

Single Windows Model Through Tangerang LIVE In Smart Governance Policy

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Abstract – Electronic government is one of the studies in smart governance with the achievement of levels ranging from *Emerging*, *Enhance*, *Interactive*, *Transactional*, and *Connected*. The single windows model that has been implemented by local governments such as Tangerang City through Tangerang LIVE is an achievement at the *Connected* level, but its implementation requires commitment from both the government and the community as the implementation of e-government policies. Therefore, a study is needed to see the extent of the success of Tangerang LIVE in creating smart government. The purpose of this study is to determine the application of Tangerang LIVE as an integrated service in Tangerang City. The research uses a post-positivism approach using qualitative data collection methods, and the data collection techniques were interviews, observation and documentation. The result of this research is that Tangerang LIVE is a technology-based public service innovation with one handheld service that can be utilised by the public to obtain various services from the Tangerang City Government. However, some of the findings include that not all people have used Tangerang LIVE, this is due to constraints in the ability of the community to use technology. In addition, there are problems with the system and the operator's response to verifying users. The integrated service model in Tangerang LIVE has not fully accommodated all types of services, limited to a few transaction features.

Keywords: *Smart governance, Single windows, Tangerang LIVE*

1. INTRODUCTION

The rapid development of technology and the environment at this time is a phenomenon that cannot be avoided and continues to grow. This phenomenon also requires each country to adjust to become a party that is not backward and expects the realization of efficiency and effectiveness in various countries in the world today. This is referred to as the current era of the industrial revolution 4.0 where digitalization is a situation faced in the era of technology is not something that is considered new in life. The era of industrial revolution 4.0 is defined as an industrial era where all entities in it can communicate with each other in real time at any time based on the use of internet technology [1]. Advances in Information and Communication technology require changes at this time, the patterns and ways they are carried out are in activities in all sectors, industry, trade, especially government.

The current technological sophistication that has been applied to various fields of government such as life, economy, industry, health and others to support the achievement of the effectiveness and efficiency of public services to the community. These efforts are made by the government to realize *good governance* in the community in using information and communication technology. Currently, cities in Indonesia have implemented the concept of *smart city* and become a desire as a solution in solving problems in urban areas, such as increasing population, decreasing service quality, traffic congestion, increasing crime rates and other social problems. According to IBM, smart cities are divided into six dimensions, including: *smart economy, smart mobility, smart governance, smart people, smart living, and smart environment* [2].

The complexity of the problems faced by local governments requires innovation as a smart solution. One of them is through the utilization of information and communication technology in city management, known as the smart city concept. Smart City development in this case does not just prioritize bureaucratic efficiency by utilizing information and communication technology (ICT) but also how to build communities by making ICT infrastructure and facilities a supporting factor or

enabler. Integration of public service systems is one of the main pillars in realizing good governance [3]. At the integration stage of e Government information and services, three main classifications are created, namely e information, electronic services and e participation [4].

Smart governance is a part or dimension of smart cities that specializes in governance. The policy target of a city is the creation of sustainable development and digital inclusion [5]. The cooperation between the government and the community is expected to realize clean, honest, fair and democratic governance, as well as better quality and quantity of public services. Smart governance consists of three parts as follows: 1. Public participation in decision-making directly or online. 2. Increased quantity and quality of public services. The implementation of smart cities in this case utilizing information technology can be done by providing web-based and mobile information systems for public services (making ID cards, driver's licenses and others), providing effective, time-saving, and automated financial administration/payment services (electricity, water and other payments) and the existence of a structured and well-organized database in storing data and information related to public services. 3. Transparency in government, so that the public becomes informed and intelligent [6].

In the study of smart governance, one of them is related to e-government, which is a government work system based on information and communication technology to provide public services and improve government efficiency. E-government allows people to access public information and services online, making it easier for people to interact with the government. E-government can also increase government transparency and accountability, as well as reduce administrative costs and time required to deliver public services. Smart city governance demands citizen participation and inclusive policies, Information technology significantly affects the Smart City Governance Index [7].

Tangerang is one of the cities that is implementing the *smart city* concept to solve city problems and improve governance. Tangerang is one of the buffer cities for the capital city of DKI Jakarta, so it must be able to support it, especially in terms of population growth. Jakarta residents who migrate to Tangerang City cause the population growth to increase so high that now the population of Tangerang City reaches 2 million people, which makes Tangerang City more crowded. Tangerang City has a vision, namely: "The realization of a Prosperous, Moral and Competitive Tangerang City". In realizing this vision, Tangerang City is trying to realize it through *Single Windows* which has 2 applications, namely for public services and government management. The application used for public services is called Tangerang LIVE, which contains several menus. Tangerang LIVE has the tagline "One Service in One Hand". Tangerang LIVE aims to facilitate the public in obtaining public services. Starting from stand-alone applications, with the existence of Tangerang LIVE, the public can easily find all services by downloading just one application.

In improving public services to the community, the government of Tangerang City takes technology development very seriously. One way to improve public services to the community is through the Tangerang City Government application portal. The features of Tangerang LIVE are tailored to the needs of its users, thus, increasing public interaction with the Tangerang City Government [8]. High-quality digital infrastructure prepared by the local government can increase the adoption of e-government [9].

In an effort to improve the efficiency and transparency of public services, the Communication and Information Office of Tangerang City faces bureaucratic complexity. Adopting the *Single Windows* concept became the solution to simplify administrative processes, address the unclear licensing requirements, and build a solid foundation for data management. Through this implementation, the Tangerang City government not only accelerates public services but also supports the international trade process. Tangerang LIVE, Tangerang City's public service portal application designed to improve the quality of public services and facilitate access to various services, is expected to create an efficient, integrated, and transparent environment, supporting economic, social, and cultural development in the region.

Various supports have been provided for the implementation of Tangerang LIVE, but several obstacles are still found in its implementation. Based on the results of preliminary interviews conducted both with Diskominfo employees and with the people of Tangerang City in December

2023, there are service features that are not active and updated, even though the budget has been given quite large, service management is less responsive to complaints from the community due to the commitment of human resources, and the slow process of entering the application. Another obstacle is related to public participation that has not been optimal in accessing Tangerang LIVE services, one of which is related to socialization that has not been optimally carried out evenly, continuously and consistently.

Based on the background description above, it is necessary to further study the implementation of smart governance through Tangerang LIVE in Tangerang City as a commitment to smart city development. In addition, the study is expected to find factors that hinder the implementation, so that it can provide input for the Tangerang City Government, especially for improvement steps in the implementation of Tangerang LIVE.

2. LITERATURE REVIEW

The implementation of e-government has been implemented by various local governments with system and application innovation models. In its development, the application of e-government by the Regional Government has increased in the integration phase, where government services are interconnected and interconnected which can make it easier for the public to obtain services through one portal commonly referred to as single windows. According to Kurniawan's research [10] that not all licensing services can be accessed through the Surabaya Single Windows (SSW) website. The Surabaya Single Window website has been integrated with all Regional Apparatus Organizations (OPD) of Surabaya City and has access to openness or transparency as seen from public access. However, the website does not yet have good security features to protect personal data and privacy and licensing that has not been well organized only displays the procedure [11].

The implementation of e-government in South Tapanuli Regency is quite effective in realizing smart cities in the midst of increasingly sophisticated technological developments [12]. Another study on single windows by Novian [13] that the factors that determine the satisfaction of the people of Depok City with the Depok *Single Window* (DSW) application service are readiness and accuracy in providing services, handling complaints and communication and the value of the level of satisfaction of the people of Depok City with the Depok *Single Window* (DSW) *application* service of 71.51% with the satisfied category.

Some of the research studies above have in common where local governments are trying to start massively in developing an integrated service system through single windows, although the implementation has not been optimal with various obstacles faced by their respective regions. This is also the case for Tangerang City, which is implementing Tangerang LIVE as a single windows model.

The research study on coordination between the Communication and Information Agency and the Population and Civil Registration Agency of Tangerang City is said to have run well through Tangerang LIVE [14]. Then another study mentioned the government's strategy related to the media's ability to deliver various forms of messages and information through the Tangerang LIVE application, the media's ability to provide direct feedback, personalize messages and show language variations [15]. In addition, another study mentioned that Citizen Support and Trust are the top priorities to be improved in the Tangerang City online licensing service [16].

Interest in using Tangerang LIVE is directly influenced by perceived usefulness and perceived convenience [17]. System quality, information quality and service quality are proven to have a positive and significant impact on user satisfaction [8]. The Tangerang LIVE application has not run optimally due to the lack of quality Human Resources (HR) and the absence of a clear legal basis in regulating the implementation of the Tangerang LIVE application [18].

Based on several previous studies, it is clear that Tangerang LIVE generally provides benefits to the community, especially in terms of faster and easier services. Although mentioned in several previous studies, there are still problems in its implementation. The research to be studied focuses on the application of the single window model or integrated system services through Tangerang LIVE as a commitment of the Regional Government in developing e-government to achieve smart

governance, so the novelty of this research is how the commitment of the Regional Government in implementing integrated services through e-government studies.

3. METHODS

This research uses a post-positivism approach using qualitative data collection methods. The selection of qualitative data collection methods is carried out with the aim of describing data based on expressions, language, thoughts, and views of the research subject, thus providing a deep understanding of the object being studied.

According to Sugiono [19] in qualitative research the researcher is the core component. This research is part of descriptive research that provides an analytical description of the dynamic capabilities of Tangerang LIVE as an integrated system service that is part of the smart government policy. The data used is primary data obtained directly from interviews and observations. In-depth interviews were used to gain a deeper understanding from the perspective of the stakeholders involved in the operation of Tangerang LIVE as a service based on information technology systems. The informants were determined purposively, namely representatives of the Tangerang City Communication and Informatics Office, as well as users of the service. In this study, observation was conducted by directly observing the Tangerang LIVE application service, as well as the operating system features in Tangerang LIVE.

Secondary data is information that is not obtained directly from the object of research. Researchers obtain secondary data through data collection techniques such as literature studies or documentation studies, which involve tracing previous studies through scientific journals, laws and regional regulations.

The data analysis method in this research refers to the qualitative analysis approach described by Miles and Huberman (1984)[19]. The qualitative analysis approach applied is an interactive analysis model, which requires a four-stage process, namely data collection, data reduction, data presentation, and conclusion drawing/verification.

4. RESULTS AND DISCUSSIONS

4.1. Smart Government Policy in Tangerang City

The development of increasingly sophisticated technology makes the smart concept not only applied to devices, but also applied to various systems and arrangements. The Smart City concept is a concept that organizes a city order so that it can play a role in facilitating the community in getting information quickly, precisely and in real time [20]. The Smart City concept is considered as a solution in dealing with urban problems such as infrastructure development activities, congestion, public safety to providing good services to the community. Currently, the Smart City concept is a concept that is widely adopted by cities / districts in Indonesia, this is due to the encouragement of the central government in realizing the Movement Towards 100 Smart Cities which aims to guide city / district governments in developing the Smart City concept. However, the development of the Smart City concept needs to meet the prerequisites in its formulation, such as adequate infrastructure, internet networks, human resource capabilities and supporting organizations. Currently, it is undeniable that Smart City implementation is rampant in several regions, such as Tangerang City, which has begun to develop and implement the Smart City concept.

Tangerang City was formed and developed around Jakarta, which is also the center of national economic activity [21]. The Smart City concept began to be implemented by the Tangerang City Government since 2016 through the creation of the Tangerang LIVE Room and is in line with Tangerang's vision, namely LIVE which is an acronym for LIVEable, Investable, Visitable, and E-City based on technology, information and communication (ICT) which seeks to make employee work systems and community services faster, more efficient and effective [22].

The Smart city concept of Tangerang City is outlined in Tangerang City Mayor Regulation No. 108/2018 concerning Tangerang City Smart City Master Plan 2017-2027. This is to realize integrated infrastructure development that is able to answer the needs of the community and the interests of business entities. This is done by taking into account the spatial structure of the region,

so that it is necessary to prepare a medium-term infrastructure investment plan and program that integrates development activities between sectors, regions, and sources of financing. Based on the Tangerang city smart city master plan 2017-2027, it has indicators that are used as benchmarks for its achievement, including smart living, environment, utility, economy, mobility, and people [23].

Tangerang City also has several policies in order to improve the capacity of the Local Government with technology-based performance, namely the Mayor's Regulation Number 25 of 2024 concerning Electronic-Based Government System. The policy aims to implement an electronic-based government system as an effort to modernize and simplify administrative processes and improve the quality of public services. Create a more efficient and accountable government by reducing the use of physical documents, speeding up administrative processes and ensuring that government information and policies can be accessed by the public in a transparent manner. Encourage the integration of various existing government systems and applications into a connected digital platform. The regulation also accommodates the strengthening of information and communication technology infrastructure that can be deployed to support the operation of electronic-based government at all levels of local government.

In line with the electronic-based government system policy, Mayor Regulation Number 26 of 2021 concerning Guidelines for One Data Indonesia Management in Tangerang City. This regulation emphasizes the importance of integrated data management at all levels of the Tangerang City government, to support more efficient, accurate, and targeted policies, programs, and public services. Provides guidelines on data governance that includes data collection, processing, storage, and distribution in a transparent and standardized manner, in accordance with the principles of Satu Data Indonesia that have been established by the central government. Creating a more structured, integrated, and transparent data system. With better data management, the government of Tangerang City can improve the efficiency, accountability, and quality of policies and public services, as well as encourage more accurate and relevant data-based decision making.

From the various policies above, Tangerang City is trying to integrate various services with one system and interconnect the various services needed by the community. Smart Government by integrating service systems in Tangerang City is implemented through the Tangerang LIVE program, which is a representative single window, a one-door service that will provide convenience for the public to access various services in Tangerang City through one hand.

4.2. Tangerang LIVE Services

Single Windows is a one-door service system that is integrated with each other to facilitate access to information and services. Tangerang City has a tagline of one service in one hand, which is in line with the concept of single windows that tries to integrate system services in one door or portal. Tangerang City has a system in the form of an application called Tangerang LIVE, an android application portal provided by the Tangerang City Government as a medium of communication, information delivery and provider of various services that aim to provide convenience to the community [24]. The Tangerang LIVE service makes it easy for residents of Tangerang City to access services [25]. This application is presented as a single windows model of system services that were originally different systems which then made it easier for the public to find all services by downloading just one application, because the system was integrated. until June 2024, 1,158,331 users had downloaded it, with 455,074 verified users [26].

Tangerang LIVE has an acronym in the word LIVE which stands for LIVEable, Investable, Visitable and E-city. The Tangerang LIVE application has 12 services and 34 menus that can be utilized by the entire general public and especially the City of Tangerang. Starting from population services, information, complaints to daily needs. The various types of services in Tangerang LIVE include population services, information services, licensing services, complaint services, health services, economic services, Islamic services, employment services, education services, welfare services, neighborhood services, emergency services and statistical and geospatial services. Each service feature has more specific sub-services that are directly integrated into the service centers available in Kota Tangerang.

In order to socialize or introduce Tangerang LIVE to the public, the Communication and Informatics Agency of Tangerang City has launched several programs so that the public can learn and get to know more about Tangerang LIVE, including the first, SANJUNG (Tuesday Visits), which is held every Tuesday in the city control room. Tangerang LIVE Room, this program is an education and tourism center where the public can learn more about the history and programs published by Tangerang City, especially the benefits and functions of the Tangerang LIVE application. Exhibition program, which explains the existing features and how to use the Tangerang LIVE application. The forum with the people of Tangerang City is held in sub-districts and urban villages, this program is conducted twice a week so that the community has no difficulty in finding information and explanations about the features and services contained in the Tangerang LIVE application. The Tangerang City Government also conducts routine socialization activities in schools, universities, sub-districts, urban villages, and also invites RT and RW as community cadres. The government also uses social media as a means of communication to the public, print media and billboards.

In its implementation, Tangerang LIVE does not escape the challenges and obstacles faced, there are several issues that the Tangerang City Government then needs to formulate strategies to overcome them. The obstacles faced by the Tangerang City Government in running Tangerang LIVE are the ability of access by the community, that not all people in Tangerang City understand the development of technology and are able to use technology, so there is a digital divide in the sense that the ability to adapt technology by the community is limited. The Tangerang LIVE application is mostly accessed by those who are more technologically savvy, namely those aged 30-49 years [27]. This digital divide is also related to the ability to own access to technology in communities with below-average incomes, so that technology is still considered a luxury or tertiary need.

5. CONCLUSION

In order to improve the efficiency and transparency of public services in Tangerang City, the Communication and Information Agency adopted the Single Windows concept through the Tangerang LIVE application. Despite the success in implementation, there are still obstacles such as lack of public understanding, inadequate quality of human resources, and digital divide in the use of technology. The government tries to overcome these obstacles through various socializations, both in person and through social media, and human resource development. Regular evaluations are conducted to ensure the performance of the application and to continue developing features to improve the quality of public services. The implementation of the Tangerang LIVE program in Tangerang City is the government's effort to accelerate public services through the smart government policy, which is one of the dimensions in the scope of the smart city being developed by the Tangerang City Government. With the Tangerang LIVE application, the achievement of smart government has reached the stage of connecting one service system with another for the effectiveness and efficiency of the Regional Government's performance.

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