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Abstract- Public service has a central role in many aspects of human life, and also as the functions in maintaining the existence and growth of the community, the nation and the state. As a capital city of Indonesia, Jakarta is the highest population level of urbanization that make the city face the big problems, such as energy, environment, security, and bureaucracy. In the era of digital government, smart city program become a solution to solve the problems, especially in public service. Smart city is an innovative city and has ability to manage the resources by utilizing ICT to improve public service become more effective, efficient and sustainable. Qlue and CROP are integrated applications of Jakarta Smart City Program that can accommodate all complaints reported by citizens. Furthermore, this paper used descriptive research method with qualitative approach. This study aims to finding out the implementation of e-government and the achievement an effective public service through Qlue and CROP.

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Abstract- Public service has a central role in many aspects of human life, and also as the functions in maintaining the existence and growth of the community, the nation and the state. As a capital city of Indonesia, Jakarta is the highest population level of urbanization that make the city face the big problems, such as energy, environment, security, and bureaucracy. In the era of digital government, smart city program become a solution to solve the problems, especially in public service. Smart city is an innovative city and has ability to manage the resources by utilizing ICT to improve public service become more effective, efficient and sustainable. Qlue and CROP are integrated applications of Jakarta Smart City Program that can accommodate all complaints reported by citizens. Furthermore, this paper used descriptive research method with qualitative approach. This study aims to finding out the implementation of e-government and the achievement an effective public service through Qlue and CROP. In this case, the researcher used DeLone & McLean Model to examine the effectiveness of information system in public complaint service. As a result, by utilizing two of Jakarta Smart City apps become seffective in public complaint service, the citizens are very satisfied and appreciate with the performance of Jakarta Provincial Government.

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I. Introduction

Public service has a central role in many aspects of human life, and also as the functions in maintaining the existence and growth of the community, the nation and the state (Hartley and Skelcher in Hartley et al 2008:3). Even the basic form of the government itself is to bring prosperity and happiness of society, through public service. Should be recognize, that the services provided by the government to the people always have updates, both in terms of paradigm or form service with increasing demands of the community and changes in the internal of government itself. Because public service delivered by the government is has not been expected by the people. The key aspects of service that often complained by the people is low response, lack of empathy, ineffective and inefficient.

In the era of digital government, organizations in public sector are increasingly using data to improve their performance, provide greater citizen engagement, and cultivate levels of collaboration and transparency (Reddick et al. 2015). Mostly, the concept of digital government that is used by the government through electronic system such as website and social media to communicate, provide information and service to citizens. The importance of involvement and interaction of citizens in a democratic state structure that underlies the emergence of open government. The concept of open government in Indonesia, was formed by Act of Indonesia No. 14 of 2008 pertaining public information openness as a legal foundation of the development of e-government and also Open Government Indonesia (OGI) in 2011, which then works with local government such as Jakarta provincial government. Furthermore, open government cannot be separated from the phenomenon of information technology development to use e-government as a tool for public service. Generally, public service is always related with the performance and program in implementation of e-government.

According to Dwiyanto (2004: 14) explained that e-government give much benefit, simplify hierarchy and improve the information quality, and the government's response become more quickly and accurately. Generally, the purposes of e-government are to make governance system more transparent, accountability, effective and efficient. It was in accordance by Muthu et al (2016) emphasize that the vision of e-government focuses on effectively and efficiently in providing services from the government to the people through online services to improve service delivery. Effective e-government creates an environment for citizens to have greater access to their government (Williams, Gulati, and Yates. 2014). Meanwhile, the development of e-government is the first step to achieve an effective public service in Jakarta.

Jakarta as the capital city of the Republic of Indonesia, has the potential area and the largest population level with the various problems due rapid

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urbanization. Urbanization that is characterized by overcrowding population makes the city faced the big problems such as security, environment, energy, and public service. In the other side, slow respond in handling the citizen reports makes the people of Jakarta feel bored and unhappy with the performance of Jakarta Provincial Government.

Based on the phenomenon, the Jakarta Provincial Government has a solution to solve the social problem by implementing e-government (Smart City Program). Qlue and CROP are smart city applications as an information system in social media platform to achieve the public complaints effectively and improve public participation in the development of Jakarta city. Qlue is an application for the citizens to report their complaints and CROP is an application for related agencies to respond the public complaint reports. The two applications are integrated system in public complaint service that managed by Team Unit of Jakarta Smart City. Furthermore, in the implementation of e-government based on technology can simplify in public service, especially in respond to public opinion through smart city applications. In this research, the main question is how the effectiveness of information system in public complaint service based on Jakarta smart city applications.

II. Research Methodology

This study used descriptive research method in qualitative approach, with the purposes to find, describe and analyze an object and a condition about the implementation of e-government in Jakarta city which investigated by researcher, so the research purposes can be achieved. In order to collect data by semi-structure, the researcher engaged in interviews and discussion with key informants. Accordingly, interviews and discussions were held on October 2015 - June 2016 with some key administrators and officers of Management Unit of Jakarta Smart City, Regional Work Unit of Jakarta Provincial Government, Terralogic as a private entrepreneur, and local people of Jakarta city, also observed in newspaper reporters, online chat forum and obtained from official documents, videos, reports, books, records and forms pertaining to this research.

The purposes of this research are to analyze the process and the role of government in handling public complaint service by two smart city applications, Qlue and CROP, and also to describe and measure by using DeLone & McLean model to examine the effectiveness of information system in public complaint service.

III. Theoretical Framework

a) Complaint Management System

Generally, complaints perceived as the mistakes, problems, stress, frustration, anger, conflict, punishment, claims, damages, and so on. Costumer complaints are a source of valuable information for the evaluation of improving performance of company, through human resources and products. Customer complaints open an opportunity for the company to fix the problem immediately. Therefore, Companies can create ideas of product innovation, marketing, improve service, and develop products.

Dovidow (2003) developed the complaint management model of customer in handling complaint. He expressed that there are six principles for an organization or a complaint system, the sixth principles are:

1. Timelines (on time in responding complaints).
2. Facilitation (the mechanism or procedures to conduct a complaint)
3. Redress (the benefits to be obtained when conducting a complaint in the form of compensation.
4. Apology (apology from service organizations)
5. Credibility (organizational responsibilities and clarifying the trouble complained.
6. Attentiveness (how to communicate and give attention).

Furthermore, BAPPENAS (National Development Planning Agency) mentioned that the main activities on the complaint handling has six elements, they are:

1. The source of complaint, where the complaint comes from the public as individuals or groups. Complaints can be submitted by public figures, LSM (local non-governmental organizations), mass media or other groups of community.
2. The content of complaint, complaints can be submitted such as quality of service, employee error in procedures and attitudes, etc.
3. Complaint handling units, is an organizational unit provided by each institution to manage and handle the complaints from the people.
4. Response to complaints, the resulting response of complaint handling unit in each institution related to a variety of complaints. The response will be given to the complainant as a feedback.
5. Feedback, the assessment of complainant on the response of each institution regarding to the complaint report.
6. Reports on the handling of complaints, if the report (feedback) is accepted by the complainant, the handling unit of complaints must make a report, including the feedback from complainant.

The complaints reported by the community is the result of feedback on the performance of the organization in providing services. If a complaint can be responded and handled properly, it is possible to realize the effectiveness and satisfaction in public service. Otherwise, if the public complaints are not responded well then the public will be prejudiced and feel hurt.

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b) The Effectiveness of Information System in Public Service

Usually effectiveness is always related with efficiency, but they have the different meaning. Efficiency is more focused in achieving great results with smaller sacrifices, while effectiveness focused on the objectives, without concern the sacrifice. The effectiveness is the basic elements and the capability to achieve the goals determined by the organization. The effectiveness describes the whole cycles of input, process, and output which refers to the results of an organization, program or activity that determined the extend of purposes (quality, quantity, and timing) to be achieved, and the measurement of success or failure in achieving purposes and targets.

Moreover, DeLone & McLean (2003) expressed that the component of success in the information system through six dimensions, including information quality, system quality, service quality, use, user satisfaction, and net benefits. This model is known as the D&M information system model that illustrated on the table below:

DeLone & McLean Model		
No	Dimensions	Indicators
1.	Information Quality	a. Ease of understanding b. Completeness c. Relevance d. Security
2.	Service Quality	a. Assurance b. Empathy c. Responsiveness
3.	Use	a. Number of site visits b. Nature of use c. Number of transactions executed
4.	User Satisfaction	a. Satisfaction b. Repeat use

Source: DeLone & McLean (2003), Journal of Management Information Systems

Information quality used to measure the output quality of information system and has some indicators, including ease of understanding, completeness, relevance, security. System quality used to measure the quality of information technology systems and has some indicators, including adaptability, availability, reliability, response time, and usability. Service quality used to measure the quality of services and has some indicators, including assurance, empathy, and responsiveness. The use used to measure the output of information system by users and has some indicators, including number of site visits, nature of use and number of transactions executed. User satisfaction used to measure the level of user satisfaction to the information system and has some indicators, including user surveys, and repeat visits.

IV. Discussion

Since launched on January 2015, Qlue is known as an application for citizen reports and CROP is known as applications that only used by Jakarta provincial government to follow-up the citizen reports. Application Qlue has applied in several cities around Jakarta such as Bekasi, Tangerang and Depok. With the two applications of Jakarta smart city, give an impact in handling the citizen complaints. Those applications are launched with the aim to support smart city concept which is expected to be implemented in Jakarta. The applications are designed to facilitate in communication between citizens and government digitally and easily.

In this case, in order to make an effective public complaint service, Jakarta Provincial Government provides Qlue as an application based on social media to enable communities in participating and care in monitoring the government's performance. Based on the focus in this study, researchers used a model from DeLone and McLean (2003) to examined the effectiveness of public services that implemented by unit of JSC. Inside the model, there are four dimensions that can be analyzed by researcher as follows.

a) Dimension of Information Quality

This dimension aims to measure the information quality on two applications of Jakarta smart city, Qlue and CROP based on the statements of some Regional Work Unit through a short interview, the researcher can conclude that both of the applications of Jakarta smart city gave a positive impact and proved effective in handling public complaints. Because Qlue and CROP are the applications integrated with each other, so the information quality of citizens reports by Qlue accepted accurately and in real time.

b) Dimension of Service Quality

This dimension measures the service quality in handling citizens' complaints through two applications of Jakarta smart city, Qlue and CROP. Based on interviews

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with citizens (users of Qlue) and Regional Work Unit (users of CROP) it can be concluded that the service quality system in handling public complaints was appreciated by the citizens and responded well by Regional Work Unit, because the service through the two application of Jakarta smart city proved effective and can complete the reports on public complaints properly.

c) Dimension of Use

The next is dimension of use, researchers get the data reports of public complaints from the team unit of JSC. From the user side in the application CROP has been adopted by all of Regional Work Unit with the total 1605 users. While for the application Qlue, people who have participated by using Qlue around 379.577 users. In fact, the population in Jakarta according to data from Agency of Regional Development Plan (Bappeda) totaled 10 million people. Its mean the total of communities who participated, only 3% are actively who using Qlue.

In the other side, based on data report from public complaints proved that the total from 60.398 reports of the five main issues are 57,88% (34.957 reports) has been completed successfully with trash problem is highly completed, at least for damaged roads need long time in the process because required the budget from Regional Budget (APBD). While for 26, 47% (15.991 reports) still in the process and 15,64% (9.448 reports) the status report is still waiting or has not responded by team unit of Jakarta smart city.

d) Dimension of User Satisfaction

For the last dimension is a measurement the level of user satisfaction of application Qlue in handling public complaints. According to the statements from some citizens who actively in using Qlue, it can be concluded that all citizens are satisfied to complaint handling system through application Qlue with the reason of service is more quickly in response to citizens' complaints and easy to report. So based on interviews and experienced researcher to try to report by Qlue proved effective

V. Conclusion

Modern eco-technology and urban planning has produced some innovations. Manu kind of innovations expand to elements of smart city service. With the implementation of smart city program in Jakarta, indicates that QLUE and CROP is directed to provide digital solutions to assist government. The purpose of Smart City is to promote the development of smart cities in Indonesia. Generally, smart city is a city that can grow itself toward positive purposes by utilizing information technology components, infrastructure and governance involving governments, industry and society.

The people who living in Jakarta can report their complaints by social media application of Qlue that work together with Jakarta Provincial Government. Many of citizen complaints reported by Qlue, there are some report categories commonly faced everywhere. The complaint Categories are reported by citizens through Qlue such as traffic jams, trash, floods, criminal, fire, damaged roads, beggar, illegal parking, bad public facilities, and ect. From some categories of complaint, there are five big issues that complained by most of people such us criminal, illegal parking, floods, fire, and damaged roads. With the application CROP, the relevant agencies should be follow-up the public reports and comes to the location where reported by the public. So all the problems that complained by the citizens of Jakarta can complet it well.

Furthermore, based on the data of research, to achive an effective public service can be measured by four dimensions of DeLone dan McLean model:

a. In the dimension of information quality, the explanation from some SKPD of user CROP indicates that the quality of information in the report via Qlue is very effective, because the information reports received in real time and accurately.
b. In the dimension of service quality, the explanation from citizens who using Qlue said that all of the public complaints can be responded quickly by Jakarta Provincial Government.
c. In the dimension of use, can be concluded that the use of two applications of JSC become more efficient and easy for the people to report their complaints.
d. In the dimension of user satisfaction, from all citizens who using Qlue are satisfied with the services of public complaints that provided by Jakarta Provincial Government.

From these four dimensions can conclude that the two smart city applications provided by Jakarta Provincial Government proved effective because SKPD can respond quickly and easy for them to report their complaints. Unfortunately, from the total population, public participation in using Qlue is still very low. This is proven by the data obtained from unit of JSC, for citizens who using Qlue only 3% from the total population in Jakarta. Whereas the citizens of Jakarta have been given the facility to report problems that occur with the application, but some of them ignored and rejected the Qlue. Jakarta Provincial Government hopes for all the people in Jakarta can utilizing Qlue in order to realizing Jakarta as a Smart City.

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