goods and / services, both in the context of meeting the needs of the community, as well as in the context of implementing the provisions of laws and regulations. Then in line with the *Surat Keputusan Menteri Pemberdayaan Aparatur Negara Nomor 63 Tahun 2003* concerning public services. Therefore, the *Undang-Undang Nomor 25 Tahun 2009* concerning public services, states that public services are activities or series of activities in order to fulfill service needs in accordance with laws and regulations for every citizen and resident of goods / services, and / or public services is to be able to provide satisfaction from services that are in accordance with the wishes and needs of the community, as well as in the context of implementing public services. Meanwhile, to be able to achieve this target, the quality of public services must be able to be adjusted to the wishes and needs of the community.

The implementation of public services is certainly carried out by public service providers. In this case it is a state / government administrator, economic and development organizer, independent institution formed by the government, business entities and legal entities that are given the authority to carry out some of the duties and functions of public services. Not only that, the community and the provate sector also have a role to carry out some of the duties and service functions of public services that cannot be handled or managed by the government, both central and local governments. However, there are at least three important elements in the public service process, including the following:

1. Elements of Service Delivery Organization (Local Government)

   In this element, local governments have a strong position as policy makers (regulators) and as service monopoly holders. This is because the Regional Government is static in providing services. This is because its services are

needed or needed by the community or organizations that have interests. This dual position then becomes one of the factors causing the poor process of public services carried out by the Regional Government, because it will be difficult to choose and sort between the interests of carrying out the function of the regulator and carrying out its function to improve the quality of public services to the community.

2. Service Recipient Element (Community or Interested Organization)
   In this second element, communities and organizations that have interests (recipients of services), basically have no bargaining power or are not in an equal position to receive services. Thus putting him in the position of not having access to good public services. This position encourages two-way communication to carry out *KKN* (Corruption, Collusion, and Nepotism) and of course this can worsen the image of service with the rampant illegal levies and even ironically, it is considered mutually beneficial.

3. Satisfaction provided and/or received by the service recipient
   In this third element, it is an element of the form of user satisfaction or service recipients. This element is a concern for service providers, in this case the government, to be able to determine the direction of public service policies that are community-oriented and of course carried out through efforts to improve and improve the performance of local government management. The public policy paradigm in the era of regional autonomy, which is oriented towards the satisfaction of service recipients, can provide changes or shifts to the paradigm of governance, from the paradigm of rule government, to the paradigm of good government (good governance) (Mulyawan, 2016, p. 33–35).

Digital-Based Public Services

There is also Trisantosa, et.al., who defines electronic services or e-Service as follows, e-Service is an application by utilizing the use of ICT devices in different areas, where technology itself has a role in facilitating the delivery of a service or service (Trisantosa, et.al., 2021, p. 122). Later Rowley revealed electronic-based public services as deeds, undertakings, or performances in which their delivery is mediated or performed by ICT. The electronic services include e-tailing, customer support and service services. This definition reflects the three main components of the service provider, the service recipient, and the service channel, in this case the technology itself. For example, for public electronic services, public bodies are service providers and citizen state, as well as service recipient businesses, while the service channel is the third requirement of the service recipient itself. The service channel is the third requirement of the service recipient. The service channel is the third requirement of the electronic service. The Internet is the main channel of electronic services. While other classic channels can also be considered, such as mobile phones, call centers, and television (Rowley in Trisantosa, 2022, p. 122).

Then there is also Choi who stated that the digitization of public services, is, *the adoption of digital technology for public service delivery can shift the model, from being reactive to citizen's needs, to becoming proactive in knowing what their needs will be in future. It can provide a better platform for the participation*

of all stakeholders, and especially, allow the reflextion on citizen preferences in policymaking process for public services (Choi & Xavier, 2021, p. 2).

C. METHOD

The research design used in this study is a descriptive method using a qualitative approach. In this study, data were collected and analyzed in terms of Digital Leadership, Culture, and ICT Infrastructure factors. The data collection techniques used in this study are in the form of literature studies, by collecting, reviewing, and analyzing existing data, which researchers have obtained, both in the form of books and journals which are certainly related to this research. Then field studies by conducting in-depth interviews, documentation, and observation of the subject and object of this research. While the informants who supported this study were categorized into two, including the West Java Province Government Apparatus and the *Sapawarga Jabar Super* App Program User Community. Then the data analysis technique in this study uses data triangulation methods, including data reduction, by collecting factual data on how the implementation of the West Java Super App *Sapawarga* program which is then sorted and simplified. Then, the presentation of data, where at this stage, researchers filter data that researchers consider important about how the implementation of the *Sapawarga* program. The presentation of data is important to be done to facilitate understanding of what happened to the West Java Super App *Sapawarga* program, to then formulate what steps can be taken based on theory and reality regarding how the implementation of the West Java Super App *Sapawarga* program in West Java. Then finally, the conclusion is rising. The process of assessing this conclusion aims to be able to provide understanding and information to the community and to the Regional Government of West Java Province regarding how to implement of the *Sapawarga Jabar Super* App program.

D. EXPLANATION

Changes caused by technological developments through the Industrial Revolution 4.0., not only have an impact on the private sector or commercial sector, but it also affects the public sector. With the development of existing technology, especially with the emergence of the internet, people's needs are increasing for service expectations in the public sector. In fact, not only against the expectations of services in the public sector, the public is now starting to demand the government to be able to respond and adapt to changes that occur quickly. The public also demands the government to provide public services as quickly as possible, effectively, efficiently, transparently, cheaper, even if necessary, without spending a penny (Nurhayoko, et.al., 2020, p.17).

However, along with the development of technology and the community's need to improve and improve the quality of services in the public sector, an innovation is needed. Especially with the Covid-19 pandemic that has hit the world and Indonesia is no exception. The Covid-19 pandemic complemented the technological revolution that gave birth to the popular term Industrial Revolution 4.0. In the history of human civilization, the technology seeded by the Industrial Revolution 4.0 continues to experience exponential changes and developments

(Agung, 2022, p.115). The Covid-19 pandemic has also forced the Regional Government of West Java Province to create innovations in the public service process. That is why the Regional Government of West Java Province strives to capture the needs and challenges of technological development, as well as digitalization by creating a public service program that can provide convenience to the community. The aspiration to transform into a Digital Province encourages the Regional Government of West Java Province to innovate, especially in the public service sector. The West Java *Sapawarga* Super App Application Program is one of the leading products of the Java Bart Provincial Government to provide maximum service as well as quality to the community. The West Java Super App *Sapawarga* Application Program is an application-shaped program initiated by the Regional Government of West Java Province through an institution under the West Java Provincial Communication and Information Service, namely the Technical Implementation Unit for Digital Services, Data, and Geospatial Information Management or what is called the West Java Digital Service. The *Sapawarga Jabar Super* App application program can be accessed by the public and the public can easily access this application-based public service. Anytime, anywhere, without having to spend money, and of course can be accessed 24/7 or 24 hours a week.

There are several features available on the menu contained in the Application *Sapawarga Jabar Super* App program, including digital public services, the latest public information related to the West Java Province Government, aspirations for better regional development, then West Java mobile Samsat. All these features are connected into one mobile application, making it easier for people to access public services in West Java. Not only that, with an integrated system, making this mobile application "friendly" to the users of the application, because it is made and designed very simply, so that people can understand the contents of the existing features. But it still does not reduce the essence and substance that must still be contained in the Application *Sapawarga Jabar Super* App. The *Sapawarga Jabar Super* App also presents complete and certainly reliable information. Then most importantly, the *Sapawarga Jabar Super* App program is also equipped with responsive aspiration features so that people in West Java Province can convey their aspirations. Figure 1.1 below is a display on the *Sapawarga Jabar Super* App mobile application.
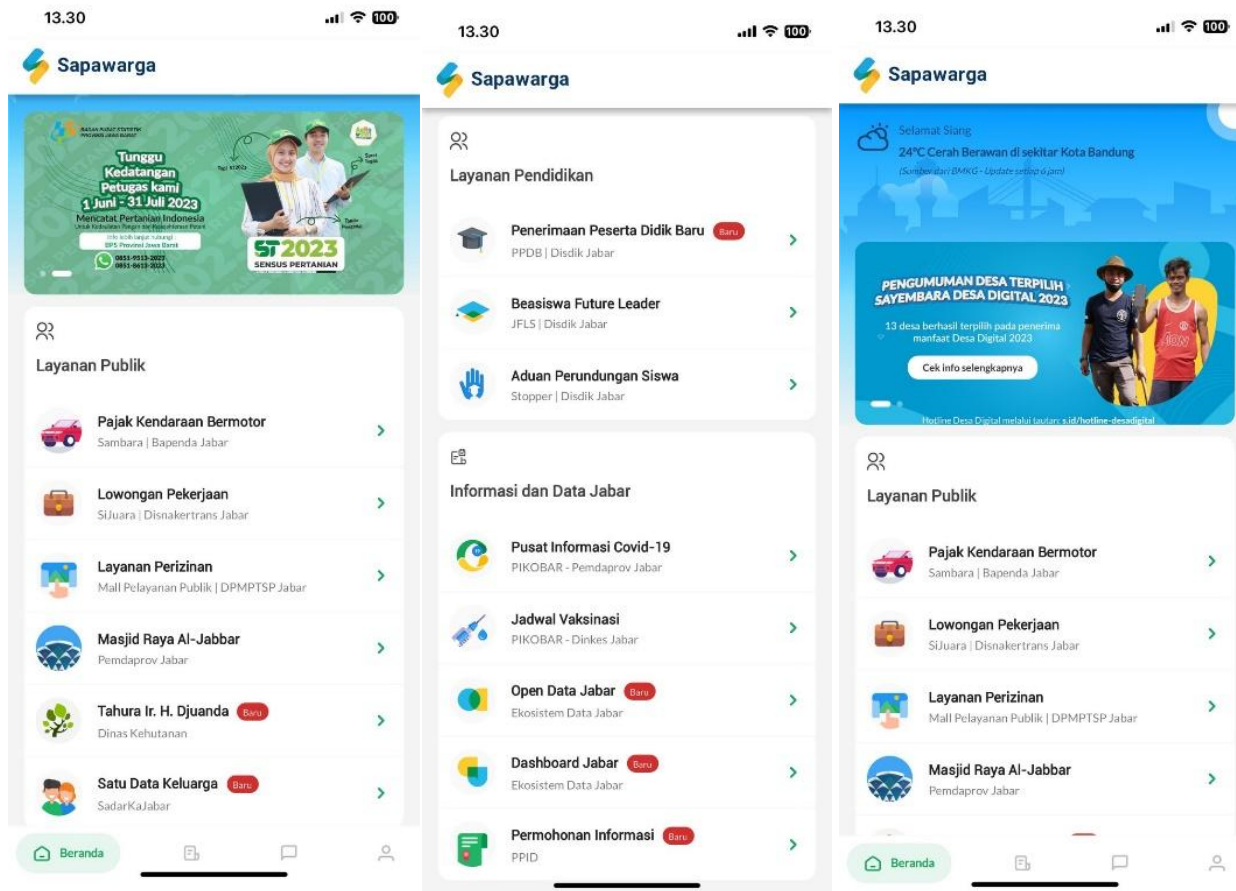
Figure 1. View of *Sapawarga Jabar Super App*
Source: *Sapawarga Jabar Super App*

Based on figure 1 above, it can be noted that the *Sapawarga* Super App mobile application is equipped with several menus and features that include public services, education services, and information and data in West Java Province. Even the mobile application, when viewed in appearance, is really friendly for users of the *Sapawarga Jabar Super* App mobile application. This can be seen from the menu and features that are simple, but understandable, and most importantly do not eliminate the essence and important substance that must remain in this *Sapawarga Jabar Super* App mobile application.

However, even though it has been made as detailed and easy as possible to reach and use by the people of West Java, when viewed from the downloader that downloaded the *Sapawarga Jabar Super* App mobile application.
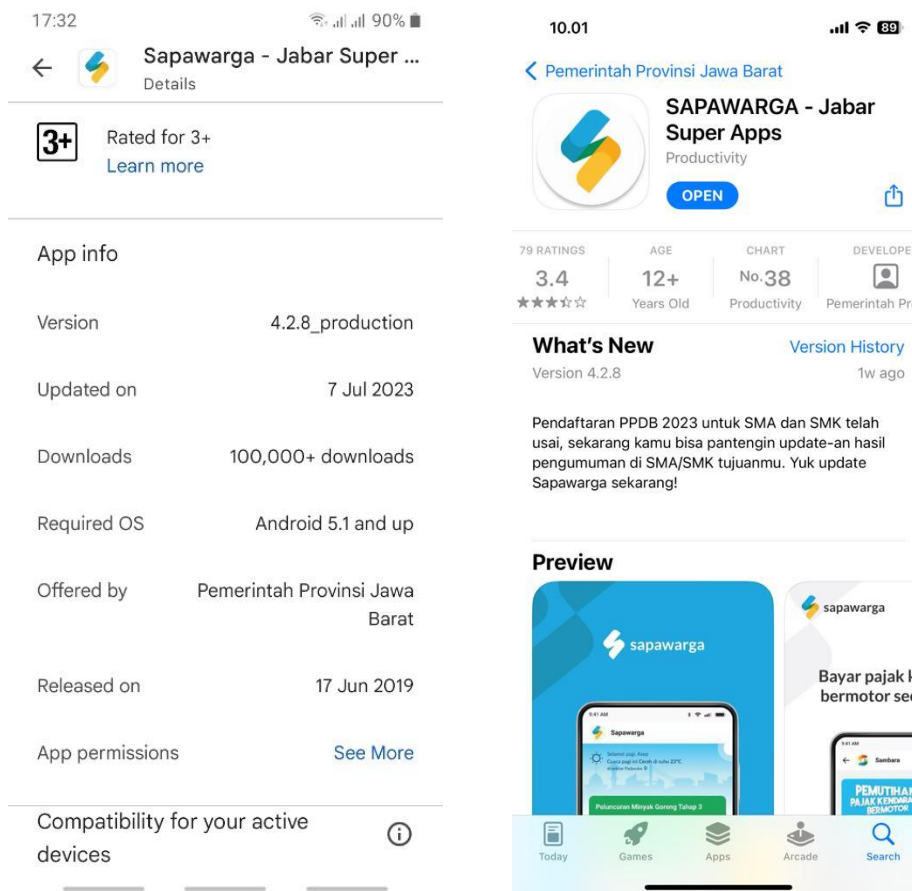
Figure 2. Number of downloaders on Android OS and rating on IOS OS
Source: *Play Store* and *App Store*

As can be seen from figure 2 above, on the Android OS itself, the number of downloaders on the *Sapawarga Jabar Super* App mobile application has been more than 10,000 downloaders and the application rating is 3.1. This is in line with the *Sapawarga Jabar Super* App mobile application with a rating of 3.4. Of course, this application-based program still has a big "Home Work", because the number of downloaders is not comparable to the population in West Java Province which reached 49,935,858 per year 2020 (BPS, 2020). Therefore, a special strategy is needed from the Regional Government of West Java Province to be able to implement this Application-based Program, so that it can better touch all levels of society. Considering that this program is an effort from the Regional Government of West Java Province to be able to provide better and quality public services to the community by utilizing ICT. So it is hoped that this program can have a positive impact on the community and most importantly, this application-based program can provide convenience to people who need public service processes in West Java Province.

Digital Leadership

Digital leadership is one of the supporting factors that is a prerequisite for success in a comprehensive digital transformation process, especially in the public

service sector. In the process of digital leadership or e-Leadership has a very important role. If the figure of a leader or Regional Head has what he calls digital leadership, it can be ascertained that there are no obstacles that cannot be handled, to make ICT as one of the instruments to realize quality and effective public services. The urgency to continue to develop public services to be more qualified and effective assisted by the use of ICT, will undoubtedly make leaders or regional heads, especially those who already have the spirit of e-Leadership, to find solutions and create innovations and new breakthroughs from the governance process. One of them is in the public service sector (Laoly, 2019, p.9-11).

Since serving as Governor and Deputy Governor of West Java Province, Ridwan Kamil and Deputy Governor of West Java, Uu Ruzhanul Ulum, many programs and policies that utilize ICT, both in the research process, formulation of academic manuscripts, decision making, implementation stages, even to the monitoring and evaluation stage, have all utilized ICT. Then, in addition to the use of ICT in the process of implementing bureaucracy within the Regional Government of West Java Province, both the Governor and Deputy Governor of West Java Province are also active in communicating and interacting with the public in the digital world. However, the interaction with the community carried out by Ridwan Kamil, in particular, is not only necessarily just posting programs and daily activities, but still includes education and substantive values. This certainly facilitates the process of delivering messages and programs that will be implemented to the community, because of the role of social media, which certainly facilitates and speeds up the delivery of information to anyone, not limited by space and time.

Political Commitment from the Governor of West Java is one of the sub-factors that determine how a leader or Regional Head characterizes whether he has a Digital Leadership factor or not, although, basically, each region has its own concentration and focus of development. However, when viewed in West Java Province, the Governor and Deputy Governor of West Java Province are able to grow Political Commitment in the midst of the West Java Provincial Government to interact with the community as much as possible by utilizing ICT. But the most important thing, under the leadership of the Governor and Deputy Governor of West Java, a program was initiated to transform West Java Province into a leading province in the use of ICT, especially in bureaucratic practices within the West Java Provincial Government or what is called the Digital Province. The Governor and Deputy Governor of West Java then initiated the creation of a Technical Implementation Unit under the coordination of the Communication and Information Service of West Java Province which was given a special task to deal with the digital divide that still exists in West Java Province. So that with the political commitment possessed by the highest leadership in West Java Province, it is hoped that the direction of leadership with actions implemented is in line with what the community needs, to get public services that are easily accessible, not limited by space and time, and minimal expenditure, even as much as possible, the community can get public services without spending any money.

In addition to political commitment, efforts to improve operational efficiency as much as possible are one of the supporting sub-factors of digital

leadership that must be owned by a leader or regional head. Efforts to improve operational efficiency are also seen from the way the Regional Government of West Java Province uses ICT in the process of implementing bureaucracy. This effort was illustrated when the Governor and Deputy Governor of West Java initiated the establishment of West Java Digital Service which was given a special task to encourage the acceleration of West Java's transformation into a digital province or Digital Province, especially in the government bureaucratic sector. The establishment of West Java Digital Service itself is expected to be an institution that is able to create programs that are not only intended for the community, but can have a concrete impact and can also be used by the Regional Government of West Java Province in the process of implementing its bureaucracy. In accordance with its nomenclature, West Java Digital Service must be able to create programs or applications that can improve operational efficiency, implementation, up to the monitoring and evaluation stages. Then the question is why West Java Digital Service is likened to being the spearhead of efforts to improve operational efficiency. This is because West Java Digital Service can be said to be a StartUp "*Plat Merah*" which is indeed the formulation of the creation of this institution aimed at being able to produce ICT-based products that are able to cut bureaucracy, so as to increase operational efficiency of the performance of the State Civil Apparatus (ASN) within the scope of the Regional Government of West Java Province. Programs and applications made based on ICT are believed to be one of the concrete efforts made by the Regional Government of West Java Province to provide services to the community with more quality programs and policy products and of course the most important thing is, easily accessible to the community or effortless.

Then, in the Digital Leadership sub-factor, one of the important points that must be considered is related to digital skills. A leader or regional head who has a digital leadership spirit, digital skills are one of the important assets to then be able to carry out a digital transformation, especially in the public service sector. Proficiency in understanding technology, following technological developments, and being able to adapt quickly to the needs of the community for technology-based public services, will be an added value for a leader or regional head who has a digital leadership spirit. Because how is it possible, a leader or regional head can lead the digital transformation process in the bureaucratic sector, if the leader or regional head is not proficient in the use of technology, cannot understand how technology works, and cannot adapt to the rapid development of technology.

As in West Java Province, the Regional Government of West Java Province, under the leadership of Governor Ridwan Kamil, should be proud. This is because the Governor of West Java Province, Ridwan Kamil, has received several awards related to his technological skills. Some of them are, Top Digitial Implementation 2022 (4 Star / Level 4), Top Leader on Digital Implementation 2022, and Winner of Public Relations Indonesia Most Popular Leader in Social Media 2022 (Governor's Category). Some examples of these awards show that the digital literacy possessed by the Governor of West Java is beyond doubt. This further shows that it is important for a leader or regional head to have digital skills to then be able to lead the region or its existing agencies towards digital transformation,

especially in the public service sector.

Culture

In addition to digital leadership that can support success factors in the process of implementing public services based on digital transformation, there are also cultural factors that are also influential. In its implementation of the digitalization of public services, culture is quite a crucial role. This is because, if government agencies, such as the Regional Government of West Java Province, are unable to adapt to a new culture, namely technology culture, it is certain that the Regional Government of West Java Province will experience difficulties in its implementation to carry out a digital transformation, especially in the process of governance.

As for encouraging the success rate in the process of governance, especially to be able to carry out government functions in providing services to the community, there are several sub-factors, among which is, innovation. Innovation is a key when the Regional Government of West Java Province wants to transform into a digital province. Currently, with the presence of technology that has been increasingly qualified driven by the birth of the industrial revolution 4.0, able to produce technological products that can provide convenience and benefits to humans, as well as the emergence of smartphones. Smartphones are one of the instruments that can help, in this case, the Regional Government of West Java Province to present innovations in the process of providing public services to the community, especially based on ICT.

The *Sapawarga Jabar Super* App is one of the programs created by the Regional Government of West Java Province through West Java Digital Service in order to present innovations from public service processes. The birth of the West Java Super App *Sapawarga* program itself has basically become one form of innovation produced by the Regional Government of West Java Province. This is because, this mobile app-based program is a public service program that is felt to be able to provide convenience and positive impact on the community. In addition to the form of public services based on mobile apps, West Java Digital Service innovated this Saparwarga program, from what was originally only intended as a communication forum for all Chairmen of Rukun Masyarakat (RW) throughout West Java. However, currently the *Sapawarga Jabar Super* App application has been transformed into the *Sapawarga Jabar Super* App which is equipped with more diverse features and menus, especially in the form of basic public services that are usually the needs of the people in West Java Province. As well as public services for motor vehicle taxes, which are intended for motor vehicle tax payments and renewal of Driving Licenses (SIM) and Vehicle Number Registration Letters (STNK). In addition, there is also a feature for people who are currently looking for work, this feature will connect application users with the West Java Provincial Manpower and Transmigration Office (*DISNAKERTRANS*) which will later bring up companies that are currently opening job vacancies. In addition, there are also licensing services, both for building construction, company licensing, and other licensing models, where this feature is directly connected to the Public Service Mall (*MPP*) and the Investment and One-Stop Integrated Services Office (*DPMPSTP*) of West Java Province. Then there is also

information about the Al-Jabbar Grand Mosque, which is intended for religious tourism, both those who want to visit the Grand Mosque area, take part in the activities of the Taklim Council, and who will visit the Gallery of the Prophet Muhammad SAW. In addition, there is also a menu of Ir. H. Djuanda Forest Park (*TAHURA*), for West Java people who want to enjoy the city forest while exercising or just for tourism. Then there is also the One Family Data feature.

In addition to the public service category, there is also an education service category, where in this category there are several services, including the New Student Admission (*PPDB*) feature. Which in this feature, there are several types of services as well, such as *PPBD* school info then there is also *PPDB* socialization, *PPDB* Phase Two announcements, and also Hotlines. In addition to the PPDB feature, there is also a Student Bullying Complaint feature. Then there is also the Future Leader Scholarship feature, which is tuition assistance for D3, D4, S1, S2, and S3 levels intended for the people of West Java. These three features were initiated by the Education Office (*DISDIK*) of West Java Province. Then there are also categories for West Java information and data, such as the West Java Covid-29 Information and Coordination Center (*PIKOBAR*), which presents several menus, such as the Covid-19 case statistics dashboard both nationally and regionally, West Java Province. Then there is also a vaccination schedule feature, for people who have not or who need the Covid-19 vaccine, both from the first dose to the third dose, with various types of vaccines that can be tailored to the needs of the community. Then there are also West Java Open Data features, West Java Dashboard, Information Requests that can be used to find data and dig up information needed in West Java Province.

In addition to innovation, efforts to foster a culture in the process of implementing public services based on digital transformation are by starting opportunities to collaborate with various existing stakeholders, both with the public sector again, and with the private sector. A culture of collaboration is also important to foster in a world full of disruption. Collaboration allows each agency and organization to help each other, share with each other, participate in each other, and agree to take joint actions aimed at achieving a positive impact.

The Regional Government of West Java Province itself through the West Java Digital Service, initiated collaboration for various existing communities to expand exploration space as much as possible both in the fields of innovation, connection, and collaboration itself in West Java in a forum called West Java Community of IT (West Java CommIT) or West Java Digital Community (JDC). There have been many communities that have collaborated with West Java Digital Service it self, there are at least 122 partnerships between communities and organizations, and 2,220 alumni of TechUpdate and West Java Digital Community activities. Jabar Digital Service invites many parties to be able to join and collaborate together to be able to explore ideas and ideas and with collaboration, it will undoubtedly lead to innovations in the IT field. In addition, West Java Digital Community can also be used as an event or forum for the development of various digital products, both developed by West Java Digital Service and by partner communities and organizations. Then collaboration can also expand cooperation networks, so that program development and IT

development itself will be easier, both to get references, and as a forum for exchanging information on content, activities, and programs, both owned by West Java Digital Service and the community, which can support the realization of the ideals of West Java Digital Province. Then, most importantly, West Java Digital Community can also be used as a means to provide services to the community. As a service that moves with laws and regulations, both in the form of goods and services, services to be provided, as well as the development of IT-based government programs and policies. Below are some examples of West Java Digital Service partner communities and organizations in the 2022 period.
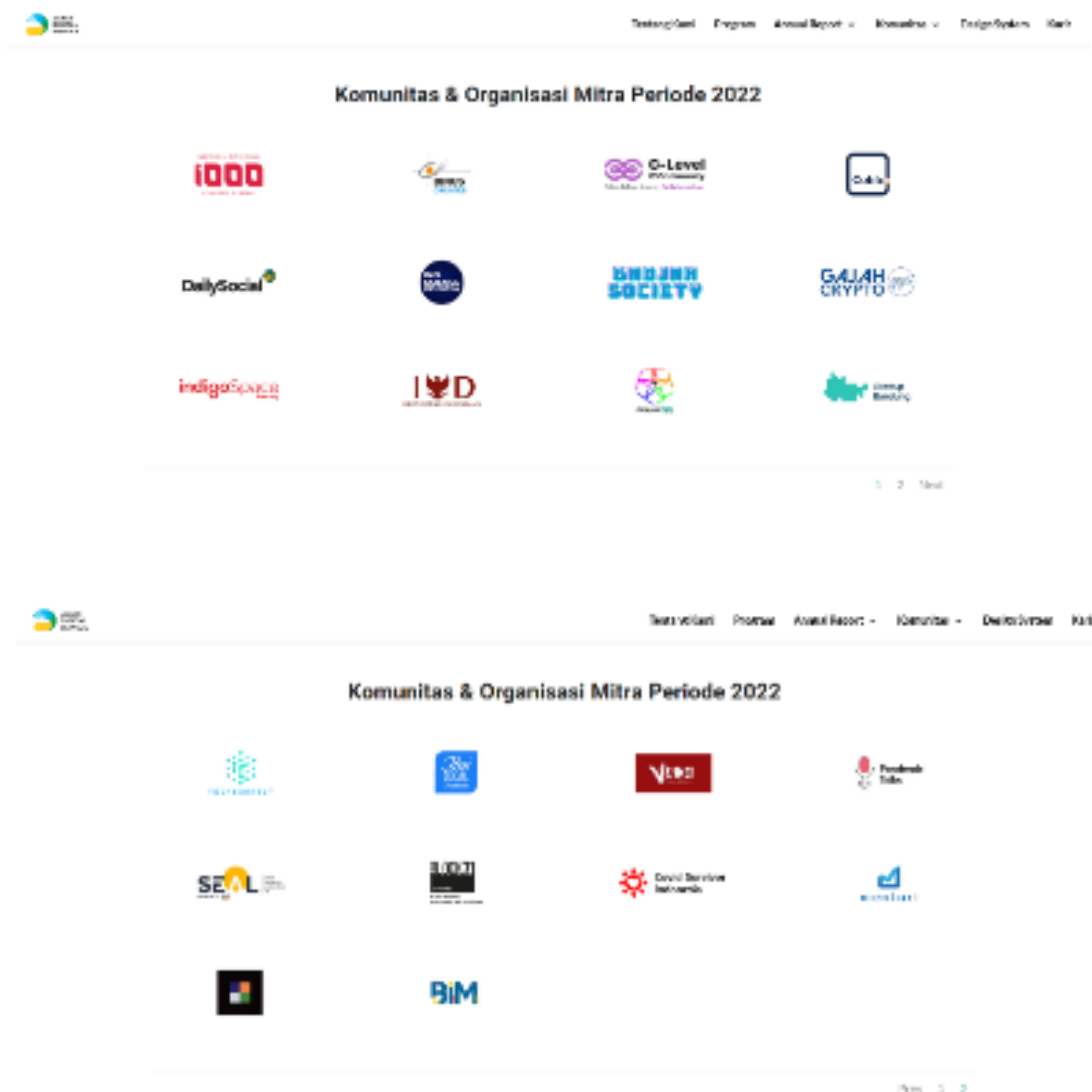

Figure 3. Komunitas dan Organisasi Mitra Jabar *Digital Service* Periode 2022
Sumber: Jabar *Digital Servive*, 2022

ICT Infrastructure

Infrastructure development in the ICT sector to implement ICT-based public services is one of the crucial points that cannot be abandoned. In the process of implementing digital-based public services, ICT infrastructure development must go hand in hand with various other needs that can support the success process of an ICT-based public service implementation. According to data from the Ministry of Communication and Information Technology of the Republic of Indonesia in 2019, the ICT infrastructure ranking in Indonesia itself is still ranked fourth in the Asian region, below Singapore, Malaysia, and Thailand.

The province of West Java itself is a province with an area of 35,777.76 KM2, which is divided into 27 Regencies/Cities. Not only that, West Java Province also has different geographical conditions. Some are urban, rural, mountainous, and coastal seas. With these different geographical characteristics, the process to equalize ICT infrastructure is one of the obstacles faced by the Regional Government of West Java Province. According to the Head of the E-Government Division of the Communication and Information Service of West Java Province, Agi Galuh Agung Purwa, based on data from the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration, in West Java Province alone, as of 2022 there are still around 600 blind spots. Blind Spot is a term used for a place that has not been channeled internet signal. In other words, ICT infrastructure in these 600 regions is not yet qualified, it can even be categorized as not yet there. Therefore, efforts from various stakeholders are needed to close the gap in infrastructure development in West Java Province as much as possible.

One of the efforts that can be done is to produce digital containers and IoT devices. What is IoT, IoT is the Internet of Things, which means all forms of aspects of human life are all connected with an internet connection or simply, is digitization. The existence of digital containers and devices can certainly produce and accommodate digital talents. Later these digital talents will be able to produce and develop every digital capability and digital device that can provide convenience for the community, both in the process of public services, improving the regional economy, and creating a new technology-based cultural culture. For the Regional Government of West Java Province itself, efforts to produce containers and digital devices can later be intended to meet the needs of the community and local government. Good for improving the discipline of the State Civil Apparatus (*ASN*) within the scope of the Regional Government of West Java Province. The *Sapawarga Jabar Super* App program still needs to be redeveloped so that it can be more useful for the West Java Provincial Government apparatus. So that the meaning of Super App can be more meaningful, because it can also be used by civil servants within the scope of the Regional Government of West Java Province. Both in the Merit System implementation process up to the MoNev (Monitoring and Evaluation) stage, the ASN mutation process, and so on.

As one of the products resulting from the development of digital innovation, the *Sapawarga Jabar Super* App application must be equipped with a qualified internet connection. It can even be accessed through a minimal internet network. In fact, it is a challenge for West Java Digital Service to be able to develop the

West Java Super App *Sapawarga* Application so that it can be accessed without using the internet network. This will certainly have a very positive and beneficial impact both for the people in West Java and by civil servants within the scope of the Regional Government of West Java Province. But again, this will be a challenge for West Java Digital Service to be able to develop the West Java Super App *Sapawarga* Application into an application that can also be used by the Government. This of course can be a separate consideration. Because the Regional Government of West Java Province and West Java Digital Service do not need to make other applications, so that in one application, the benefits can be included for the community and for the government, both in the process of public services to the community, as well as a means for coordination, supervision, and monitoring and evaluation for civil servants within the scope of the Regional Government of West Java Province.

Apart from the *Sapawarga Jabar Super* App application itself, the internet connection must also be qualified. Based on data from the Central Statistics Agency, as of 2021, West Java Province has 4,601 Base Transceiver Station (BTS) towers. The BTS tower itself is a transmitting station that is one of the ICT infrastructures.
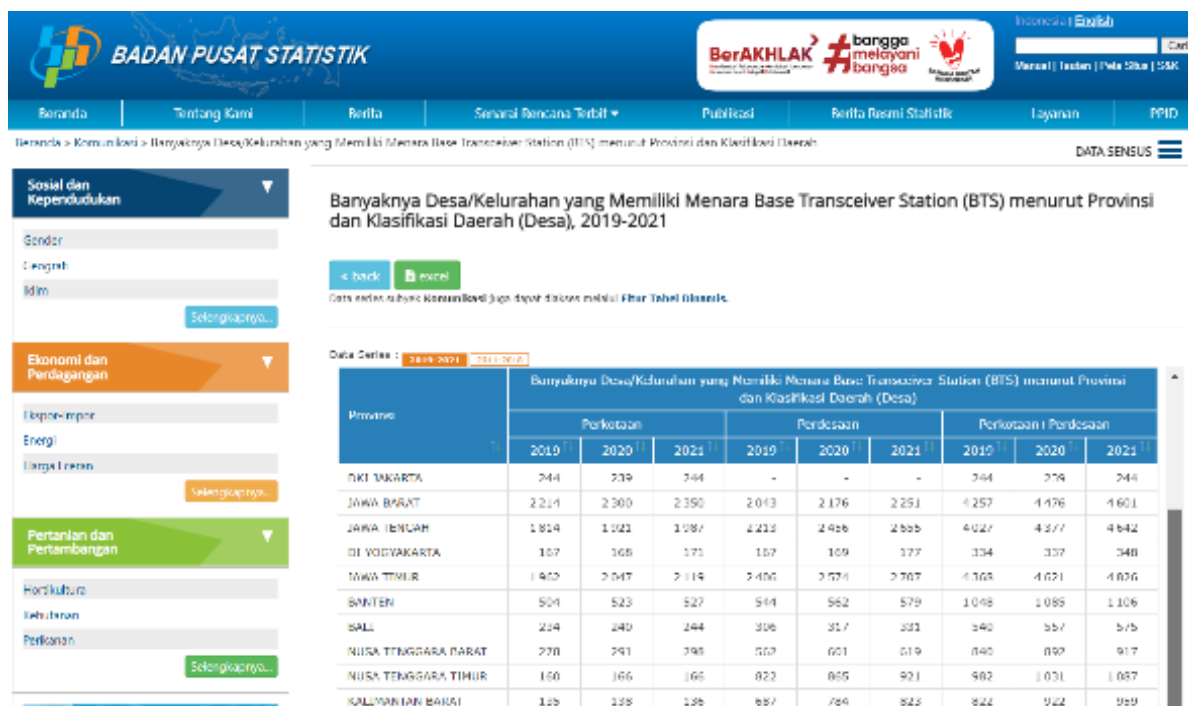

Figure 4. Number of BTS Towers in West Java Province (Urban + Rural)
Source: Badan Pusat Statistik, 2023

When compared to others on the island of Java, such as Banten, DKI Jakarta, DI Yogyakarta, Central Java, and East Java, West Java with the second largest area after East Java, of course it is still minimal with one of the ICT infrastructure in the form of BTS towers, this is reinforced by a statement from the Head of E-Government of West Java Province which states that in West Java

there are still around 600 blind spots. This indicates that the construction of BTS towers in West Java as one of the ICT infrastructures must be added and of course developed with a qualified connection network, so as to support the digitization process in West Java Province.

E. CONCLUSION

Based on the results of the analysis of the findings and discussion above, it can be concluded that this technology-based application program in the form of the *Sapawarga Jabar Super* App, has become an innovation program born by the Regional Government of West Java Province as a form of effort to transform the process of public services in West Java into digital. This is certainly in accordance with the ideals of West Java Province to make West Java Province a Digital Province. This also goes hand in hand with the Central Government's program to implement an Electronic-Based Government System. Even the *Sapawarga Jabar Super* App is also able to collaborate with several communities and organizations in West Java and even in Indonesia to be able to collaborate to create and develop technology products and be able to produce digital talents who can have a positive and beneficial impact both on the community and for the government itself, especially those within the scope of the West Java Provincial Government.

In addition, the *Sapawarga Jabar Super* App can also be felt to provide convenience for people in West Java, especially to get public services, without having to come to the office and not limited by space and time. However, as a technology-based public service program aimed at providing convenience to the community, the *Sapawarga Jabar Super* App in the process of its implementation, still has several obstacles that must be overcome by the West Java Digital Service as the developer of this *Sapawarga Jabar Super* App. Just as the number of application downloaders is still inversely proportional to the population in West Java Province, then there are obstacles to the development and development of ICT infrastructure in West Java Province which still has several blind spots. Contains conclusions and recommendations written in one paragraph. The conclusion of the study was based on discussion and did not repeat the results of the study.

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