

Utilization of Jaki Application in Improving Public Services in DKI Jakarta

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ABSTRACT

Jakarta Kini (JAKI) is an application created by the Government of DKI Jakarta to help all people access public services. JAKI is designed to create a smart city that efficiently and effectively makes Jakarta a better and liveable city. Therefore, JAKI presents the features which are expected to make life easier for many people. There is at least 10 (ten) kind of services which could be handled by JAKI, including Jakwarta, Jaklapor, Jaksurvei, Jakpangan, JakISPU, JakSiaga, JakCo, and JakApps. This study aims to analyze the utilization of the JAKI application to improve public services in DKI Jakarta. The research was conducted by spreading a questionnaire to JAKI users in 5 (five) municipalities of DKI Jakarta. The data obtained were analyzed to show which municipalities had the most users of the JAKI application and how the JAKI application helped improve public services by grouping them into five indicators: unhelpful, less helpful, sufficient helpful, helpful, and very helpful.

Keywords: JAKI application, public services, DKI Jakarta, smart city.

1. INTRODUCTION

A smart city is an excellent step in advancing the city based on information technology and communication [1], [2]. City development with the concept of a smart city has developed in various parts of the world. The advancement of information and communication technology is a huge opportunity to support urban development that is inclusive, adaptive to change, and sustainable [3]–[6]. Technology development in public services based on the smart city concept is the right strategy to solve urban problems. The proper use of technology can make various public services and infrastructure, such as population administration services, education, health, transportation, and others, more efficient and responsive in meeting community needs [7]–[11].

One of the advantages of the Smart City concept is that it can create better livable city planning and development in the future. The Smart City concept is also making government services more quickly implicated in society. Besides, the concept of a Smart City can also make the transportation system more efficient and integrated to increase the mobility of its people. The environment can also be more sustainable because of waste management and more advanced water

management. In other words, a smart city will also improve community welfare and improve health services.

The smart city concept is expected to make a smart city with a concept designed for public services to be efficient and effective. As one of the largest metropolitan cities in Indonesia, Jakarta does not want to be left behind in developing the smart city concept. Jakarta Smart City is the smart city concept that can optimize the use of information and communication technology to identify, understand, and control various resources more effectively and efficiently to maximize the public services in DKI Jakarta.

Jakarta Kini (JAKI) application is one of the programs of Jakarta smart city. It is an application created by the Government of DKI Jakarta to help all people access public services [12], [13]. JAKI is designed to create a smart city that efficiently and effectively makes Jakarta a better and liveable city. Therefore, JAKI presents the features which are expected to make life easier for many people. This study aims to analyze the utilization of the JAKI application to improve public services in DKI Jakarta.

2. RESEARCH METHOD






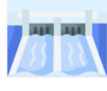

This research uses quantitative research methods. The research was conducted by spreading a questionnaire to JAKI users in 5 (five) municipalities of DKI Jakarta using the google form. Through this method, data was collected for 100 respondents for every municipality of DKI Jakarta. The data obtained were analyzed to show which municipalities had the most users of the JAKI application and how the JAKI application helped improve public services by grouping them into five indicators: unhelpful, less helpful, sufficient helpful, helpful, and very helpful.




3. RESULT AND DISCUSSION

3.1 JAKI Application and Features

The JAKI application was developed to answer the needs of today's society for information and technology in public services. There are at least ten (10) kinds of services which could be handled by JAKI, including Jaklapor, JakRespons, Jakwarta, Jakpangan, JakWifi, JakPantau, JakSurvei, JakISPU, JakSiaga, JakPenda. Each feature in the JAKI application has a different function, as described in table 1.

Table 1. Features Description and Function of JAKI Application

No	Features	Description
1	 JAKLAPOR	The people of DKI Jakarta can also report the problems in Jakarta through JAKI. The reporting system in JAKI is based on geo-tagging and is integrated with the rapid community response
2	 JAKRESPONS	Reports about problems reported by residents through JAKI can be monitored for the follow-up process through the JakRespons feature.
3	 JAKWARTA	JAKI presents official news directly from the Regional Government. The information that the public gets is published directly from the provincial government of DKI Jakarta. The information presented is also in geo-tagging technology or geographic tagging. It means that residents will be notified if they are around the news incident area.
4	 JAKPANGAN	The list of market commodity prices is now presented briefly in the JakPangan feature. Without having to come directly to the market, the public can calculate their food needs before buying.
5	 JAKWIFI	This JakWifi feature supports the internet network for some areas in DKI Jakarta. This feature will make it easier for Jakartans to find 4,956 free public Wi-Fi points.
6	 JAKPANTAU	Through the JakPantau feature, the public of Jakarta can prepare themselves better when it rains heavily. JAKI users can access the latest information about river flows and conditions of floodgates in Jakarta.
7	 JAKSURVEI	The JakSurvei feature provides an evaluation room for residents who wish to assess the performance of public services provided by the Jakarta government.

No	Features	Description
8	 JAKISPU	The JakISPU feature presents an Air Pollution Standard Index and is integrated with the air sensors belonging to the Jakarta Environment Agency in real-time.
9	 JAKSIAGA	By installing the JAKI, residents of DKI Jakarta automatically have significant numbers during critical situations, such as Jakarta Alert 112, the SAR team, the fire department, and others.
10	 JAKPENDA	From the JakPenda feature, users can check taxes obligation.

(source: JAKI application)

3.2 User Opinion on the Benefits of the JAKI Application

Based on data obtained from questionnaires about the use of the JAKI application. Information was obtained from five municipalities in DKI Jakarta, which showed a relatively high number of JAKI application users (Table 2).

Table 2. Distribution of JAKI Application Users in DKI Jakarta

Municipalities	Total Users
Central Jakarta	75
East Jakarta	70
North Jakarta	64
South Jakarta	90
West Jakarta	87

(source: research result, 2021)

From table 2, we can know the result by spreading 100 questionnaires to every 5 (five) municipalities of DKI Jakarta. The result shows that the South Jakarta Municipality is the municipality with the most users of the JAKI application. There are 90% of people of South Jakarta who know and utilize the JAKI Application. Meanwhile, the North Jakarta Municipality is the municipality with the minor users of the JAKI application. There are only 64% of people who know and widely use the JAKI application.

According to Capdevilla and Zarlenga [8], the critical point in developing the concept of a smart city is not only oriented to the top-down model of implementing an application in the context of public services. However, it is more about fostering bottom-up

community initiatives in utilizing existing media or applications to meet their needs and provide input to the government. In this context, the varying conditions of using the JAKI application in the five municipalities in DKI Jakarta also show that disseminating information is still not evenly distributed and the possibility of differences in digital literacy skills of residents in each municipal area.

If we see the human development index (HDI) in DKI Jakarta, the HDI score in South Jakarta is the highest. In addition, there are many office complexes in South Jakarta which could represent a higher level of population structure and literacy. Meanwhile, North Jakarta has the lowest HDI score compared to other municipalities. Furthermore, suppose we see the condition in North Jakarta Municipality. In that case, there are many slum area concentrations, representing the low level of technological literacy and lower awareness in the use of technology.

As for the level of usefulness of the JAKI application in supporting the improvement of public services, it was acknowledged by more than half of the public by stating that the application was in the "beneficial" and "helpful" category (Table 3). From table 3, we can see the result that the JAKI application is helping to improve public services, and JakWifi is the most favorite feature in the JAKI application. JakWIFI is a program to improve the quality of public services of free Wi-Fi in some areas that are not covered by free internet services. In the current pandemic situation, not surprising that this feature is a favorite because many people (especially students) are helped by utilizing public Wi-Fi in carrying out various activities (studying or working online).

Table 3. Community Perspective on the Benefits of the JAKI Application

Indicator	Percentage (%)
Very Helpful	47
Helpful	33
Sufficient Helpful	16.2
Less Helpful	3.8
Unhelpful	-

(source: research result, 2021)

Optimizing the use of information and communication technology is proven to improve public services. It will have a good impact on the benefits obtained by the community. The development of the Jakarta Smart City concept can be an adaptive solution to change and can answer the challenges of today's society who are arguably included in the category 5.0 society. Especially in this covid-19 pandemic situation, people must be good at managing mobility to maintain their health and safety. The JAKI application can be an example for other cities in Indonesia that will implement the smart city concept in managing their city and urban areas.

4. CONCLUSION

The JAKI application users are spread relatively even in five municipalities in DKI Jakarta. South Jakarta is the region with the most users, while North Jakarta is the region with the least number of users. The public acknowledges that the JAKI application is beneficial for improving public services in DKI Jakarta. The various features that exist in the JAKI application can represent the needs of today's society. However, development efforts must continue to be made to expand the public services provided and their benefits for the people of DKI Jakarta.

AUTHORS' CONTRIBUTIONS

Farhan Andaru Daffa, as the first author, is responsible for analysing research data and compiling draft articles. Satya Budi Nugraha as the second author, assisted in reviewing the literature and perfecting articles' preparation and grammar.

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