

EVALUATION OF FIRE AND RESCUE SERVICES DIGITALIZATION IN JAMBI CITY WITH "*SIMERAH KOJA*" MOBILE APPLICATION

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ABSTRACT:

This study aims to evaluate digital-based public services through the mobile application "*SiMerah Koj*a" in fire and rescue services by the Jambi City government. Jambi City has a high population density that has a high potential for fire. One of the factors for the slow handling of fires is the lack of utilization of technology, so the Jambi city government is committed to creating effective and efficient services by digitizing public services. This research uses descriptive qualitative methods. Determination of informants in this study was carried out using purposive sampling technique, namely taking informants who were in accordance with the research focus. Data were obtained through interviews, observations, and documentation which were then analyzed by researchers. The results showed that the digitization of public services in fire and rescue services in Jambi city using the *SiMerah Koj*a mobile application was still not optimal and experienced several obstacles. First, the lack of government socialization to the public regarding the *SiMerah Koj*a mobile application. Second, the lack of digital literacy of citizens. Third, the quality of the *SiMerah Koj*a mobile application system is not optimal.

Keywords: *Public Services, Digitalization, Fire and Rescue, Mobile Apps*

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1. INTRODUCTION

Fire disaster is one of the disasters that often occurs anywhere and anytime, both in residential areas, industrial areas, forests and plantations. Fire is an oxidation event with three elements: fuel, oxygen, and heat. The impact caused is in the form of large material losses, threatened human life safety, and even environmental damage (Risky Noviar et al., 2023). In the context of settlements, fires occur due to both intentional and unintentional human elements such as electrical short circuits, LPG gas leaks, forgetting to turn off the stove, throwing cigarette ends carelessly, burning garbage that is not in place and time.

Jambi City is the capital city of Jambi Province located on the island of Sumatra with an area of 169.887 Km² with 11 sub-districts and 68 villages and is currently facing a critical situation related to fire. Until September 2024, there were 70 land fires that burned around 20 hectares, plus 49 house and building fires with the total material loss reached ten billions rupiah (jambisatu.id, 2024). Given that Jambi city has a high population density, this area is vulnerable to fires so that fire mitigation efforts in densely populated areas do not only require technical handling, but also involve aspects of education or knowledge, strengthening and regulation, and innovation from the local government.

The problem of fires in Jambi City, especially in densely populated settlements, is the slow handling of fires by firefighters. The delay of firefighters often occurs due to several factors. First, the lack of preparedness of the officers. Second, the density of traffic conditions to the location of the fire incident. Third, the slow information reported by the community to officers. Fourth, the lack of clear information related to the location of the incident provided by the community (Pratama et al., 2023). The slow response from firefighters is partly due to the lack of utilization of information technology, resulting in inaccurate information related to the location of the fire.

Along with technological developments and public demands for the government to be able to carry out responsive public services and in line with the objectives of implementing Jambi Smart City, namely making Jambi city an inclusive, innovative and sustainable city, it is necessary to apply smart technology for a better community life. In today's digital era, technology plays a very important role in creating the way a person interacts in a public service, to produce effective and efficient public services, because good services will increase public trust in the government and the quality of life of the community (Daraba et al., 2023).

Public services in Indonesia are currently being encouraged to transform the form of services from conventional ones characterized by face-to-face processes, and the use of paper to digital services, namely the use of information technology. One of the government's efforts to improve services to become effective and efficient services to the community is to innovate in the form of digitizing services. The term digitization is a word that refers to the use of digital technology and data to improve digital culture, in other words, the digitization of public services is a series of activities to meet the needs of service recipients by utilizing digital technology and data in facilitating services to the community (Panggabean & Meilani, 2023)

Efforts to digitize services were also made by the Jambi city government in transforming conventional forms of service to digital services, namely in the field of fire fighting and rescue, namely through the creation of the "*SiMerah Koja*" mobile application. This application is the Jambi City Regional Fire and Rescue Information System which is based on digitalization in order to facilitate public services to the community, including fire fighting, rescue, licensing, education and fire protection inspection services. *SiMerah Koja* is an integrated electronic-based government information system at the Jambi City Fire and Rescue Service to support the Jambi City Smart City program (<https://simerah.jambikota.go.id/>, 2023). This application is expected to be able to accelerate the response time of officers in handling and handling fires, especially in densely populated settlements. This application was inaugurated directly by Jambi Mayor in August 2023.

It has been more than a year since this application was launched, if you look at the Playstore mobile apps, the *SiMerah Koja* application has only been downloaded 100+ times by users, in contrast to other Jambi City Government applications such as the Office Administration Service Information System (SIPADEK), Online Community Complaint Information System (SIKESAL), Vulnerable Community Information System (SIMANTAN) and other applications that are more than 500+ downloads, even though the *SiMerah Koja* application is important as an anticipatory effort when a fire disaster occurs. By considering the needs of the community for emergency services, it is very important to conduct this research to improve the efficiency, safety and effectiveness of services, so that by adopting information technology fire services become more responsive, integrated so as to save many lives and prevent wider material losses.

2. METHOD

Based on the research title, the author wants to objectively evaluate the digitization of the Jambi City Fire and Rescue service with *SiMerah Koja* mobile apps. In this study the authors used descriptive qualitative research methods, to obtain relevant data in an effort to increase understanding of the research objective. Accurate and appropriate sources were carefully selected to achieve the objectives of this research. Data collection techniques are carried out first through observation, the author makes observations in the field to see the preparedness of officers in anticipating fires. Then interviews, where the author conducted interviews with several firefighters and a number of related communities. The determination of informants in this study was carried out using purposive sampling technique, namely taking informants or sources with a specific purpose in accordance with the theme or focus of research consisting of citizens, city government officials, and firefighter personnels.

3. RESULT DAN DISCUSSION

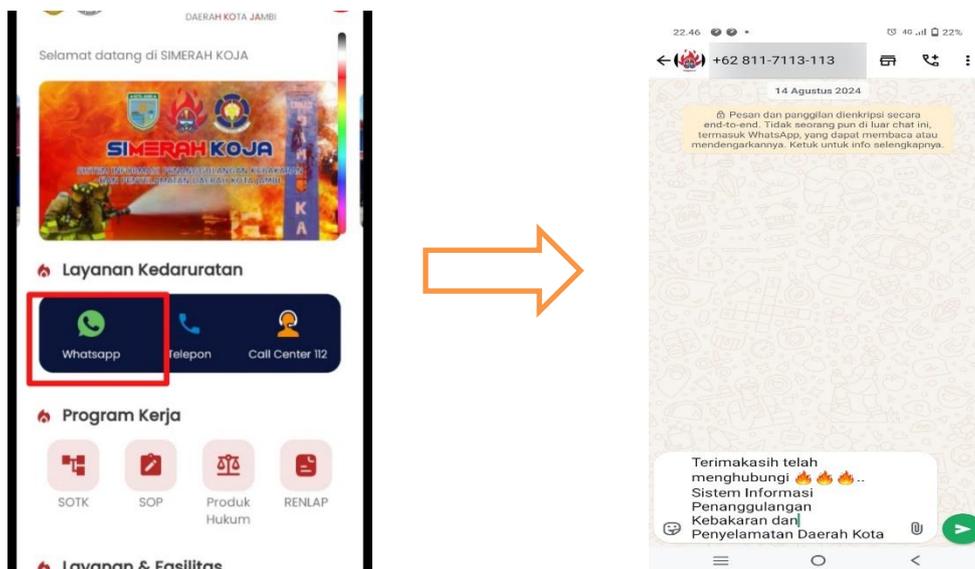
3.1 About the *SiMerah Koja* Mobile Apps

This application is a Jambi City Regional Fire and Rescue Information System based on digitalization in order to provide easy public services to the community, including fire fighting, rescue, licensing, education and fire protection inspection services. This application can be easily downloaded by the community as an effort to anticipate when a fire occurs. *SiMerah Koja* is one of the many applications created by the Jambi city government which, according to the author, is less known and in demand by the public, this can be seen from the number of downloads in the playstore application. The *SiMerah Koja* application is also quite lightweight, only requiring storage space of around 9.64 MB so it is safe if you download this application. The appearance of the *SiMerah Koja* application is as follows:



Picture 1. Home View of *SiMerah Koja* Mobile Application

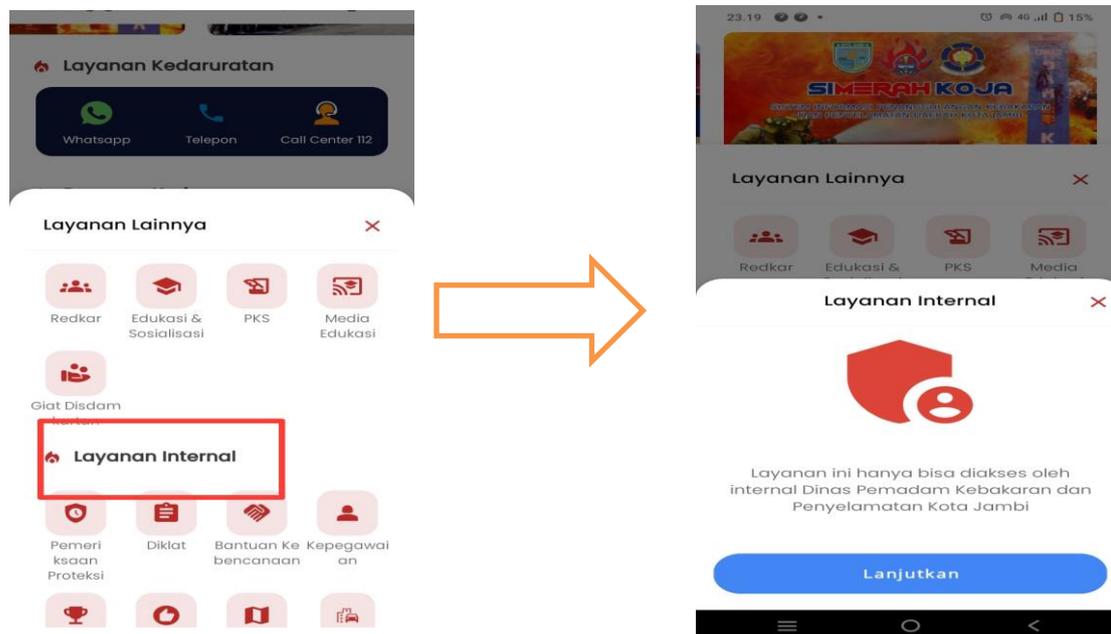
There are many features in this application such as emergency services including Whatsapp applications, telephone and Call Center 112, Work Program features containing SOTK, SOP, Legal Products, and RENLAP. The Services and Facilities feature contains Fire Fighting Volunteers (REDKAR), Education and Socialization, Licensing. Event and Evacuation feature, Social Media News feature, and Internal Service feature. If the author sees most of the features in this application can function properly, but according to the author's analysis, this application is still not optimal because it is not directly connected from the *Simerah Koja* application to Damkar, but this application still requires or connects to other applications, such as the Whatsapp application or telephone, even though the public can contact via WhatsApp or telephone without having to download the *SiMerah Koja* application.



Picture 2. Calling service on the mobile application

In addition, another feature that according to the author is also less effective is the internal service feature, because in this feature the community does not have access to find the government information they need, even though one of the goals of implementing e-government is to create services that are transparent and open the communication taps needed by the community and bridge communication between the government and the

community so that it makes it easier for the community to get effective and efficient services. (Tui Fenti Prihatini et al., 2022).



Picture 3. Internal services in the mobile application

Features that contain the confidentiality of an institution, which does not allow the public to access it, do not need to be made in this *SiMerah Koja* application because it will become a question for the public regarding transparency. When viewed from the internal service features, this feature contains Protection Checking services, Training, Disaster Assistance, Personnel, Awards, IKM, Mitigation Maps, Facilities and Infrastructure, nothing needs to be kept secret, instead this service must be open access to make it easier for the public, especially people who want to conduct research in obtaining information related to Fire service.

Interviews with several communities and firefighters regarding the existence of the *SiMerah Koja* mobile application show that there are still many people who are not aware of the existence of this application, they tend to directly call the Fire Department or contact Call Center 112 to request help in emergencies. For people who have used this application they say this application is very helpful but this application is slow to use, so the hope is that in the future the government can improve the performance of the application and innovation in terms of digitizing fire and rescue services in Jambi city can be carried out optimally.

3.2 Evaluation to Service Digitalization in the *SiMerah Koja* Application

Based on the research that has been conducted, several obstacles have been found in the implementation of the digitalization of fire and rescue services in Jambi city *SiMerah Koja*, namely: First, the lack of government socialization to the public regarding the *SiMerah Koja* application. This application was officially launched by the Jambi Mayor at the Jambi City Bapedda Hall, but this socialization did not reach the community, this is evident from the fact that there are still many people who do not know what the *SiMerah Koja* mobile application is.



Picture 4. Inauguration and launch of *SiMerah Koja*

Socialization that reaches the community will make people aware of the efforts made by the government in meeting the needs of emergency services, and civilize the community to use technology in services. The second obstacle is the lack of digital literacy, the lack of people's ability to understand, use, and utilize digital technology effectively. And third obstacle is the quality of the mobile application system is not optimal. The existence of features that cannot be accessed is one of the obstacles in digitizing services.

4. CONCLUSION

One of the government's efforts to improve services to the community to become effective and efficient services is to innovate in the form of service digitization. Service digitization has begun to be implemented by all governments in Indonesia, including the Jambi city government. The Jambi city government's efforts in transforming conventional forms of service to digital services, namely in the field of fire fighting and rescue, are through the creation of the "*SiMerah Koja*" application. Most of the features in this application can function properly but are still less than optimal. The obstacles in the implementation of this digitalization are first, the lack of government socialization to the public regarding the *SiMerah Koja* application. Second, the lack of digital literacy. Third, the quality of the application system is not optimal. So that in the future the Jambi city government is expected to continue to improve for the implementation of effective and efficient service digitization in accordance with the needs of the community.

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