

## **CHAPTER III**

### **RESULT AND DISCUSSION**

This chapter describes the findings and analysis of the formulated problems presented in first chapter of this research. This chapter discusses the productivity of smart government with new public services, the participation of citizens in using the application of public services, especially the optimize of Jogja Smart Service (JSS) as the new application in Yogyakarta. The content is presented in this chapter in which is divided in some parts. The first part discusses the involvement of the government in smart city, including public service and openness of government. The second part explains about the implementation of smart government related to the strategy of government, participatory, policy request, information and data openness, and the last part discusses the utilization of ICT and E-government.

#### **III.1. The Involvement of the Government in Smart City**

Smart government concepts consist of the involvement of the government in public services, participation in decision making, transparency government, development planning and strategy from the government (Anand & Navío-Marco, 2018). In Yogyakarta, there has application created the government to support Yogyakarta as smart city. The involvement of the government implement with new public services application as the support to Yogyakarta Smart City.

Yogyakarta join to in the program made by the government that is movement 100 smart city to development of city. The optimize performance of smart government has an embodiment of government for society to implementation program of government. The utilization of Information Communication and Technology (ICT) is embodiment of smart city in Indonesia.

The development of Information, Communication and Technology give influence toward public services in government. Besides that, the success indicator of smart city is that the smart government can be feel easier to access services in quickly and optimized ICT system (Budi Sustrisno & Idil Akbar, 2018). In this part, authors analyzed all aspect of the involvement of the government towards smart city.

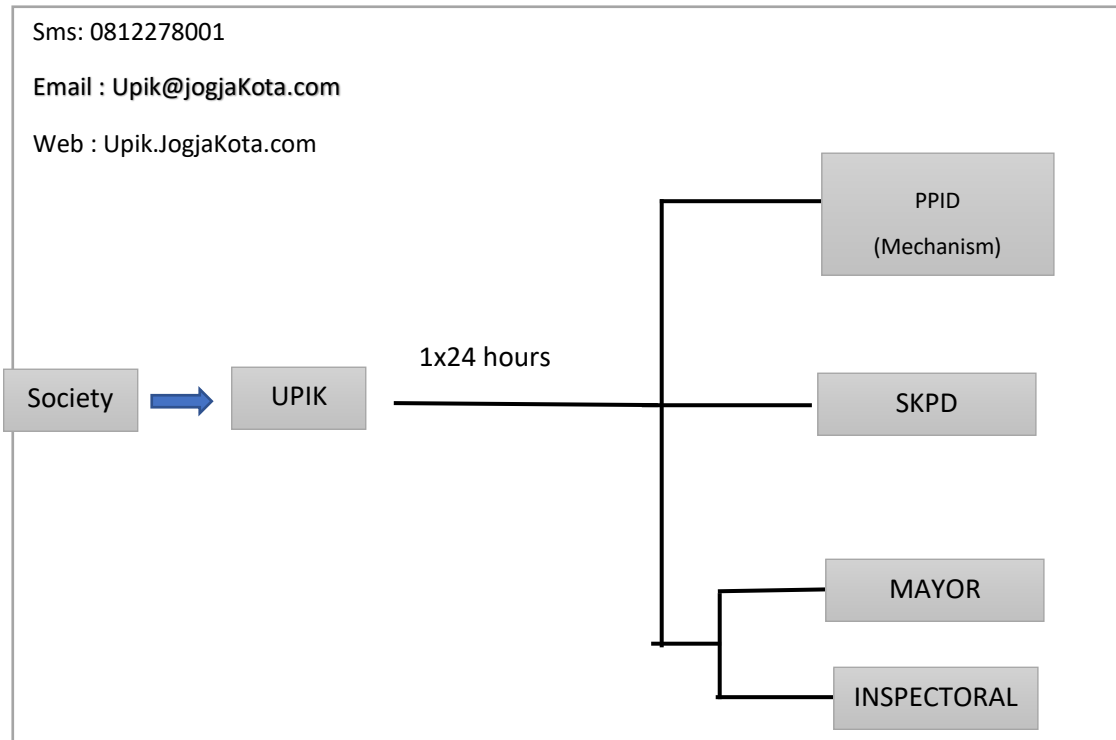
### **III.1.1. Public Service**

Based on the Constitution no. 25 in 2009 about public services involving the improvement of quality of public services with a provider of facilities and infrastructure, participation, responsibility, competence in implementation, and publication of public services. Beside that, the implementation of smart government in public services has innovation and collaboration, transparency of public services, and government can be fair to public services (Anand & Navío-Marco, 2018).

Yogyakarta has public services to support smart government, including UPIK (*Unit Pelayanan Informasi Keluhan*) and JSS (*Jogja Smart Services*) application. UPIK and JSS application has the same purpose and different kinds. UPIK is website created by the government as form of service and society complaints based on conventional system such as SMS (Short Message Services), email and customer services. Also JSS application is upgrading innovation from the government in public service to make one window of public services.

UPIK created by the government in 2009 is based on *Peraturan Walikota No.77* in 2009. UPIK becomes facility to delivers complaint, questions, information, and suggestion to the development of government. The system of UPIK shows that the services in UPIK has stages and division inside based problem of society. The work system of UPIK needs 24 hours to process of responds from government. Society cab give complaints though using system, SMS (Short, Message Services) , email and website. Furthermore, complaints input based on SKPD (*Satuan Kerja Perangkat Daerah* ) and PPID (*Pejabat Pengelola Informasi dan Dokumentasi*).

**Figure 1. The System of UPIK (*Unit Pelayanan Informasi dan Keluhan*)**



Sources: Department Information and Communication Yogyakarta City, 2018.

UPIK has stages before being processed by the government. The demand from society input in UPIK system needs 1x24 hours process to identify department based on the problem of society. The UPIK system has 4 services handled by the government, including PPID (*Pejabat Pengelola Informasi dan Komunikasi*), SKPD (*Satuan Kinerja Perangkat Daerah*), mayor, and inspectoral.

Based on the Mayor's Decision No.269 in 2017, the duties and authority of PPID include the providing and securing public information, compiling standard operation procedure for implementation of public information, and providing public services for public information which are fast, precise and informative. Besides that, According to the Regulation of Yogyakarta City No.3 in 2008 about the local government, SKPD parties are regional secretary, secretary of DPRD (*Dewan Perwakilan Rakyat Daerah*), local department, regional technical institutions, sub district, and *kelurahan* (Political district administered by village chief). The complaints of society input based on problem in area.

Based on result interviews conducted at Department of Population and Civil Registration (DUKCAPIL), the participant said,

*"Public services based on online creating a work system more efficient and the*

*integration with OPD (Organisasi Perangkat Daerah) ” ( Itta Rustanti, 29 January 2018).*

In addition, the argument of Itta Rustanti Related to Arbianto about the system of public services in Yogyakarta City.

*“The utilization of public services based on online used by society is more efficient than based on going to relevant of department directly”. (Arbianto, 3 february 2019).*

UPIK based on conventional system for selective process based on identification of problem. In had public services, the conventional system could not be used for a way to get real information. The utilization of ICT is supportive implementation of smart city. In emergency system, the utilization of conventional system needed to have efficient time and conditions. UPIK was public services in conventional system, had a service for complaining and sharing information from government.

**Table 1.The Complaints in UPIK  
(2February 2019- 1 March 2019)**

No	Complaints	Quantity
1.	Tax, Licensing, Industrial, Trade, Tourism and Entertainment, Reklame, Sport, Transportation, Social, Agriculture, Administration, Public Services, Cleanliness, Garden, Eduction and officialdom.	0
2.	Health, Discipline, <i>Kipraswil (pmukimanan dan prasana wilayah)</i> , Living environment.	5
	Totals	5

*Sources: Website Unit Pelayanan Informasi dan Keluhan, 2019.*

Based on the Table 1, showed that in UPIK system, the complaints from society could be accessible in the public. One of complaints from society on 27 February 2019 was related to the problem of street lighting in Umbul Harjo area. The respond of government addressed to Department of Public Work in one day report. The sources from UPIK system in complaint, there was no progress from government.

Based on the result on the interview done at Department of Communication and Information of Yogyakarta City, the participant mentioned,

*““ UPIK (Unit Pelayanan Informasi Keluhan) as conventional services to report community complaints like SMS. But, in conventional system has long*

*process to identification problems from society” (Joko Marwianto, 2 February 2019).*

The lack of UPIK system was absence of image as the evidence from the problem. Thus, the government needed time to check and clarify area about problem. In UPIK, society could only send messages in the form of text to government.

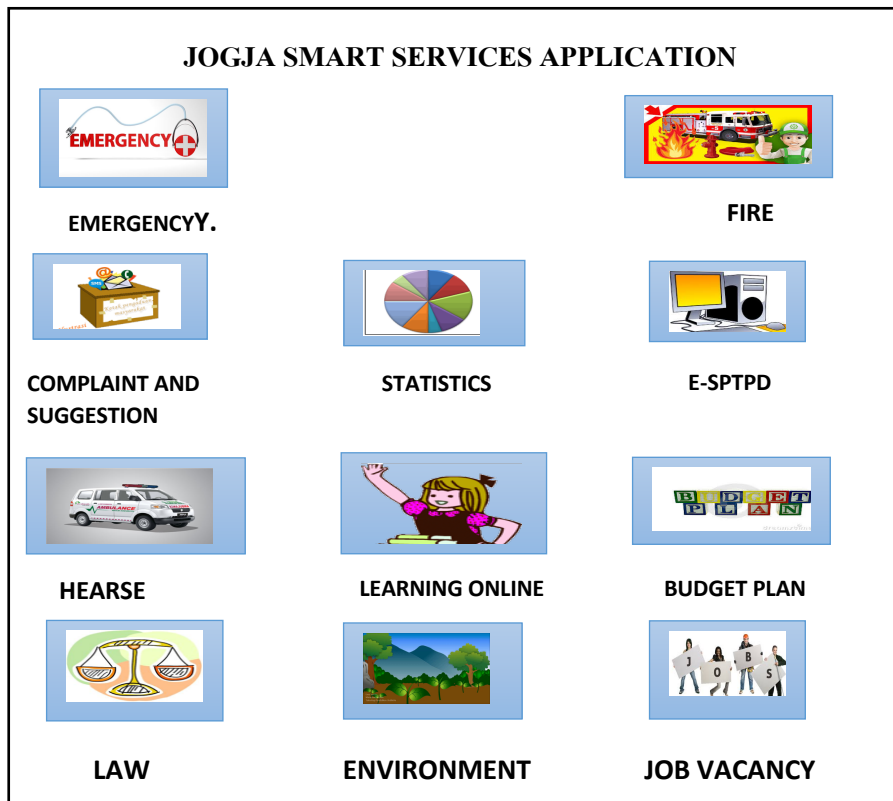
However, in 2018, the government made new system to support public services in Yogyakarta. Jogja Smart City (JSS) is new public services used for all society such as complaint, public services, agenda, promotion and report for all staff department in Yogyakarta City. This application started operating since June 7th, 2018. In this application there are 2 different versions, for government and society. According to Department of Communication and Information, JSS is divided into 3 parts, including:

Complaints system, Statistic of information, and public service partnership.

The complaints system related to public service are the complaints system used by society to know the problems of public services. The complaints become supporting fact data from society to speed of process in services. A complaint is delivered with pictures and video related to problems of public services. Besides that, is needed by government to know about new information from other government and transparency data about government. The information handles by the department in Yogyakarta, include realization of budget from government, job vacancy, important places in current area, events in Yogyakarta, and agenda meeting of government.

Furthermore, Public Services and partnership, are used by society to make efficient and effective in proses of public services. The utilization public services based online supports program of smart city and partnership doing collaborating with government to improve quality of services.

**Figure 2.The Jogja Smart Applications**



Sources: *Playstore, 2019.*

Jogja Smart Services (JSS) application is a feature to support public service in Yogyakarta City. The features are related to emergency, public services, information and partnership. Based on the data from Department of Communication and Information (Keminfo) there are 10.754 active users in JSS. Besides that, the populations of Yogyakarta City are 417.744 populations (2017). Based on data from Departement of Communication and Information Yogyakarta City, The best 3 feautres highly used for citizen are: Complaint and Suggestion services for society with 894 complaint in 6 months (Febuary until June 2019), Job Vacncy related to information about job fairs and networking and last learning online handled by Departement of Education for student to learning education online.

According to *Bappeda Special Region of Yogyakarta (2016)*, the benefit in implementating of smart are city as explained: First, Improving quality of public service and problem solved is that the utilization of public service is problem solving, in the improve quality of public service, it needs evaluating and monitoring system about services. It can be either public service which is response of government service to identify problem of government.

Second, Creating Good Governance needs to carry out program of government. The principles of governance are transparency, rule of law, participatory, responsibility, accountable, equitable and inclusive, consensus oriented, effective and efficient. Third, A smart city is education of community to know about ICT. Smart government needs ICT to support performance of government. Last, management of city potential and human resources in implementing smart city is limited. The improvement of quality of human resources is determined of implementing smart city in area (Bappeda Special Region of Yogyakarta, 2016).

The implementation of smart city needs standard to measure the success of smart city. The use of ICT in public services can be done effectively and efficiently the service to society. The effort from government as provider of public services are manage and introduce of society about applications.

Based on the result of interview done Department of Population and Civil Registration (DUKCAPIL):

*“Governances done program becomes support from government to implementing vision and mission of city. However, in Yogyakarta government the challenges are Human Resources and Budget Constraints”* ( Itta Rustanti, 29 January 2018).

Furthermore, the government of Yogyakarta, was needed to make evaluation about failed factor in implementing government programs. In Yogyakarta, the improvement quality of human resources gave impact for the implementation of public services. The stages of government reflected to principle of good governance needed all aspects, without one aspect, there was the lack of implementation of smart city in Yogyakarta.

Based on the result of the interview conducted at Department of Communication, Information Yogyakarta City, the participant mentioned, :

*“ good governance is government knowing all of background society before implementing the program or policy more efficient ”* ( Joko Marwianto, 1 Febuari 2019).

However, based on Department of Communication and Information of Yogyakarta City, JSS application until on February 2019 had a little bit from population in Yogyakarta City and cooperation only 1:400. Even though, JSS as tools to make easy public services in Yogyakarta City and government make JSS with features and pictures as evidence in complaint.

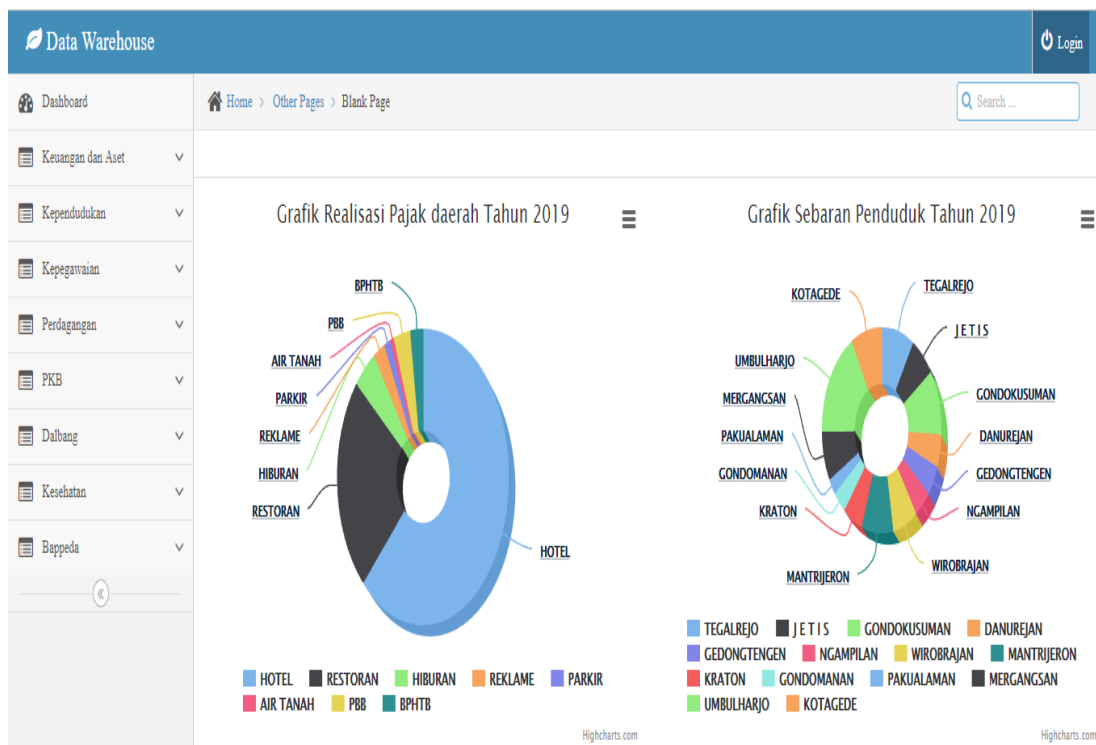
### III.1.2. The Openness of the government

The openness of government aims to success of smart cities with the transparency data of government in the public to the development of planning process (Anand & Navío-Marco, 2018). Besides that, (Annisah, 2017) argued about openness of governance related to transparency stakeholder; the transparency from stakeholder are:

- 1). Principle of communication between stakeholder and utilization communication as tool to make reports.
- 2). Make strategic communication between internal and external.
- 3). Directing implementation and information in institution
- 4). Development mechanism for validation and agreement every institution
- 5). Measure of effectiveness and communication in stakeholders

In Yogyakarta City, there was data Warehouse accessed in JSS, related to all of activities done by government. The purpose of data warehouse was a reflected from transparency of government. Data Warehouse handled by Department in Yogyakarta City related to a). Financial and Asset b). Population c). Staffing d). Trades e). PKB (Tax for motorcycle) f). Data of building control g). Health h). *Bappeda ( Badan Perencanaan Pembangunan Daerah)*.

**Figure 3. The Data of Warehouse of Government**



Sources: *Jogja Smart Services Application, 2019.*



Based on Data of Warehouse, there are some services, including Financial and Asses which have indicators as follows: 1). Realization local tax 2). Budgeting. In the of data Warehouse society can access about amount of local tax, such as tax in street lighting. The services of Population is related to religion, age, marital status, *akta*, disability, family card, nationality, education, and type of blood.

The service of Staffing is religion, rank, work unit, education and position. This service makes the government and staff in easy know about identity of staff in government of Yogyakarta City and handled *Badan Kepegawaian* in Yogyakarta City. In Trades, features related to trades in Yogyakarta handled by Department of Industrial and trading in Yogyakarta City. the services about trades has services of realization and retribution.

Furthermore, Vichle tax (PKB) handled is by *Sistem Administrasi Manunggal Satu Atap (SAMSAT)*, Yogyakarta City. Based on data from SAMSAT (2019) SAMSAT divided is into some part: a) Polri as the function of security, registration and identification b).Income office Region as function prosperity or tax c). Jasa Raharja as the function of insurance. In service of Data of building control handled by government of Yogyakarta. based on features there are no information related with building control.

Besides that, health is a feature in the Warehouse of Yogyakarta City, and is handled by Department of Health Yogyakarta City. In health there is data for information amount of health in health center of Yogyakarta City. (Khodary, 2016) has assumption about services of health center which needs transparency data including complaints, mechanism, procedures, performances, budget, and future. Last, Bappeda (*Badan Perencanaan dan Pembangunan*) of Yogyakarta City in the data of Warehouse is nothing upgrading, Based on the previous interview conducted with Keminfo Yogyakarta City, some departments are in process join in JSS application.

However, in 2019 utilization of public services has some problems. Department of Communication and Information Yogyakarta City has complaints from society involved in Jogja Smart Services, including:

**Table 2. The Complaints in Jogja Smart Services  
(7 June 2018 – 6 February 2019)**

<b>Kinds of Complaints</b>	<b>Quantity</b>
General Public Service (street, pollutant, traffic, waste, land, garden, tourism object, tax, internet host spot, agriculture, trading)	<b>712</b>
Social and media problem	<b>13</b>
UMKM, IKM and market management	<b>3</b>
Disaster Management	<b>15</b>
Sub-District area	<b>15</b>
<b>Totals</b>	<b>894</b>

Sources: *Keminfo*, 2019.

The data above were the complaints from public toward JSS application that had received 894 problems. The most problems, in JSS application were 712 complaints related to general public services, including street, pollutant, traffic, waste, land, garden, tourism object, internet hotspot, trading, and agriculture. Besides that, other complaints were related to social and media problems has 13 complaints, UMKM (*Usaha Mikro, Kecil dan Menengah*) and IKM (*Industri Kecil dan Menengah*) having 3 complaints. Another problem related to disaster management was 15 complaints and sub district area had 15 complaints. The data since 7 June 2018 until 6 February 2019 had 894 complaints.

Based on the result of interview conducted at *Pembinaan Kesejahteraan Keluarga (PKK)*, the participant said,

*“The openness of the government is need to make a good communication between stakeholder and staff as Example in PKK, leader of PKK has good communication if there are project and mandate.”*(Mrs. Andi, 16 January).

The good communication give impact for performance between stakeholder and staff. The leader needs clear explanation about instruction and acts in problem solving. The special treatment for old people is to learn about the utilization of JSS as application to improve the quality of users. In addition, the same argue Mr. Joko’s from statement was in line with he said, Andi related to interviews with Department of Communication and Information Yogyakarta City:

*“In the government, there are features about agenda of government, every day, there are updated agenda meeting and conference for all staff, ICT is as tool for communication and for creating efficient time and condition. Every department needs coordination about agenda for meeting so it does not need conventional system like massage”. (Joko, 2 february 2019).*

In the openness of the government, the activity of government could be accessed by the public. The utilization of ICT had tools to communicate with other departments in Yogyakarta to minimize time and condition. The utilization of the Data of Warehouse in the activity included agenda meeting to make public policy having same theory as the openness of the government in programs.

### **III.2 The Implementation Smart Government**

The implementation of smart government has indicator for key success including the participation of public, transparency of government, interaction and communication, strategic planning and accountable (Anand & Navío-Marco, 2018). Besides that, (Scholl & Scholl, 2014) argued that about smart governance is open government and guide smart administrative. In this part, describe indicators for key success in implementation smart government.

#### **III.2.1 The Strategy of The Government**

The strategy of government is approached by the government to persuade citizens joining to the program of government; the strategic planning uses ICT as tools to develop new solutions based on successful and effective collaboration between citizens, agents, and institutions using innovative, sustainable and inclusive business models and policies (Anand & Navío-Marco, 2018)

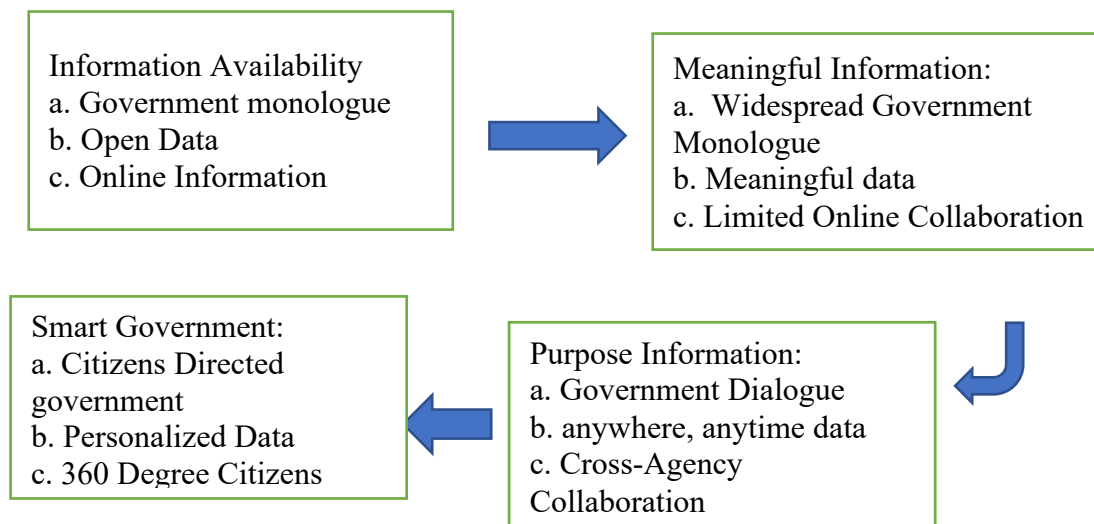
Jogja Smart Services (JSS) had versions used for staff of government and society. Every feature has different strategy marketing. In the government, the version are related to performance of government, agenda meeting, and salary. In society, versions have features as information system, registration, complaints, and promotion.

Based on the result of the interview at Department of Information and Communication Yogyakarta City, the participant mentioned,

*“The different approaches in promoting and utilization between government society. In government has information agenda and salary. For society use for information and training”. (Joko Marwianto, 3 February 2019)*

Based on the interview done at Department of Information and Communication ( Keminfo) Yogyakarta City the strategy needs to influence government and society using application to support programs of government. *Badan Perencanaan Pembangunan Nasional (Bapennas,2015)* started about smart government related with agency or institute in

government based on developing ICT and easy access for interest group. The principle of concepts implementation involves collaborating and all level of society, developes operation more efficient, improve organizational management, human resources, and infrastructure, creates database system for generally the processing up-to-date (real time) data information use in the latest methods coordination between stakeholders. In smart government, there are stages to implement (Annisah, 2017)



Sources: (Annisah, 2017)

The stages of implementation of smart government: a). Information Availability b). meaningful information c). purpose information d). smart government. In this parts, the researcher explained as follows :

- a). Information Availability need for government to share information for citizens. In digital era information easier to share for all of citizens in online to make time efficient.
- b). Meaningful information, in sharing of information needs clear information and has purpose. For example, information in government website, every department has website or services in online to help people who need knowledge about information.
- c). Purpose information is before the stages go to smart government. The government needs to make purpose information before sharing to citizens. purpose information from the government depends on SKPD, because every department has different purpose.
- d). Smart government, it needs all of indicators such as information availability, meaningful information and purpose information

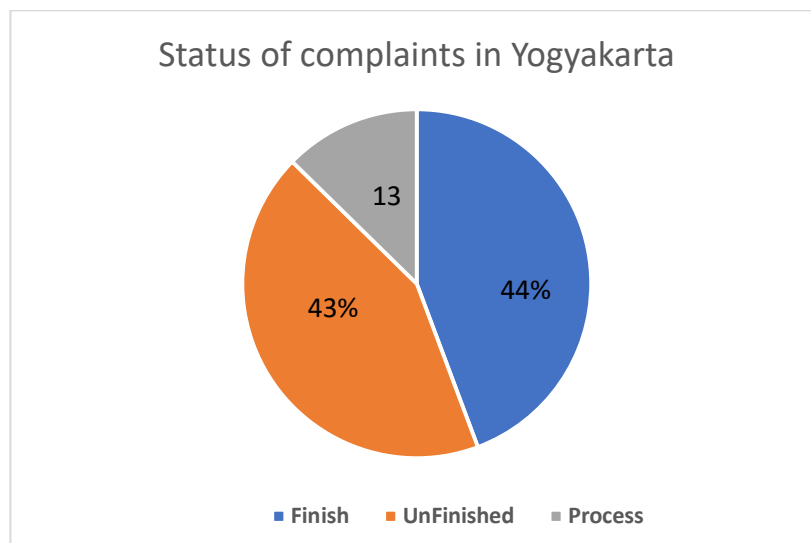
### III.2.2 Participation

The concept of participation based on (Anand & Navío-Marco, 2018) is involvement of society in solving urban problems that are real success of city. Participation of society needs in taking decision of programs (Anand & Navío-Marco, 2018). The other assumption, (Hardianti & Muhammad, 2002) has argued that the participation is implementation of activities involve all society and facilitated by government.

In Yogyakarta City the participation of society toward smart city could be shown in the implementation of JSS application as public services. Based on the data from Departement of Informantion and Communication, on June,2019, there are 79 complaints from society towards public service in Yogyakarta.

The public service complaints based on The Department of Communication and Information are:

**Figure 4. Public Services Complaint on June 2019**



Sources : *Keminfo of Yogyakarta,2019.*

The participatory society in public services was showed in the diagram, above JSS application could be help of people to share information and complaints to government. In the Local Regulation no.11 in 2018 about ICT in Yogyakarta it needs management and utilization application-based principle: a). Honesty b). openness c). accountability d). efficient e). synergic f). benefits g). productivity h). validity i). integration. The result was added by Mr.Joko Marwianto interviewed in *keminfo of Yogyakarta:*

*“Evaluation system government needs identification program and gives*

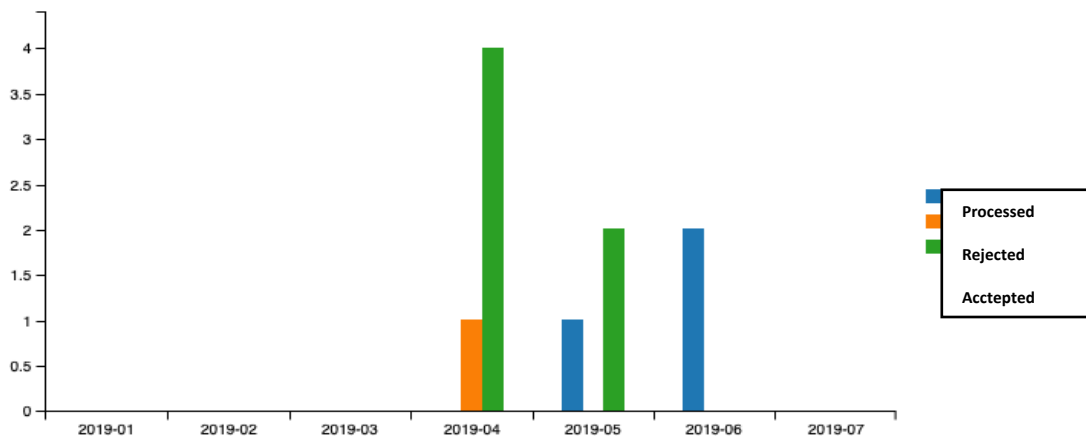
*appreciation from department that has good performance” (Joko Marwianto).*

The evaluations from government needs appreciation from society to run programs and do coordination with others departments based on SKPD. Moreover, the implementation of program needs to improve the quality of performance and give appreciation as rewards. The application has platform for society to improve the quality of service more effective and efficient. There was statement from Tanjung in meeting

*“openness information needs to help society knowing about activity, data and new information related to services. Information about services in Yogyakarta had is good since every department has website or platform to share information and easy to be access” (Tanjung, 25 January 2016).*

The statement of Tanjung was information in Yogyakarta was good. Every department had platform to share information in Yogyakarta. JSS application had features to share data and information which were easy to be access by society starting from data related to tax, health, budgeting, and agenda meeting of government.

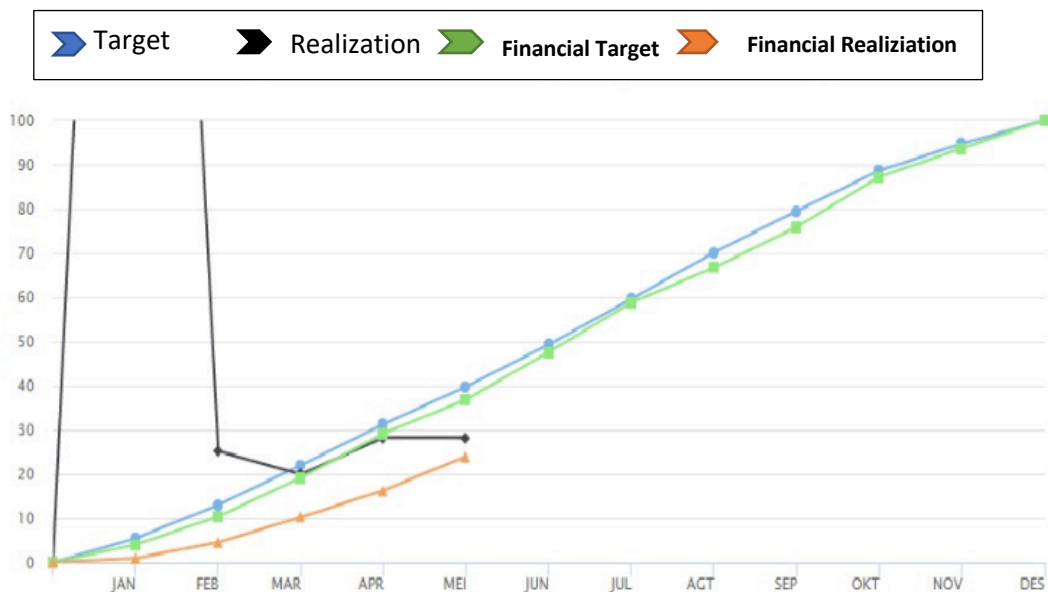
**Figure 5. Statistics in Public Services 2019**



Sources: PPID, 2019.

Public services there are some application complaints from society toward public services. But, government needs a process to improvement in problem of public services. According to Report of Government Performaces until on May 2019 showed with compare between expectation and target of government in public services.

**Figure 6. The Realization and Target of Government in 2019**



*Sources: PPID, 2019.*

### III.2.3. Policy Request

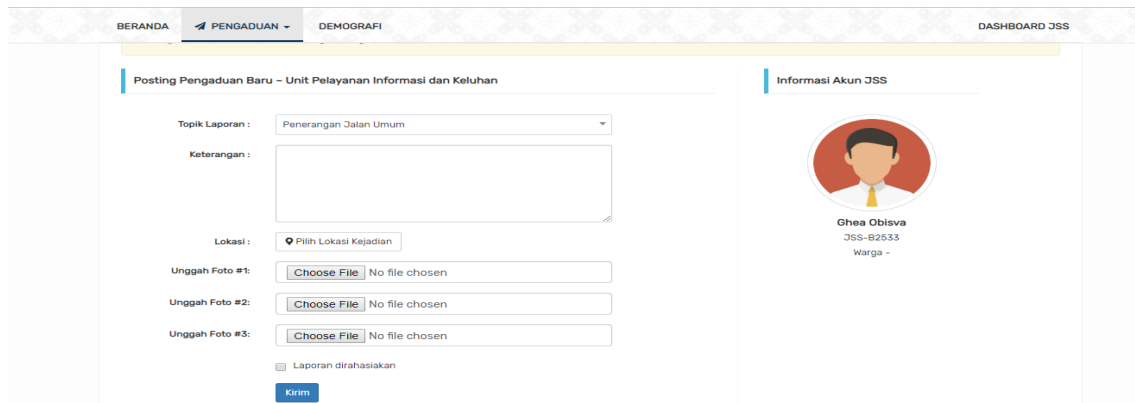
Policy request is the involvement of government collaboration with society to take decision based on aspiration from society about problems in area (Anand & Navío-Marco, 2018). The assumption related to (Annisah, 2017); Policy request is related to make a facility easy to be accessed for government and then use aspiration from society to make decision related to services intergrated in public services.

The Ministerial Regulation No. 21 in 2016, The Communication and Information in Indonesia focus of government in 2015-2019 are:

- 1). High digital devided in Indonesia; it has different perspective about ICT, so the solution from government persuades and makes training about ICT.
- 2). The lack of access information from society; the influence related to the lack of satellite in Indonesia make impact for uneven information.
- 3). The Edelman barometer in 2015, there is improvement amount from 45% to 65% trust from society about ICT and the target from government make a change in significate for keep trust form government.
- 4). Tolerance and national personal crisis; the lack of share information related with program of government.

In Yogyakarta for making policy request need complaint and demand from society to create new policy. All of aspiration from government can be uses features complaint in JSS application, the purpose is to receive all of problem in area and into be involved agenda meeting, discussed by government.

**Figure 7. The feature of Complaints**



The screenshot shows the 'Posting Pengaduan Baru' (New Complaint Posting) interface in the JSS application. The page has a navigation bar with 'BERANDA', 'PENGADUAN', and 'DEMOGRAFI' tabs, and a 'DASHBOARD JSS' link. The main content area is divided into two sections. The left section, titled 'Posting Pengaduan Baru - Unit Pelayanan Informasi dan Keluhan', contains a form with the following fields: 'Topik Laporan' (Topic Report) with a dropdown menu set to 'Penerangan Jalan Umum'; 'Keterangan' (Description) with a large text area; 'Lokasi' (Location) with a 'Pilih Lokasi Kejadian' (Select Incident Location) button; and three 'Unggah Foto' (Upload Photo) fields, each with a 'Choose File' button and 'No file chosen' text. At the bottom of the form, there is a checkbox for 'Laporan dirahasiakan' (Report is confidential) and a blue 'Kirim' (Send) button. The right section, titled 'Informasi Akun JSS' (JSS Account Information), displays a profile picture of a man, the name 'Ghes Obisva', the ID 'JSS-82533', and the role 'Warga' (Citizen).

*Sources: Jogja Smart Services, 2019.*

Jogja Smart Services (JSS) application has unit for complaint and into agenda meeting from government. The society can choose topic related to complaints and image as evidences. The complaints from public are more private and accessed by department in government.

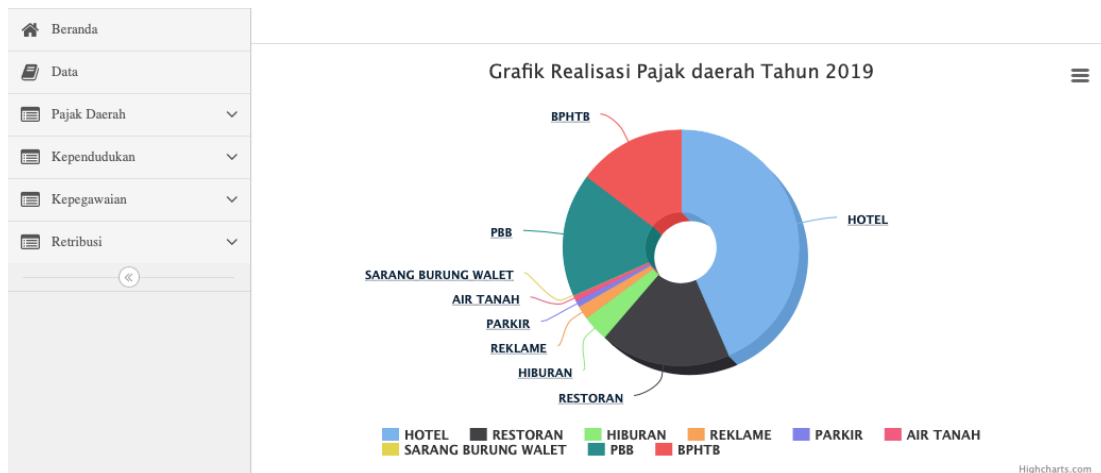
### **III.2.4 Information and data openness**

According to (Anand & Navío-Marco, 2018) ICT has information and data openness in government. The role of technology and communication is key success to distribute of data and information between others (Anand & Navío-Marco, 2018).

In the implementation of information and data openness, it is needed regulation from government to supporting sharing information from government all times and then making evaluation report (Annisah, 2017). In the Local Regulation no.11 in 2018 about ICT in Yogyakarta; it needs management and the utilization application-based principle: a). Honesty b). openness c). accountability d). efficient e). synergic f). benefits g). productivity h). validity i). integration.



**Figure 8. Open Data of Government**



Sources: Open data jogja kota,2019.

The open data is a concepts about data in Yogyakarta City can accessed and utilization from society. Open data related to government performance more transpanranchy and accountability with public services also there are participation from citizen.

### III.3 The utilization of ICT and E- Government

The concepts of smart government have focus on E-government; the utilization of ICT as tools is to realize smart city (Anand & Navío-Marco, 2018). In Yogyakarta city, it needs long term development in planning until 20 years, making strategic of ICT, and managing human resources. The development of Information, Communication and Technology gives influence toward public services into government. Smart city has attraction for society; services using ICT related to government can be make easier to access services quickly and innovative (Budi Sustrisno dan Idil Akbar, 2018).

Based on the result on the interviews Dukcapil in Yogyakarta City:

*“In implementation of smart government are budgeting and human resources” (Itta Rustanti, 28 January 2019).*

Mrs. Itta Rustanti had assumption about the lacks of implementation of smart government which are budgeting and human resources to support all programs in government. Besides that, in the interview with Department of Cooperation, UMKM, and transmigration of Yogyakarta City there had another assumption:

*“The lack of coordination from government and society make impact for*

*utilization of ICT in government, There is Nothing coordination from government and entrepreneur join in this feature whereas the department can support for people having business and there are corporation between others (Admin- 30 January 2018).*

In making market place, need coordination between actors, the relation between others give impact the growth economics in areas. The opportunities of business have something related to reduce poverty and improve quality of life in society. Sometimes, society having bad technology did not understand about ICT. In the realization of service related to ICT the stages of government is make to communication between business and market.

According to the Staff of Department Cooperation, UMKM and Transmigration of Yogyakarta City mentioned in implementation of JSS application, especially features *dodolan test* it had lack of coordination from society. even though, the government gave subsidy to society who had business. It gave a benefit to improve profit in business

The example of feature in Dodolan, there are some products which have nothing pictures related to product, and then some price not related to product. Its needs, evaluation more for government about dodolan and coordination with department in Yogyakarta City. Besides that, (Al-Shamsi, Rashed;Ameen, Ali; Al- Shibami, 2018) started that an e-government needs initiative to make society more efficient and effectives utilization of ICT related to government . The government can be transparent, efficient , effective and accountable to support successful ICT. Moreover, the government needs competitive and innovation platform (Al-Shamsi, Rashed;Ameen, Ali; Al- Shibami, 2018).

In addition for improving quantity of public services, the utilization of ICT can improve quality of life and became the innovation for economic growth in area. However, the government needs to control and handle for activities of society in public services. There are special requirement and training for entrepreneur joining to market places.