

E-Government Towards Smart City: Using of the "SIKESAL" Application to Improve Public Services in Jambi City

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Abstract: The use of applications by the government is one of the ways to provide public services today due to the rapid development of technology and information. Therefore, this study aims to explain using the "SIKESAL" application created by the Jambi City Government to improve public services. This research method is qualitative, using a descriptive approach. This study uses NVIVO 12 plus software to analyze the data. Findings in this study, the "SIKESAL" application has a main menu with the name "send the report" used for reporting. The application also has a menu that contains an archive of complaints that have been reported, as well as seeing responses from regional organizations. The actors involved in using the "SIKESAL" application are the Jambi City regional apparatus organization and the application user community. The Department of Communication & Informatics has a role as the leading implementer and the secretariat of complaints. Then the response of the people of the city of Jambi using the "SIKESAL" application is dominant to negative. The adverse reaction to using the "SIKESAL" application is more for technical reasons so that the essence of public services is disrupted.

1 INTRODUCTION

Public services are part of a network of players whose direct and indirect interactions do not exist in isolation but rather as part of a larger ecosystem. The use of applications is one of the ways of public service today because of advances in technology and advanced information used by humans (Hodgkinson, Hannibal, Keating, Chester Buxton, & Bateman, 2017). Jambi City is one area that receives guidance from the Indonesian government to implement intelligent cities in improving public services. Jambi City's use of information and communication technology has been contained in the first vision and mission of the Jambi City Medium Term Development Plan 2018-2023, namely strengthening the bureaucracy and improving information technology-based public services (Nugroho, 2020). "SIKESAL" is an application for complaints and aspirations submitted by the people of Jambi City to the Jambi City government in the form of online contributions of thoughts, ideas, suggestions, or complaints that can only be explicitly accessed by people who have a Jambi City Population

Identification Number. However, some problems are the absence of a particular budget from the Jambi City Regional Budget for developing the "SIKESAL" application. Then the lack of socialization of the "SIKESAL" Application, which is only about 0.16% (1000+) of Jambi City residents who download this application. As well as the incompatibility of implementing this application with the established regulations, such as when responding to public reports that are old/exceeding the standard limit (Ahmad, 2021).

The importance of this research is because the "SIKESAL" application was launched as a form of improving public services for the Jambi City government. So its use in the community becomes a vital component to be considered a reference for the successful implementation of the policy. The performance of public services is the government's effort to fulfill every community's basic needs and civil rights for goods, services, and administrative services provided by public service providers (Usman, 2011).

Several previous studies are pertinent to this topic, which addresses the WeLive framework, a set

of tools that combines Open Innovation, Open Data, and Open Data Services paradigms to enable co-created urban apps (Emaldi, Aguilera, López-de-Ipiña, & Pérez-Velasco, 2017). In Germany, mobile crisis applications are being used. Mobile crisis applications, which are relatively new public services for citizens and are specifically meant to spread disaster-related information and communication between authorities, organizations, and citizens, are increasingly being investigated by crisis informatics (Kaufhold, Haunschild, & Reuter, 2020). Contact tracing is a typical surveillance technique for locating, analyzing, and managing persons who have been exposed to novel infectious illnesses. COVID-19 is managed through mobile phone apps that employ a digital technology approach known as "proximity tracking" (Pillai, Siddika, Hoque Apu, & Kabir, 2020). The determinants of citizens' future use of government-provided mobile applications (Reddick & Zheng, 2017). Citizen-government applications in information use, service use, and participatory use. It explores the impact of such use on citizen compliance and the mediating role of trust in government (Wang, Chen, Xu, & Leng, 2020).

Based on this explanation, several previous studies focused on how the application works and the determinants of people using government applications. So the novelty of this research is the focus on the use of applications launched by the government to improve public services. Therefore, this study aims to explain using the "SIKESAL" application created by the Jambi City Government to improve public services.

2 LITERATURE REVIEW

2.1 Smart City

The term "smart city" refers to using ICT to sense, analyze, and integrate critical data from core municipal systems. Smart cities may simultaneously respond intelligently to a variety of needs, including daily life, environmental protection, public safety, and local services, as well as industrial and commercial activity (Zhang, 2010). The phrase "smart city" refers to the idea of applying the "smart planet" concept to a specific place to create informative and integrated city administration. It's also the successful combination of intelligent planning

principles, intelligent building processes, intelligent management methodologies, and innovative development strategies (Su, Li, & Fu, 2011).

The way cities organize policymaking and urban expansion is changing due to information and communication technologies. Smart Cities use information and communication technology to alter city infrastructure and services in various disciplines, including economy, environment, mobility, and governance (Bakıcı, Almirall, & Wareham, 2013). Intelligent city policies foster new methods of conceiving, organizing, and controlling the city and its flows while imbuing the city with a new moral order by establishing technical parameters that distinguish between "good" and "bad" cities. As a result, the smart city could effectively generate docile subjects and political legitimacy processes (Nam & Pardo, 2011).

2.2 E-Government in Public Service

E-government will improve public services by transforming the functioning of public sector organizations. E-government can improve public service delivery by boosting efficiency, lowering operational costs, increasing access to services, and raising consumer satisfaction (Osei-Kojo, 2017). E-government is constantly evolving for various reasons, including providing high-quality services to citizens and businesses, improving public sector efficiency, reducing government administrative burden, allowing for cost savings in government administration, and increasing government decisions and actions transparency. "The use of ICTs in public administrations combined with organizational reform and new skills to improve public services and democratic processes and strengthen support for public policy," according to this definition. E-government is seen as a catalyst for improved government and higher public value (Georgiadis & Stiakakis, 2010).

E-government applications improve the public sector's cost efficiency and effectiveness and bring about a revolutionary change in public service delivery, administration, and public involvement. Because of the use of ICT

to improve life and work inside a city in significant and fundamental ways, technology is critical for being a smart city. When it comes to tackling those political, administrative, democratic, or material difficulties, ICT applications can help (Díaz-Díaz, Muñoz, & Pérez-González, 2017). E-government is the application of information and communication technology (ICT) to improve the execution of traditional government duties and services. To reform the government bureaucracy, traditional governance necessitates the establishment of E-Government. As a result, e-government is intended to allow government agencies to provide timely and accurate services to all stakeholders. It is expected that implementing E-Government will result in changes in the form of better public services. The goal of e-government is to increase the efficiency of government services to citizens (Nurjanah, Mutiarin, & Kasiwi, 2021).

3 RESEARCH METHOD

This research method is qualitative and uses NVIVO 12 plus software to analyze the data. The feature used in NVIVO 12 plus to analyze data is the project map. This feature is used to display actors involved in implementing the "SIKESAL" application in improving public services in Jambi City. Another feature used in NVIVO 12 plus is the crosstab query; this feature displays public responses using the "SIKESAL" application. The source of the public response comes from reviews on the playstore, this is because users comment a lot about the "SIKESAL" application. This research data collection technique uses library research. The source of this research data comes from the official website of the Jambi city government. Then it is added with data originating from credible national and regional online media news and relevant scientific journals. The period for data collection in this study is from 2017 to 2021, and this is because the "SIKESAL" application was launched and began to be used by the people of the city of Jambi at that time.

4 FINDING AND DISCUSSION

4.1 The Process of Using the Application and the Actors Involved

The "SIKESAL" application (Online Community Complaint Information System) is a Quick Win for Smart City implementation in Jambi City. This "SIKESAL" application is used as a form of community participation in urban development so that suggestions and aspirations, as well as community complaints, can be conveyed quickly. In other words, public complaints media, which are usually carried out conventionally, are developed into application-based complaints media. Through the "SIKESAL" application technology are expected to encourage effectiveness and efficiency in resolving various public complaints (Mahmudah, 2018). In essence, complaints submitted by the public-to-public servants are a response to public services received by the community from public servants. According to the Decree of the Minister of Empowerment of State Apparatus No. 118 of 2004 concerning the Handling of Public Complaints, public complaints are a form of implementation of community supervision submitted by the community, either orally or in writing to the relevant government apparatus, in the form of contributions of thoughts, suggestions, ideas, complaints or complaints made by the public constructive. The availability of space to express aspirations (voice) in the form of complaints and protests against the implementation of government and public services will play a significant role in efforts to improve overall governance performance. The public can use the "SIKESAL" application owned by the City of Jambi by downloading it on the Play store channel using a device based on the Android operating system. The admin of the "SIKESAL" application is the Jambi City government. The public must register how to use the application by entering the family identification number (NIK). Then enter the user's data as an initial form of registration to

enter the application. After all the stages have been filled in, the user can enter to use the application. In the "SIKESAL" application, there are features that the public can use to report something.

In presenting the report, the user must fill in several fields that have been provided in the application. The user must fill in the report title column, report description, suggestions, or solutions that can be given. Then choose which category of regional device organization must resolve it and write down the full address of the place of the complaint. After all the fields are filled in, the "SIKESAL" application user must attach a photo of his complaint so that the report sent is clearer. The reporting history that has been submitted will wait for a response from the Jambi City regional apparatus organization concerned to follow up. The Online Community Complaints Information System (SIKESAL) application has four accessible menus. See the home menu to see the progress of the completed report, famous problems, or the most active users. While the other three menus contain archives of complaints that have been reported and see responses from regional device organizations, then a menu about regional device organization ratings & user profiles. The presence of this application is expected to make the people of Jambi City able to assist the government in reporting problems that exist in the community through E-Government. This is certainly in line with the vision & mission of the City of Jambi to become a Smart City Government (Ahmad, 2021).

Understanding the roles that players such as public legal entities and natural persons play in inter-organizational digital public services is critical for digital government success. An actor role (or role) is defined as "the responsibility for performing specified behavior, to which an actor may be allocated, or the part played by an actor in a given action or event" (Wouters, Janssen, & Crompvoets, 2021). In the context of the application "SIKESAL," several actors are involved, both Jambi City government agencies and the community itself. Figure 1 attempts to map the actors involved in the use of the "SIKESAL" application.

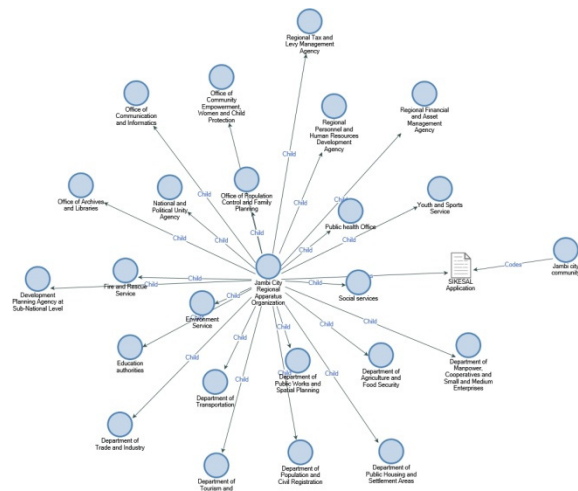


Figure 1: Actor involved.

Figure 1 shows some of the actors involved in using the "SIKESAL" application. The actors involved in the "SIKESAL" application are the regional government organizations of the Jambi city government and the community. The SIKESAL application is directly connected to the local government organization of the Jambi city government. This means that complaints or reports submitted by the community through the application can be directly directed to the relevant agencies or in their fields. The Department of Communication & Informatics has a role as the leading implementer and the secretariat of complaints. Jambi city government, regional apparatus organizations involved with the "SIKESAL" application include Regional Development Planning Agency, Regional Personnel, and Human Resources Development Agency, Regional Financial and Asset Management Agency, Regional Tax and Retribution Management Agency, National and Political Unity Agency, Education Office, Health Service, Public Works, and Spatial Planning, Public Housing and Settlement Areas, Social Service, Population Control and Family Planning Office, Community Empowerment Service, Women, and Child Protection, Environment Service, Population and Civil Registration Service, Transportation Service, Communication and Information Service Office, Manpower Office, Cooperatives and Small and Medium Enterprises, One-Stop Investment and Service

Office, Archives and Library Service, Youth and Sports Service, Tourism and Culture Office, Trade and Industry Service, Fire and Rescue Service, Agriculture and Food Security Service.

In this context, it has been suggested that clarity of roles and underlying duties among collaborating public organizations is a crucial element for digital government success. Defining and assigning actor roles might help to alleviate governance issues caused by interdependencies among participants. This is especially true for inter-organizational digital public services, which necessitate collaboration among many players to link building blocks that form integrated service chains that supply various services.

4.2 App User Public Response

In practice, ICTs have begun to play an essential role in all areas of human life, including political processes, electoral participation mechanisms, and public services. ICT is used to make things easier for all matters and the establishment of transparency. Then, the response from users becomes very important to see the success of the implementation of the ICT (Haryadi, Nurmandi, Muallidin, Kurniawan, & Salahudin, 2022). In the context of using the "SIKESAL" application, various responses emerged from the user community. This response can be seen in the review column in the play store. Figure 2 shows the reaction of the community of users of the "SIKESAL" application which is managed through the NVIVO 12 plus crosstab query.

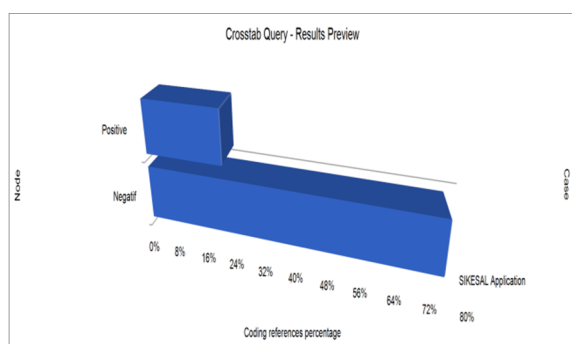


Figure 2: Public Response.

Figure 2 shows the public response to the "SIKESAL" application, both negative and positive. The user community of the "SIKESAL" application who gave a positive response was 22.00%, while those who gave a negative response were more than 77.00%. This shows that although the "SIKESAL" application has a good purpose in its application, it still has not received a good response from the people of the city of Jambi. In principle, the emergence of Artificial Intelligence, or what is commonly referred to as intelligent applications, has significantly impacted life. Because it focuses on the artificial reproduction and modification of human intelligence to construct intelligent machines, dealing with a quickly changing world and being adaptable to intelligent technologies can help people be more creative, productive, and survive. Artificial intelligence will assist the government in freeing up resources by automating mundane jobs, resulting in improved public service (Kasiwi, Nurmandi, Mutiarin, & Azka, 2021).

The positive response from the user community is that using the "SIKESAL" application will bring benefits. Perceptions of usefulness and convenience significantly affect interest in using the "SIKESAL" application, an instrument for the public to report complaints. More than that, the positive response given by the community to the "SIKESAL" application is more to the initial purpose of the application as a forum to convey aspirations to the government. However, the negative response received by the "SIKESAL" application is more about its use which is still not well developed. The application still has many technical problems that make users uncomfortable using it. The government needs to continue improving the application's features so that people can more easily access and complete the application as an instrument of complaint.

The obstacle faced in using the "SIKESAL" application is that the period given to the agency to follow up on the report is too short, resulting in the regulations governing implementation not being implemented. Another inhibiting factor, namely the absence

of a budget, also resulted in the lack of a particular socialization program related to the "SIKESAL" application which resulted in the small number of downloads in this application, and there were still many people who reported manually. The role of agency heads in several public sectors also seems to lack attention and technical support in developing the "SIKESAL" application due to the internal busyness of each agency (Ahmad, 2021).

5 CONCLUSION

This study concludes that the Online Community Complaints Information System Application (SIKESAL) has four accessible menus. The main menu with the name "send the report" is used for reporting; in the application, there is also a menu that contains an archive of complaints that have been reported as well as seeing responses from regional organizations. The actors involved in using the "SIKESAL" application are the Jambi City regional apparatus organization and the application user community. All regional government organizations of the Jambi city government are involved in using the "SIKESAL" application, with the Communications & Information Office having a role as the leading implementer and the complaint secretariat. Then the response of the people of the city of Jambi using the "SIKESAL" application is dominant to negative. The adverse reaction to the use of the "SIKESAL" application is more for technical reasons. Application development problems are crucial in giving a negative response to the "SIKESAL" application. This is because the problem interferes with improving public services using the "SIKESAL" application.

Although this research can explain the use of the "SIKESAL" application to improve public services in the city of Jambi, however, this study has limitations, namely only defining the use of one application in the city of Jambi. Therefore, the recommendation for further research is to compare two or more applications used by the Jambi City government. This is to

more fully and clearly describe e-government towards a smart city, especially in Jambi city.

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