

Regional Capacity Improvement to Provide Digital Services

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Abstract. This research was conducted to analyze the performance of regional public services towards smart cities through e-Government. The need for digital services is increasing today. For this reason, local governments need to increase capacity to respond to changes in electronic-based services. The study was conducted with a descriptive qualitative method. The results show that service delivery can be achieved well through infrastructure support, efforts to implement Smart City master plans, and public readiness to receive digital-based services. This study recommends strengthening local government institutions and digital service policy frameworks; and preparing the urban empowerment development.

Keywords: Regional Government Capacity, e-Government, Smart City, Digital community, public services

1 Introduction

The Digital Era requires local governments adapt to information technology to optimize public services. Smart City has become an instrument that helps local governments provide fast and unique public services. This concept arises because it introduces new practices and services that greatly influence policy making & planning. [1, p. 4]. Smart City is a tool used to provide a variety of new services that result from the actualization process. This service is part of the government's task to create a better city. For this reason, cities are not only built to meet physical needs, but also support information technology-based services. Current urban development depends not only on physical and social infrastructure, but also on the availability and quality of Information and Communication Technology [2, p. 93]. This shift in Smart City development not only meets the availability of infrastructure, but also the availability of information technology that speeds up public services.

Smart City implementation faces several obstacles in providing public services. Infrastructure constraints, network connections, and outreach to the community are the causes of the lack of public access to technology and the internet [3, pp. 127–128]. Some of these things become a challenge when Bandung implements smart cities. In realizing

the Smart City, it takes the same understanding and response from stakeholders to improve the quality of service. Smart City implementation requires information systems that reduce various problems that occur in direct contact services. Direct contact services are vulnerable to maladministration practices, which violate administrative ethics or administrative practices that are far from the goal [4, p. 22]. Ethical behavior is one of the problems that occur in public services. For this reason, the importance of e-Government is to reduce errors in service delivery practices.

The development of smart cities in Indonesia is growing rapidly, although there is no clear legal basis in Indonesia [5, p. 206]. Furthermore, previous research conducted by [6, p. 194] concluded that there were two obstacles in realizing smart cities in Medan, which is uneven infrastructure in supporting ICT use and the problem of the unpreparedness of human resources to use ICTs in government and public services. Another study conducted by [7, p. 78] provides suggestions to develop Smart City that requires deeper studies related to the readiness of local governments. Thus, the problem of implementing e-Government in strengthening smart cities is a problem with the device and the lack of responsiveness of local governments.

This was also explained through research on the Implementation of Public e-Government in Service Based Institutions in Palu City conducted by [8, p. 278] which concluded that the Palu Government was "not serious" in supporting e-Government implementation, HR development, infrastructure, and unrealized budgets. The integration of Smart City in public services based on information systems still faces challenges from the community and the local government itself. Furthermore, this study raises the issue of how the performance of Local Government Public Services through e-Government to create Smart Cities.

2 Research Method

This research is a qualitative research method. Qualitative research is a form of social action that stresses on the way of people interpret, and make sense of their experiences to understand the social reality of individuals [9, p. 2]. To obtain data, researchers used instruments in the form of in-depth interviews and field observations and then analyzed by non-statistical methods. In the main, the quantitative data are obtained through closed-ended questionnaires and the qualitative data through open-ended questionnaires, interviews and classroom observations [10, p. 254]. The study was conducted in several regions that adopted Smart City, i.a. Semarang City, South Tangerang City, and Banyuwangi Regency.

The method of data collection is done by using the data source triangulation technique. The interview process was carried out on several numbers of informants who were in the Office of Communication and Information, as well as news from print and electronic media. Besides, excavation of archives, investment data and questions and answers were conducted with informants. While the data processing researchers conducted data, reductions conducted by researchers from throughout the research process.

3 Results and Discussion

3.1 Results

Information Technology Infrastructure is the basis for the delivery of electronic services by local governments. Hole (2011) on [11, p. 36] Conceptually, the basic concept of e-Government is how to provide services through electronics, such as the internet, cell phone networks, computers, and multimedia. E-Government has become a channel of government transparency to the public through electronic-based services. E-Government services with open data systems will encourage public services that are integrated and transparent [7, p. 60]. In addition to transparency, data and information integration is also used to support decision making in community services.

The development of IT-based service applications prepared by the government were initially carried out by a third party. Furthermore, the development of service applications in e-Government can be well mastered by the Office of Communication and Information (Diskominfo). IT-based services get recommendations and collaborate with Diskominfo in guiding the architecture of IT service applications. The presence of this infrastructure can increase the interaction of local governments with the community and business actors in a reciprocal manner to bring service speed. Infrastructure is the main resource that is important for attracting public participation in recognizing various web-based services provided by local governments. This broad scope is evidence of the government's commitment to focus on improving service quality.

At this moment, Diskominfo is trying to increase its capacity to make software as needed. The ability to transfer knowledge has been the task of this agency to ensure the continued use of service applications, with prerequisites: 1) the application is open-source software. Open-source software is a program that gives users freedom for all purposes, to study, modify, and redistribute copied material without having to pay royalties to previous developers (Wheeler 2003) on [12, p. 26]. 2) Web-based, 3) knowledge transfer takes place to Diskominfo, 4) basic raw materials of the software is given in full. The fourth requirement is Diskominfo efforts to integrate software applications, facilitating the development of application services, and generate data that are different from the previous service applications. Electronic services are also supported by Diskominfo as software houses.

Furthermore, Diskominfo becomes an institution that bridges other agencies to get the right application as needed. Also, Diskominfo encourages collaborative efforts with other agencies to develop applications and utilize data and information from service applications. Transformation occurs changing the function of the duties of Diskominfo by taking the role of mediator for the provision of integrated public service application services. Besides, the guarantee of implementation requires the support of various stakeholders and is institutionalized through regional regulations. The guarantee is obtained from the continuation of the development and evaluation of the implementation of e-Government in the implementation of smart government, which is a dimension of the Smart City carried out together with the Smart City council. The implementation of electronic services is also supported by planning policies that are incorporated into the Smart City master plan that seeks to internalize every policy and activity of the local government.

Public services through IT are to facilitate the community in implementing Smart Cities. The development of the city towards Smart City begins with the use of information and communication technology, which is usually a part of priority problem [13, p. 4]. In this condition, the local government began by preparing various infrastructure and application tools to meet the delivery of public services. Strategy mapping in Smart City is used to

accelerate IT development in the pre-planning period of 5 to 10 years. Smart governance emphasizes an approach through business processes to create a government that has planned steps to meet service standards. Every smart government master plan prepared by local governments emphasizes the integration of databases and basic data as raw materials for preparing strategic policies. For other dimensions in Smart City, IT-based service delivery is also prepared as a quick response to community needs. Infrastructure in the form of buildings is also needed to support community activities.

The number of applications-based electronic services are a way for local governments to guarantee the performance of their public services. The web-based application is demanded to be able to integrate data and information for service delivery so that in the future, it can serve the needs of the community in remote areas, even though it is currently not yet realized because there are still many service applications that need to be optimally integrated. For this reason, almost all applications that support e-Government are built and coordinated by Diskominfo to guarantee the continuity of service delivery in the future. Avoiding field problems that often occur, namely if there are obstacles in the IT-based service must coordinate with third parties/partners so it needs time to be fixed.

Service application architecture can be replicated by other local governments that need and have certain characteristics. This explains the reusability, flexibility and inherent nature of the service application created. Transparency and completeness of information by government agencies are also a standard imposed on the development of this web-based service. In addition, other standards were built to save time and service lines that have standards. The next standard is to provide applications that eliminate unnecessary service costs and make them cheaper. Raising standards in web-based services will encourage the participation of other actors.

E-Government brings government interaction with the community closer. The provision of services can provide satisfaction to the community. Services provided at the village government level provide almost 24-hour service hours. The presence of web-based services offers various facilities for its users of services. This ease is obtained by easily accessing various online services that are so fast, easy, and inexpensive. E-Government was born because of the demands of the times, changes and streamline previously slow services, to become more effective and efficient [14]. In the implementation of e-Government services very closely the involvement of the community as consumers and users. Community involvement through the use of service applications and accessing services with the most technological devices available today. The ability of the community to be able to be literate in information technology is an opportunity for service providers to introduce application devices and information technology in providing services to the rural areas to the remote areas of local governments. The high enthusiasm of the community to support local government programs in the form of IT-based services also have its challenges by looking at the response of the community at certain age groups. There are still and there are groups of people in certain groups who are technology blindly, but in general, the community gives an appreciation of what the local government does in providing services through technology so that the community has consciously felt that technology has become a community culture in using services in using applications.

The general public wants services and fast response from service providers. The egalitarian service delivery model is used as a starting point for local governments in responding to the desired community service culture. Service delivery has principles that must be understood by local governments by ensuring a better quality of IT-based services and perfecting previous service delivery. This was explained by [15, p. 2129] that the

principles of public service are used as an effort to improve quality in the provision of services to the public sector including in this case as a basis for the development of e-Government. For this reason, understanding the principle of service delivery must be known to government officials to meet the quality standards of service expected by the public. E-Government was born because of the demands of the times, changes and streamline previously slow services, to be more effective and efficient [14]. Public complaints about service delivery were the start of the formation of smart people in organizing smart cities. Public complaints about the use of electronic services have become a control function for local governments to improve services. The public is invited to criticize and maintain various policies in the form of services needed in implementing smart cities.

3.2 Discussion

E-Government is an information technology system developed by the government to improve public services by giving choices to the public to get easy access to public information [16, p. 2]. The government makes it easy for the public to receive services as needed using the application. E-Government is a service innovation carried out by local governments. Smart cities need a variety of innovative services that provide information to all citizens about all aspects of city life through interactive and internet-based applications [17, p. 39]. Interaction between the government and the population is a major aspect of providing services to the community through various application support that is provided and integrated with each other.

According to [18, p. 187] The use of information and communication technology in people's lives is a major need in developing a knowledgeable society. The use of information technology is changing the culture of people in receiving smarter and closer services. The e-Government implementation is part of the basic construction of smart cities. The Smart City approach sees the importance of continued use and development of software to meet service needs of the community. In addition, the development of public IT services not only facilitates but also the efficiency of financing. A web application based services provides an understanding of the openness and transparency of public information. Service providers must always open data to the public in order to know the extent of the achievement of government performance in terms of service delivery. Everything is to meet the satisfaction of services delivered to the public. People who are not familiar with the use of information technology is assisted by responding officers who are always ready to provide the best service.

Service delivery strengthens understanding of service with open data integration. Web application based services provide an understanding of the openness and transparency of public information. The importance of service providers always discloses data owned by the local government to the community so that the community knows the services and performance achievements of the government from the aspect of service delivery which is closely related to the vision and mission of the local government. The whole thing is to fulfill the satisfaction of the services delivered to the public. Communities who are not literate with the use of information technology are prepared by employees who are responsive in helping with the willingness and readiness of employees to help customers and deliver services quickly.

The concept of an advanced society in the current era became the basic construction of the culture of digital society. E-Government services in organizing Smart City have an information technology base that brings people closer to the use of various devices that are connected to the internet network which in turn encourages people to become internet-

connected communities. "Digital citizenship" is the ability to participate in society online [19, p. 2]. Educating the people to change the pattern of utilization of electronic services requires efforts to campaign and disseminate the use of information technology-based services to the public at various opportunities for local government activities. The community is the beneficiary in developing services in the Smart City dimension by inviting the public to participate by using the available information technology infrastructure.

Service delivery involves interactions between people and service providers (operators). Electronic service delivery seeks to minimize meetings between the public and service providers, which often leads to maladministration. E-Government can minimize the occurrence of maladministration in the provision of public services. Maladministration is a scourge for the community in receiving services outside the provisions or actions that can harm the community. The concept of bureaucratic maladministration was further developed by Peter (2003) in [20, p. 56] bureaucratic maladministration occurs because there are no clear targets to achieve, there are no indicators in measuring service performance, doing several cases without stick to the principle of virtue, have no competence in the work done, and be dogmatic. Maladministration no attempt to improve the quality of service and does not provide benefits.

Besides, efficiency becomes more valuable in the administration of e-government services. It appears that the real use of paper, minimal use of paper and time to visit the community where the service is an impact on the implementation. This is a form of internal factors, namely "personal factors of people who commit mal-administrative actions. This factor is in the form of an intention, willingness, and impulse to grow from within a person to carry out mal-administrative actions." (Irmandani, 2018, p. 6). Interaction between a service operator with a community if you do not use online applications or website-based service applications, there will be a very intentional error that is an internal factor of the employee. Digital literacy of employees and the community is jointly constructed to ensure the continuity of the delivery of electronic-based services.

Furthermore, electronic-based services are becoming a new trend in entering the digital age with very little or less work. This is a form of internal factors, namely the personal factors of people who commit maladministration. Internal factors are formed with the intention, willingness, and drive to grow from within oneself to perform maladministration actions [21, p. 6]. Interaction between service operators and people if they do not use online applications will potentially lead to errors. Digital literacy for employees and the community must be built together to ensure the continuity of electronic-based service delivery.

The services provided certainly have an impact on people's behavior that is demanded to change by adjusting the new website-based service mechanism. Most people at a certain age need to be familiar with internet technology as a technology that supports service delivery. Communities quickly adapt to new mechanisms in the delivery of government services. Digital literacy is a separate and common challenge that may occur in service delivery. Information technology has considerable benefits in influencing changes that occur in the current era. The cultural backwardness of the community needs to be addressed to minimize the various perceptions and mechanisms that are wrong with the service provided.

4 Conclusions

Performance of Local Government Public Service via e-Government for Smart City can be achieved through the support of the IT infrastructure by strengthening communication and

information services at the regional level as a manager and quality assurance of electronic services. Public services through e-Government for Smart City are carried out through the Smart City Masterplan to have quality electronic services. The Master Plan is strengthened by preparing service applications that are guided by the regional Office of Communication and Information (Diskominfo). These agencies serve as the driving institutions to strengthen digital literacy in internal local government through the integration of smart government. The implementation of public services through e-Government for Smart City is based on people's readiness to receive digital-based services. The implementation of public services through e-Government for Smart City is based on people's readiness to receive digital-based services. This readiness is achieved through the transformation of IT development and service delivery mechanisms.

It is necessary to strengthen the local government institutions to carry out the transformation of digital-based services. Furthermore, it will accelerate services, service coverage, infrastructure, and strengthen local human resources. The approach taken is collaborative through the completion of the task function in pursuing the application of smart government in the realization of a Smart City. The need to strengthen the digital service policy framework by emphasizing the exchange of information in a digital system that is integrated into a smart government architecture. The need to prepare the construction of urban empowerment by making the community as customers who can interact with information technology and digital mechanisms that provide comfort in doing and receiving services.

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