CHAPTER I

A. BACKGROUND

In the current era, the use of technology as media communication and information is very important. The use of computer as access, process and present information, both individual and groups, intra-networks and international networks as primary needs in digital era (Muhammad et al., 2011). In government, the use of Information Communication and Technology (ICT) to support development in a country. One of government project is smart city program. The concept of smart city has relation between trend and infrastructure social actions (Anand & Navío-Marco, 2018). Technology is part of smart cities, the success of smart cities are policy innovation, leadership and building innovation (Anand & Navío-Marco, 2018). Citizen platform is successful key to promote more transparency in digital era (Anand & Navío-Marco, 2018).

In the implementation of smart city, there are six primary of smart cities including smart government, smart people, smart economy, smart living, smart environment, and smart mobility (Vesco, Andrea; Ferrero, 2015). Every city has target to implement smart city using ICT as tool to be realized. The implementation smart city has project related to society and strategy from the government needs facilities to support program of government (Dameri, 2017).

In the smart government the system of bureaucracy in transparency and there are public transparency (vety, 2018). Next, the government need strategy to support implementation of government program, Indonesia has program smart cities in every city, especially smart government. There are programs of government based on ICT to help human and save time. There are applications of smart cities in Yogyakarta such as Jogja Istimewa, Immigration web, E-Lapor Sleman and Jogja Smart Services . In era digital, every instance start doing upgrading and modernization public service. The contribution done by government needs to implementation program and collaboration with ownership its not easy (Anand & Navío-Marco, 2018).

In digital era, internet gives loss of variety of information, For example applications of "Jogja Istimewa" as technology providers is one of the form applications of smart province in Yogyakarta. The purpose of this application is to make it easier people and tourists in obtaining information about Yogyakarta since 2015. The feature of application include health, culture, business, transportation, education, and others (Rachmawati, Ramadhan, & Rohmah, 2018). Based on the result of research about the application smart province "Jogja Istimewa" as

provision integrated information and utilization has 50 participants in Yogyakarta, almost places in central city. There are 38 participants who answer that do not know about the application and 12 know about the application. The conclusion of research is lack of promotion from government about the application Jogja Istimewa, the demonstrations of rule and how to use Jogja Istimewa, and increase users in downloading the applications.

Figure 1. Diagram of Jogja Istimewa 2015

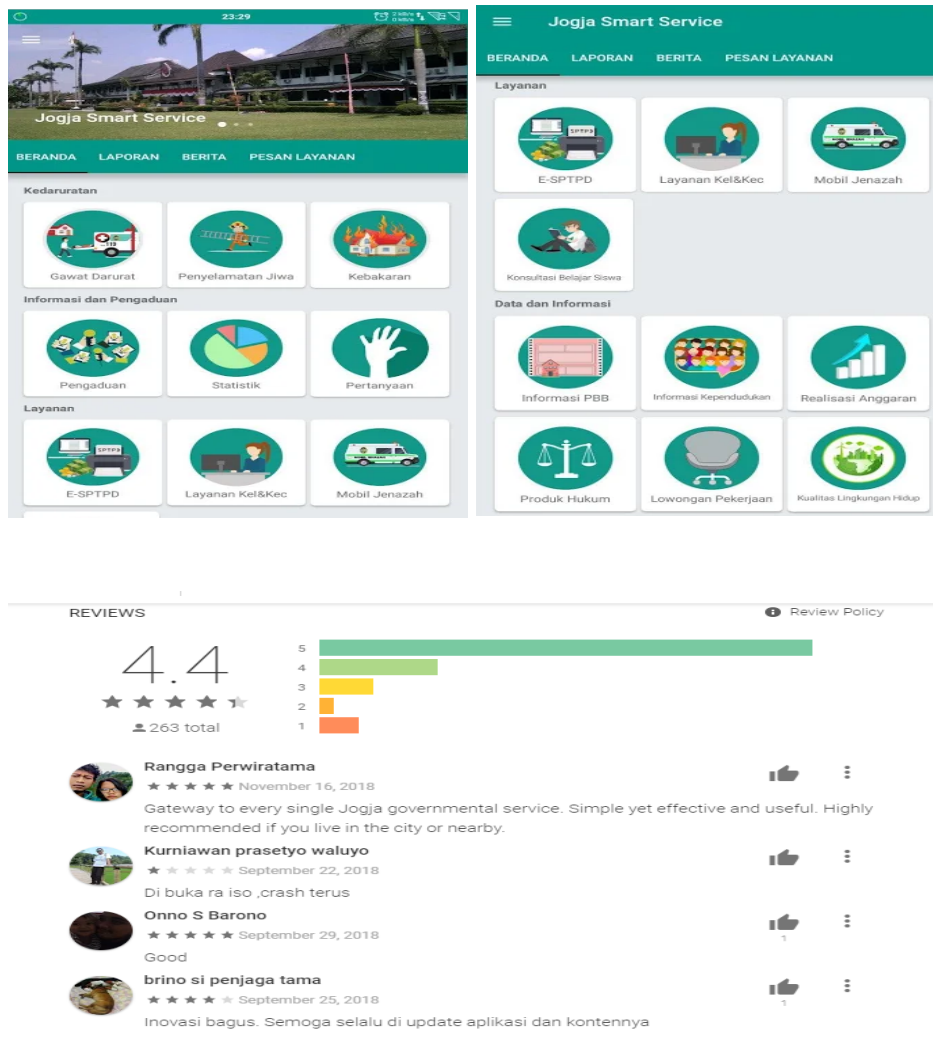Knowladge of "Jogja Istimewa" Application

8%

92%

■ No   ■ Yes
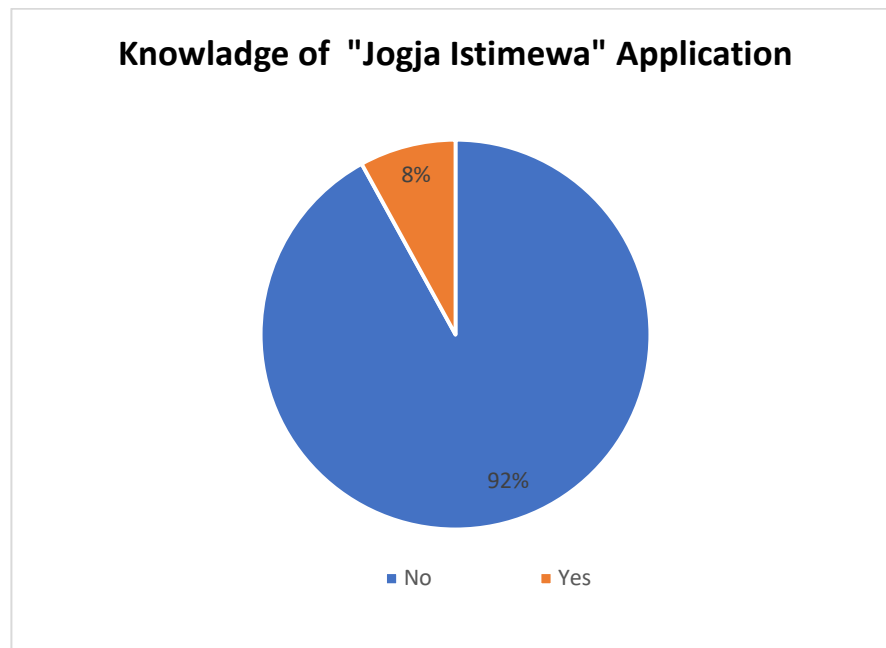
Sources: The Result of Jogja Istimewa Application in 2015 (Rachmawati et al., 2018)

Besides that, in 2018 the government made a new application often used by people in Special Regional of Yogyakarta that Jogja Smart Service Application made by *Kemimfo DIY (*Department of Communication and Information). Jogja Smart Service application has collaborated with feature service, information and complaint, emergency and data information. Department of communication and information join partnership with police, hospital, and other department in Yogyakarta. As the new application Jogja Smart Service has good rate in mobile application like android. The utilization of application can give impact for productivity, efficient and effectiveness of government.

The purpose of Jogja Smart Services is information public and public services in some department in governance itself. The purpose of research are the identification of "Jogja Smart Services" Application used by all of society are the analysis, promotion evaluated by government toward "Jogja Smart Services", the actors analysis and idea making new application and optimized, the action of governance and society toward "Jogja Smart Servics,

the different between Jogja Smart Services and other applications, and the usage place for Jogja Smart Service Application.

Figure 2. Jogja Smart Service Application

Jogja Smart Sevices application has a rate 4,4 of 5 in Play Store. According to a user, Rangga Perwira has assumption that "Gate away to every single Jogja Government Services; it is Hopefully effective and useful. Also, it is highly recommended if you are in city or nearby". Furthermore, Kurniawan Prastiyo has different assumption, that application its error open by phone.

According to Laws No.25 in 2009 article 18 about public services, there are right and obligation for society are knowing about standard of public service, observing implementation standard of public service and fulfilling public service and quality facilities. The participation

of society needed in implementation public services. The aspects evaluating of public service, based on Permenparb No.17 in 2017, are human resources professional, public policy, public service information system, consultant and judiciary, innovation, facilities and infrastructure.

According to Regulation of President No.3 in 2003 about "Policy and Strategy of National about Development E-Government", the demand of society is about public services that fulfill interest of people in all regions of the country. Therefore, the implementation of E-government can be with optimal and utilized ICT to elimination of bureaucratic organization. There are aspects in Information, Communication and Technology (ICT), such as E-Leadership, information network instruction, management information, business environment, human resources. The purposes and strategies to develop E-Government are developing reliable ,trusted, affordable public services for society, Organizing a management system and government work process, utilizing Information Communication Technology, increasing participation of Business world and developing telecommunications information, developing of capacity human resources in autonomy government, improving E-literacy, implementating development of systematic, realistic, and measured stages.

This research uses explanatory, explanation, participatory and descriptive. Explanatory is based on interviewing ll of participants related to this research including Department of Communication and Information, *Badan Perencaan Pembanggunan* (Bappeda), Department of Civilization and Population (Dukcapil), Department of Fair, Department of cooperation, UMKM and industrial, Department of Environmental, *Pembina Kesejateraan Keluarga (PKK),* and society in Yogyakarta City. Moreover, explanation is based on the result of interview from participants, and participatory is social actions to download and persuade to use the application. From all of them. the researcher makes conclusion by using descriptive paragraph.

According to (Anand & Navío-Marco, 2018), The goals of smart government are strategic of government, participation from society in decision making, and transparency. The satisfaction level in Ministry of PANRB is influenced for task and implementation to make policy, coordination, monitoring, and evaluation. Besides that, promotion is strategic for government in realization program of government (vety, 2018)

B . RESEARCH QUESTIONS

Based on the background problem above, the research question of this research are started as follows :

1. How is Jogja Smart Application as a new public service for society and government and also as a platform for citizen's needs?
2. How does smart government handle the government to improve the application?

C. OBJECT AND BENEFIT OF RESEARCH

1.Objectives of the research

The objectives of the research are:

a.To know attraction and interest of society toward the application of Jogja Smart Services

b.To analyz the utilization of Jogja Smart Services as the application from government

2. Benefits of Research

The benefit of research is to understand a mindset of society, with the utilization of program of the government based on technology. In additional it is to know the effectiveness of the application as public services. The findings are used as media promotion and opinion from public with this application. Based on the purposes and objectives of research, the benefits expected from this research are:

2.1. Theoretical Benefits

This research is expected to complete study and provide references the effectiveness of smart city based on technology, and to give suggestion for the government to improve the quality of application.

2.2 Practical Benefits

This research has benefits for society since society can know about this application, and this research give suggestion for the government to be active in the promoting the application and the utilization of the application as public service based on technology.

D. THEORITICAL FRAMEWORK

1. **Smart City**

According to (Niculescu & Wadhwa, 2015), smart city is a collaboration from government and society to use technologies in governance. The infrastructure, human resources, and technology are as indicators to building smart city (Niculescu & Wadhwa, 2015). The requirement of implementing smart city are uses smart digital for accessing data internet, use of smart devices for registration administrative of government, application and e-services as tools to develop infrastructure.

The indicator of success in smart city based on (Annisah, 2017) involving the participation of society in taking decision such as public hearing, survey, discussion online, public service and development of complaint service. In governance transparency needs the utilization of website and application as political strategic perspective. In taking decision , aspiration from society is needed to make policy and support from information from government such as blue print, infrastructure, ICT and E-government (Annisah, 2017).

Furthermore, (Fridayani & Nurmandi, 2018) had argue about smart mobility as a tools, to make more efficient, such as application in city which is to be accessed by society. The application also has feature to support activities of society, such as education, administrative, and participation from society give impact for utilization smart mobility (Fridayani & Nurmandi, 2018). Besides that, there is smart economy for regional or global competitive, entrepreneurship and innovative momentum, high levels of productivity, increased broadband access for all citizens and business, sustenance of business , electronics business (e-banking, e-shopping, and e-auction) (Vesco, Andrea; Ferrero, 2015).

Moreover, Andrean Vesco has mentioned that Smart Living include high quality, social aspect-education (health care- public safety, housing), access to high quality, providing electronics health records management, home automation, smart home and smart building services, and access to social services. Smart Governance involves decision making, public and social services, transparency, increased democratization and political efficacy, interconnecting governmental organization and administration, enhanced community to multitude of services and next Smart People as Social and human capital, qualified, creative and educated citizens, consistent educational experiences, e-educational. Last, Smart Environment is activity use technology to reduce pollutant and energy consumption (Vesco, Andrea; Ferrero, 2015)

The meaning of primary smart cities are the elements and the indicator in supporting of the implementation of smart city based on social action from the government collaborated with society. The relation between the government and society needs to make decision making and evaluate all of problem in implementating smart city. Besides that, key success to build smart city is strategic plan for next steps done by the government. Indicators successful others of smart city are that it has good time management and goals and determine efficiency and effectiveness in implementing smart city.

2. Smart Government Challenges

According to Vesco (2015) , in the implementation of smart city there are six primary smart cities, namely smart government, smart people, smart economy, smart living, smart environment, and smart mobility. In the smart city there are the indicators for key success including the participation of public and transparency of government (Anand & Navío-Marco, 2018). Besides that, (Anand & Navío-Marco, 2018) said that the challenges of government include a problem of public services, a participation for decision making and a spatial planning process. The conceptual smart government and elements involve strategic and relevant outcome of object and interaction from smart citizens to implement "Smartness" in all aspects (Anand & Navío-Marco, 2018).

However, (Nurmandi & Purnomo, 2011) has argue about indicator success of smart government related to "Strategic Planning" its means that development strategic planning involved missions and vision of government, opportunity, and challenges make the strategiy and goals, identificating issues and problem and doing evaluations, a taking social action. The specific aspect of implementation smart government based on (Anand & Navío-Marco, 2018) is interaction between citizens and the government to implement some action of smart cities.

In the strategic planning, the government make practice with procedure, evaluating, and analysis. (Nurmandi and Purnomo, 2011) stated that for making strategic planning, it needs SWOT analysis (Strengths, Weakness, Opportunities, and Treats) and knowledge about the context. The strategic plan makes government has draft for direction, and it is used for guidance; then, all of activities done by government as pursue. The contributed government and citizens give influence for develop smart cities, and collaborative between government (local, province, and cities), and public gives impact in development plans (Anand & Navío-Marco, 2018).

3. New Public Services

The public management has strategy improving the performance of public sector more effective and efficient (Fatemi and Behmanesh, 2012). In supporting the actualization of public services quality, there are: 1). The dimension of public service quality as functions to interact between individuals and environment, 2). The dimensions of public services quality as the principle running administration among others like steering rather than rowing implementation own development, which is enough control resources in community (Solong, 2017)

Furthermore, (Solong, 2017) argued about the concepts of NPS that they are democracy and empowerment, services, transparency, participation, decentralization , participations, policy consistency and partnership. Besides that, according to *Kepmenpan No.63/KEP/M.PAN/7/2003*, the public service is a service activity implemented by public service as effort fulfillment services. Based on Laws no.25 in 2009 the public services becomes as activity or fulfillment service based on rule for all citizens and administrative services done by organizer public services. In theory of public services based on paradigm, the new public service is responsive to interest and public values. The tasking of government are negotiation and collaboration with all citizens and community.

Solong (2017) has perspective about new public management services which the has principles are making management skills for active, objective and voluntary control of organizations, and defining standards and criteria for measuring performance through determining the objectives and indicators success.

4.E-governance and E-Public Services Theory

Widodo (2016) in theory about E-government as government administration with ICT to improve performance of governance, and community need in transparency and accountability financial information with a purpose of good governance. E-government is interned user to carry out government affairs and provide public service orientation to public society (Widodo, 2016).

According to (Cahyadi, 2003), the critical factors of implementation e-government program are support from manager in taking decision, willingness in changing methods building partnership, sharing, managing data and good from government institutions ,willingness to improve work culture, ability and regulation of government administration and finance in institutions to implementation e-government. Then, the implementation is developed

by with requesting from society, adoption rate, and acceptability rate. The crates justice are information access and goods, developing facility of technology and regulation to support and security guarantee and last Level of skills and infrastructure ICT.

The successful key the implementation of e-government based on (Alshehri Abdulrahman & Drew, 2010) is collaboration and cooperative with all partner related to implementation e-government and utilization ICT in infrastructure.

Figure 3. The Lack of E-government

The Lack of E-Government	
Category	Include
Technical	- ICT - Infrastructure - Privacy Security
Organizational	- Top Management Support resistance to change to electronic ways collaborative lack of qualified personnel and training
Social	- Digital Divide - Culture Financial
Financial	- High Cost

Sources : (Alshehri Abdulrahman & Drew, 2010)

According to (Afriani & Wahid, 2009) the implementation cases of E-government are located in Jambi City, is utilization of Information, Communication and Technology (ICT) to improve government administration quality and communication quality. The main focus of that research was as identification of E-Government application has impact to good governance, and the case of research was service E-Government for business (Afriani & Wahid, 2009).

By the using ICT there is an opportunity for government to give services and interaction with constituent, society, business, and partnership. In Jambi city there are information 2 system based on (Afriani & Wahid, 2009) which are KANTAYA (*Kantor Maya*) related to regional administration and SIMDA (management system of government regional). Government agenda is developed connection network in Sub-District, and one windows. The

result indicator of research based on Snowball Sampling concerns for stake holder and improve service to share information in Jambi City such as website. The characteristic of services is in convenience and safety. The effectiveness and efficiency of the service based on ICT give impact for productivity level, conducive, discipline. The last participation of society is such as SMS center and forum discussion online. In the cases of participation of society needed as opinion and suggestion between stake holder and society.

In smart government public services, E-public service are roots in implementation of e-Government. According to (Visser, 2010) the dominant models of e-government are found in public service management and e-business models. The success of e- public service in implementation based on realization and government ICT Technological innovation to improvement of service delivery (Visser, 2010).

In service standard for delivering massage in ICT, it use, all society and the focus on increasing information to public using interview and assumption from society in development e-public services (Visser, 2010).
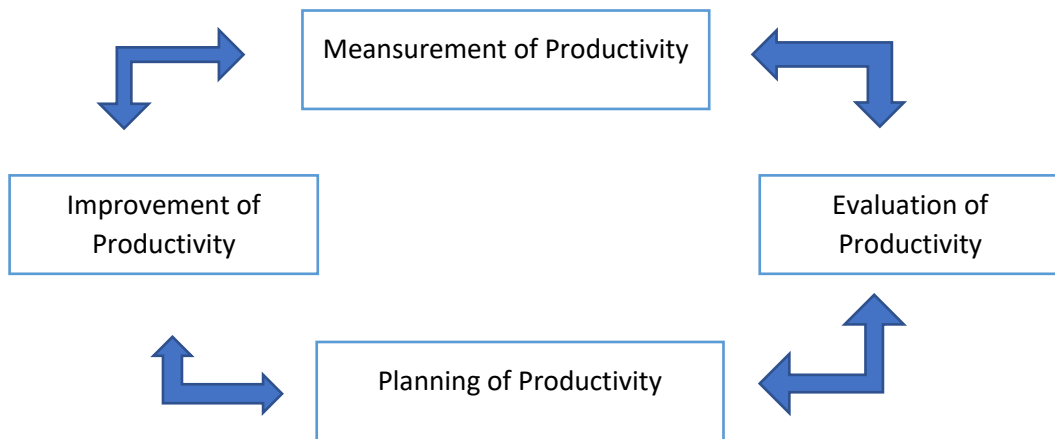

5. Theory of Productivity

The concepts of productivy is relantionship between output results ouput or organizational result with necessary input, productivity ratio can be improved by adding more output in the form of increasing certain resources (Agustina, 2018). According to Bappenas (2010) the factor give influence toward productivity level included human resources, collaboration, participation, and result of activities.

The productivity has meaning of comperative between the results achieved with resources used (Suryono, 2016). In addition, the good productivity needs: 1). Efectiviness as achievement of work (goals) related to quality, quantitiy and times. Efectiviness it is a meansure that provides a fareaching picture of the target 2). Effciency which relates to effort to compare input and realization of their use or how the work is used or meansure of comparing planned inputs with actual inputs.

According to conference of OSLO (1984) quoted by Suryono, Productivity of work has 3 meaning, such as: 1). Productivity is ratio of what produced (Output) for the entire production equipment used (input). 2). Productivity is basically a mental attitude that has the view that the quality of life today is better than yesterday. 3). Productivity is interaction formally integrated from three essencital factors namely investment including the use of knowledge and technology as well as research, management and labor.

Figure. 4 The Ducitivity of Producitivity

Sources: Atfal Murodif (2016).

Based on Figure 4. The cycle of productivity theory has a stages can be started from planning of productivity included identification problem and description planning to improvement of productivity and make a meansurement of productivity before get a result from the goal and needs evaluation of productivity to know developing of the goals.

E. DEFINITION OF CONCEPTS

There are some definitions a concepts supporting the previous explanation, as follows:

1   (Anand & Navío-Marco, 2018) said that the productivity of smart government including the involvement of government and participation from citizens in public and social services and transparent of the government. In addition, the government knows situation and location smart city projects. In the implementation of smart government, participatory from society needs decision making. Besides that, the performance of government is indicator to determine productivity of smart government.

2   E-Public Service using ICT based on (Alejandro et al., 2014) has been considered as the mean to solve the city's economic, social and environmental challenge. According to *Peraturan Mentri Kemimfo* No.41 in 2007, procedure of National Governance TI has purpose to implement good and responsibility of IT governance (Good Governance) with the application involving the principle of accountability, rule of law, transparency, and participation all of society in public policy process. Thus, In

Implementation E-Public Service needs ICT as complementary performance of government.

F . THE OPERATIONAL CONCEPTS

In this research, there are some definition it is started as follows:

a. Productivity in development planning (Gaspersz,1998) , mentioned:

- Effective and Efficient in make planning as meansurement in productivity.
- Strategy to increase productivity
- Evaluation and monitoring to productivity improvement

b. (Visser, 2010) mentioned E-government and ICT , including:

- Utilization of ICT in implementing E-Governance
- Attractive and efficient Jogja Smart City Application
- Productivity level of Jogja Smart Service Application

In this research, the productivity of new public service based on Jogja Smart Service can engage the realization of Yogyakarta Smart City looked by comparative, assumption, challenges of utilization application to make efficient, effective, and productive.

G. RESEARCH METHODS

The research methods are to discovering answers through the application of scientific procedures. The main aim of research is to find out the truth which is hidden, and which has not been discovered as yet, though each research study has its own specific purpose.

a. Type of Research

The research method is qualitative research based on methods, are:

1. Descriptive

The research projects regarding (Dalgleish et al., 2007b) are used for descriptive studies in which researcher seek to measure such items example, frequency done of shopping, preferences of people, or similar data. It includes, attempts done by researchers to discover causes even when they cannot control the variables. The methods of research (Dalgleish et al., 2007a) utilized in descriptive research are survey methods of all kinds, including comparative and correlational methods. In analytical research, on the other hand, the researcher has to use facts or information which is available and analyze these to make a critical evaluation of the material. Besides,

According to (Baxter, Hastings, Law, & Glass, 2008) The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening.

The conclusion of descriptive use correlation between phenomena and objective, but the weakness of descriptive is that the researcher cannot control and variable in research. Though Descriptive analysis the researcher can get information from object and evaluation in research.

2. Conceptual and Empirical

The conceptual of research (Dalgleish et al., 2007b),I is research related with some idea or theory, the empirical research based on observation and experiences from researchers. The concept of this research based on experimental and fact first hand to production of information and characteristic of research is manipulate of one them to study to get information (Dalgleish et al., 2007b). In Empirical research needs evidence to doing experiment or empirical studies based on hypothesis (Dalgleish et al., 2007b) From explanation, Conceptual and Empirical we can take conclusion: researcher will be research based on idea and concepts. In this methods researcher makes hypothesis about problem and solution for guide in research. Though, researcher need more information to get result with variables and experiment to support data in research.

3. Exploratory

Exploratory research is a new research without does hypothesis, in exploratory research there are the involvement of researcher in make conceptual concept in research, the exploratory research has observastion in theory and realitin in a forth and back (Barnd Reiter,Ijsrm Human,2017:Vol.5 (4): 129-150). (Dalgleish et al., 2007a) started about Explanatory research, For example, it is one thing to describe the crime rate in a country, to examine trends over time or to compare the rates in different countries. It is quite a different thing to develop explanations about why the crime rate is as high as it is, why some types of crime are increasing or why the rate is higher in some countries than in others. Hence, exploratory needs deep research to knowing all of aspects including characteristic of object, and the explanation problem solve in research.

In this research, The reseachers used descriptive and explonatory qualitative research, the research focused on descriptive and analysis the problem, participation, and utilization of Jogja Smart Services in Yogyakarta as public services. In addition, the problem of research related to smart government to make a simple public services and influence for the performance of government for society.

E. Research Location

The research was located in Special Region of Yogyakarta in the case of attraction, utilization, and effectiveness the application of Jogja Smart Services. Especially, the instance in Yogyakarta has collaborated and joined in this application there are *Bappeda, Keminfo*, corporation, police and department in Yogyakarta. The reason selecting the location is that, there is relation between user and official application. The researchers is interested in this topic and knowledge about the effectiveness of Jogja Smart Services.

F. Data Collection Technique

The researcher uses some references such as books, journal and article related to the research. For the collecting data, the researcher uses two types data as follows:.

1. Primay Data

According (Sica, Knoblauch, Wilke, Berger, & Luckmann, 2016) The information obtained relates to what is currently happening and is not complicated by either the past behavior or future intentions or attitudes of respondents. This method is no doubt an expensive method and the information provided by this method is also very limited. As such this method is not suitable in inquiries where large samples are concerned. And then according (Dalgleish et al., 2007a)

There are personal interview for the investigator follows a rigid procedure and seeks answers to a set of pre-conceived questions through personal interviews. primary data refers to the information gained first-hand by researchers related to the interest variables for specific study purposes. The primary data in this study are obtained through questionnaires and in-depth interviews(Fridayani & Nurmandi, 2018). This is not a very widely used methods, but it plays an important role in industrial surveys in developed regions, particularly, when the survey has to be accomplished in a very limited time. The researcher and the respondents do come in contact with each other if this method of survey is adopted (Dalgleish et al., 2007a) .

Although, For Primary data researcher make survey and draft for guide in research. And doing deep interview to knowing characteristic and problem solve in research. And collecting data in relevant from respondents, and very carefully of questioners to reduce errors in research.

2.Secondary Data

According to (Andrews, 2012), secondary data is based on analysis of individuals in research; the resource of this research are journal, books, document, literature review related the object of research.

G. Data Classification

Data clarification based on (Baxter et al., 2008) in this research uses primary and secondary data to identity. Data analysis in qualitative research is neither intended to look for trends about observed social realities nor to portray patterns in general from observed social realities(Dalgleish et al., 2007b). However, qualitative analysis is intended to interpret the meaning behind the words and behavior of the subject of the study to seek an in-depth understanding of the social reality under study as the social reality is understood by the research subject (Dalgleish et al., 2007a).

H.Data Analysis Technique

Based on the journal of research methodology Bexter (2008) said the researches wants to be complete data analysis, the stages of data management and analysis in study are the measurement of scale, empirical generalization, logical induction. According to (Dalgleish et al., 2007a) are depth interview transcription using the language related in interviewers. Then the next step is to do logical induction, by looking for an in-depth understanding of the social reality under study as the social reality is understood by research subjects, as well as interpreting the meaning behind the words & behavior of research subjects (Andrews, 2012). It can be conducted that qualitative research methods are not rigid so that the order of the order can be adjusted to the context are exist as long as it can support the achievement of research objectives (Baxter et al., 2008). The conclusions and verification in this study are carried out based on an understanding, qualitative research, conclusions that are made in several stages. In descriptive is conclusion based on data verification and collecting data to find the result of research.

I.THE SYSTEMATIC OF WRITING

The systematic of writing and understanding, the researcher make a systematic writing as follows:

Chapter I: Intoroduction, in part focused on background, research questions, objectives and benefit of research, theoretical framework, literature review, definition concept, operational concept, types of researches, research location, collective data, data classification,data anaylis technique.

Chapter II: Description of Speacial Region of Yogyakarta, has describe about boundary, location and population, condition and potential of Yogyakarta City, Vision and Misssio of Yogyakarta City.

Chapter III: Results and Discussion, focused on the problem and influence of Jogja Smart City as new application for public services, and the implementation for government and society also the influence and the solution from government to make promotion for society.

Chapter IV: Conclusions, consist of the conclusion of the research, recommendation, and literature on the smart city, E-government, and public services.