

CHAPTER I

INTRODUCTION

1.1. Background

The growth of information technology services by the government has brought the good benefits for the community. The concept of government administration services at this time is viewed to be innovative solutions for social and city problems so that an appropriate handling strategy is needed effectively and efficiently in overcoming social problems in the community which are emergency responses, this will be the focus of the government to improve citizen's quality of living by managing city assets and resources (Retnowati & Nugraheny, 2021).

The government has adopted E-government to reach citizens through the use of innovative information technologies, particularly web-based Internet applications. This allows government information and services to become accessible to the public, improving the quality of public administration services and providing greater opportunities for citizens to participate in democratic institutions and processes held by the government (Fang, 2002). In Presidential Instruction No. 3 of 2003, the goal of E-government is to establish a reliable information network and streamline public service transactions in order to enable wide-reaching access by the general public at an affordable cost. Additionally, it aims to foster relationships and mechanisms for interaction with related institutions through communication channels, while providing public facilities to facilitate policy formulation and encourage public participation (Dewi et al., 2012).

E-government is commonly use in region by they develop web-based in terms to advance performance in information and services by develop the growth from one-way information provision to two-way interactions held by the government and people (A. Manoharan & Ingrams, 2018). The approach action by the government for citizen would

create great relations in terms of democracy because people participating in how stages growth of the region would be, and the public feedback is the important things for government to consider adjustment and modifications for E-government.

Public services are the most visible measure of government performance, the public can directly assess government performance through the services they received (Kurniawan, 2016). Therefore, through public service, the local government tries to figuring out the existing public problems and then used as a basis of reference for the government to identify effective strategies and techniques to create innovations in terms of modernising administrative capacity and a more efficient and accountable government (Sururi, 2017). According to Yusuf (2018), the use of web-based information and communication technology or applications has become a trend in every region in Indonesia so that the direction of digital-based public services is the establishment of E-government with the realisation of responsive public services in Yogyakarta City (Novriando et al., 2020).

In practice, the Yogyakarta local government has implemented web-based E-government with a form of E-government model management, especially Government-to-Citizen (G2C), both in each part of the local government, departments, institutions, and organisations. The concept of interaction with the Government-to-Citizen (G2C) model has the target of interaction between the government and the community, by building a door by the government to facilitate public access which includes the dissemination of information and basic community services such as permit applications, issuance of birth / death / marriage certificates, as well as information on education, health, and other services (Kusnadi, 2023).

Local governments take an active part in developing public services based on ICT, The Yogyakarta City Government through Jogja Smart Service (JSS) provides integrated

services related to public, information, and complaints based on a website that is integrated with regional offices and institutions (Wibisono & Handoko, 2020). Using the concept of Single ID, Single Window, and Single Sign On, users can access various services through only one application and one account. As of April 2023, there are 220,479 JSS user accounts (PANRB, 2023).

In 2021, the Yogyakarta City Government (*Pemkot Jogja*) won the 2021 Innovative Government Award (IGA) in the category of the Most Innovative City from the Indonesian Ministry of Home Affairs (Kemendagri) with one of the city's outstanding innovations, which is digital public services through the Jogja Smart Service (JSS) application and the Gerakan Gandeng Gendong (Khafid, 2021a). The innovation developed by the government was again included in the Top 45 National public service innovations in the Public Service Innovation Competition (KIPP) organised by the Ministry of Administrative Reform and Bureaucratic Reform (PANRB), JSS is considered to be one of the public service innovations that can make adjustments towards a faster, precise, effective, efficient, and flexible direction (HUMAS DIY, 2023).

Government adopted web-based channel as a central platform to integrate information, public service, information and complaint service unit (UPIK), work programmes, and establish public connections to provide optimal service. The role of the website as a tool is fundamental in supporting the success of E-government that is right on target. The website innovation launched by Pemkot Jogja is executed by the Informatics Communication and Coding Office (*Diskominfosan Yogyakarta*) (DISKOMINFOSAN, 2018). A study of this is needed to identify the factors that influence Yogyakarta City Government in its success implementing E-government through Jogja Smart Service.

1.2. Problem Formulation

Based on the background, The researcher formulates the problem as follows:

1. What are the factors that influence the success of the E-government implementation of Jogja Smart Service carried out by the Yogyakarta City Government?

1.3. Thesis Purpose

The objective of this research aims to identify the factors that influence the success of Jogja Smart Service provided by the Yogyakarta City Government as a form of the E-government implementation.

1.4. Thesis Benefit

1.4.1. Theoretical Benefit

This thesis is beneficial for the development of government science, particularly in the study of administration and public services based on electronic and internet in digital era.

1.4.2. Practical Benefit

This thesis is beneficial in the performance management of the Yogyakarta Special Region Government, especially to the Department of Informatic Communication and Coding of Yogyakarta City Government (*Diskominfo* Kota Yogyakarta) and Yogyakarta City Government (*Pemkot DIY*) to improving the quality of public services based on web-based technology in digital era.

1.5. Literature Review

According to Manoharan and Ingrams (2018), the development of smart city concept in the beginning is focus on the smart city concept by use ICT in modern infrastructure, but over time, smart city was developing globally therefore the focus expanding to includes several other things. The development of local E-government is conceptualised as a stage of growth from one-way communication to two-way communication between government and citizens. The three major stages in E-government are e-information as the publishing

of public services through the creation of Web sites; e-transaction as the integration of interactive Web sites by the public to send messages; and e-participation as the integration of service responses between institutions or agencies. This is realised by adopting E-government and technology to focus on developing innovations aimed at increasing public participation by using social media, m-government apps, and smart city ideas, which will then generate public information that has been processed by combining administrative and democratic factors.

Determining factors for implementing E-government by local governments consider three influential factors, namely external enablers that consider accountability and transparency where politics in administration affairs are not easily separated, as well as citizen demands for social media platforms and information access to use in E-government. Second, internal enablers, namely the role of the leader to manage how E-government will run and act with the existence of work risks for a result, and the employee performance challenges in operating E-government. Third, Barriers are associated with poor planning and execution faced by public officials in running E-government by looking at the managerial and technical processes (A. Manoharan & Ingrams, 2018).

Urban population nowadays becomes more tech savvy thus the citizen's need for an accountable public service which is integrated with technology and social media, where people can easily obtain information quickly and accurately, and can express their aspirations and get feedback (A. Manoharan & Ingrams, 2018). With this system, government and citizen interaction can be built in order to form a better performance of E-government especially at the local level. This is one of the focuses of local governments in applying smart city ideas (A. Manoharan & Ingrams, 2018).

The form of E-government relations that occur in the form of Government to Citizen (G2C) aims to establish connection between government and society through various

channels in order to fulfil public services. The provision of service access through multichannel (PC, Laptop, Smartphone) provides benefits in the E-government implementation process, including transparency, accountability, increased efficiency, speed of service delivery, improved interaction between government and society, sharing information with public, and adherence standards and procedures. One of the regions that has applied it is the Cimahi City Government through the implementation of a web-based application called *Sistem Informasi Layanan Persandian dan Keamanan Informasi* (SiLPa KAMI). The implementation of this application was initiated based on the demand for fast and accurate information and quick response to community issues. The Cimahi City Government assessed that there was a significant increase in services after SiLPa KAMI was implemented, and this has even succeeded in enticing the Sumedang Regency Government to replicate the SiLPa KAMI application (Susanty & Yuningsih, 2021).

On the previous research about strategy analysis studies in Yogyakarta City, online public services are one of the steps implemented by the government in creating a smart city. The Yogyakarta government has initiated the smart city development process since the early 2000s, where the Information and Complaint Service Unit (UPIK) was launched on 31 August 2004 which was then followed by various other services including; SIM Health Services, YES 118 Service, Taman Pintar Yogyakarta, Hi Jogja, Digital Library, SIM POS PBB, and a number of other applications that are effective and efficient public services for the community. Furthermore, the Mayor of Yogyakarta Regulation No.15 in 2015 contains a masterplan for the development of E-government in Yogyakarta City for the period 2016-2031 as a milestone in the development of smart cities, there are 5 stages in the masterplan, each stage focusing on one goal as a government strategy to improve public service performance. This article examines the strategies that have been carried out by the Yogyakarta government, one of which is the utilisation of ICT which is the main strategy

until 2018, it is hoped that further utilisation of ICT will not only develop smart cities but also improve the quality of people's lives (Faidati & Khozin, 2018).

In the research of Retnowati and Nugraheny (2021), interaction between government and society digitally through the form of Government to Citizen (G2C) and Citizen to Government (C2G) relations in the city of Yogyakarta is realised through the Jogja Smart Service (JSS) application. This article analyses the implementation of G2C and C2G relations using SWOT analysis in identifying the strategies applied. The results of the SWOT analysis are then re-analysed using KAFI (Conclusions, Internal Factor Analysis) and KAFE (Conclusions, External Analysis) which show that there is still a need to improve application performance and further socialisation in the use of the JSS application which is still not fully mastered by the community so that various strategies are needed to maximise strength factors and minimise weaknesses factors. Additional services are needed and application socialisation to citizens needs to be intensified to improve the performance of online public services. This research provides a clear picture of the advantages and weaknesses of the application, this is related to the research that will be conducted by researchers to find out the government's strategy or plan in reaching out to the community.

Table 1 Previous Research

No	Researcher	Research Title	Research Result	Relevance
1	(A. Manoharan & Ingrams, 2018)	Conceptualizing E-government from Local Government Perspectives	This study looked at the increasing tech-savviness of urban populations underscores the need for accountable public services integrated with	This study supporting the implementation of ICT for local government services by pointing out the increasing of use online platform

No	Researcher	Research Title	Research Result	Relevance
			technology and social media, facilitating quick access to information, expression of aspirations and feedback mechanisms, ultimately promoting better government-citizen interaction and performance in E-government initiatives, especially at the local level in the context of smart city development.	for facilitating ease of information access and feedback. The difference, there is no mention of the way the government works in its implementation
2	(Susanty & Yuningsih, 2021)	Implementasi Electronic Government: Studi Kasus pada Aplikasi SILPa KAMI di Pemerintah Kota Cimahi	This study pointing out how G2C web-based model type of relation works in Cimahi City and proofing that used of web-based application is become effective and efficient for	The web-based program could be worth it to be implemented in another local government if it executed optimally. The difference, research location of the study use SILPA KAMI in

No	Researcher	Research Title	Research Result	Relevance
			the local government.	Cimahi City as study case and this research will use Yogyakarta City as the research location.
3	(Faidati & Khozin, 2018)	Analisa Strategi Pengembangan Kota Pintar (Smart City): Studi Kasus Kota Yogyakarta	This article shows that the Yogyakarta government is trying to develop a smart city by creating a JSS application as one of the stages in the Yogyakarta government's E-government masterplan for the 2016-2031 period but the development of ICT is expected to improve the quality of life of the community by providing information about city problems.	This study discussing about the example of E-government masterplan realization of Yogyakarta government. The difference, the study not mention the factors that affect to E-government development.
4	(Retnowati & Nugraheny, 2021)	Government to Citizen Digital Interaction and	The results of this research showed that 75% of	This research provides strategy suggestions

No	Researcher	Research Title	Research Result	Relevance
		Citizen to Government on the Jogja Smart Service	Jogjakarta residents responded positively to government services facilitated by the JSS application. Through SWOT analysis and KAFI vs. KAFE analysis, four strategies were identified: SO strategy, WO strategy, ST strategy and WT strategy. These strategies offer formulations to improve public services and promote digital interactions for the Yogyakarta City Government	based on the results of the analysis. The difference is that the data presented is based on the perspective of the community instead of the Yogyakarta government.
5	(Oktariyanda & Rahaju, 2018)	E-government Strategy of Surabaya City Government Through E-Rt / Rw to Improve	This study analyze the strategy of Surabaya city government who successfully	Strategy of E-government that used successfully works by develop web-based sites or application.

No	Researcher	Research Title	Research Result	Relevance
		the Quality of Public Service	implemented an E-government website called 'Electronic RT/RW' programme through the development of aspects of content, interactivity, usability and innovation as the government's awareness in improving programme development.	The difference, the aspect or factors used to analysing the strategy is different, the study examine aspects of content, interactivity, usability, and innovation while the researcher will analyse the factors of support, capacity, and value.
6	(Utama, 2020)	The implementation of E-government in Indonesia	E-government has indirectly changed the system's functioning and enhanced internal management that recognized as an international partnership strategy to provide high quality of services	The study shows how implementing E-government would increase quality of public services which it become one of the focus of the researcher in this study.

No	Researcher	Research Title	Research Result	Relevance
			especially information technology in government.	
7	(Gumilar et al., 2022)	The Elements of E-government Success in Public Services at Bekasi Regency Using the “SP4N LAPOR”	This study shows the failed implementation of SP4N LAPOR in Bekasi City because unsuccessful of executing standard operating procedures, social inequality, inadequate operator human resources, and public interest of using the application.	The study used three elements of support, capacity, and value in examining the successful of application which will be applied in this study.
8	(Novriando et al., 2020)	Efektivitas "Jogja Smart Service" Terhadap Pelayanan Publik di Kota Yogyakarta	By looking at the success of Bandung Command Centre (BCC), Jogja Smart Service (JSS) was developed in the form of integrated services that have	The study focus on analyse the effectiveness of JSS as the E-government application in Yogyakarta that manage by Informatic Communication

No	Researcher	Research Title	Research Result	Relevance
			been effectively served by the Mayor's Regulation Number 15 Year 2015 regarding the roadmap for E-government development.	and Coding of Yogyakarta City Government (<i>Diskominfo</i> san Kota Yogyakarta).
9	(Kusnadi, 2023)	Manajemen E-government Berbasis Web Model Government-to-Citizen (G2C) Pada Dinas Kebudayaan dan Pariwisata Provinsi Jambi	Web-based E-government that applied at the Jambi Province Culture and Tourism Office has been analyse used POAC management and shows the lacks and obstacles that faced by the department.	The concept of research is similarly same with the study but the study will use element factors in E-government to examine the successful of the research objective.

The table above shows that local governments in implementing the E-government concept utilising online access channel as a form of E-government implementation which is considered efficient and effective. Implementation stages are still being developed and optimised to create quality public services. Those studies examined the suitability of E-government applications and the factors that influence the development of E-government applications, but did not explain a lot about the effort from the government point of view to succeed the public's use of E-government applications. Therefore, this research focuses

on identifying the success factors that influence E-government services in Yogyakarta City which focus on the Jogja Smart Services (JSS) conducted by the government in order to facilitate online public services for the community as form of implementation of E-government services.

1.6. Theory

1.6.1. E-government

This thesis is based on the theory of E-government. This theory has been applied by the government with the aim of facilitating communication and interaction between the government and the community, this implementation is applied massively to cover government sectors such as agencies, bureaus, and offices. According to Indrajit (2006), E-government is a system managed by the government (stakeholders) in a modern way through the use of information technology (internet) which aims to provide improved quality of public services to the community. Improvements made by the government are related to three triggers of E-government that are emphasised by the community, first, the acceleration of the globalisation era that runs until now is closely related to various issues such as human rights, democratisation, civil society, law, transparency, corruption, and so on that need to be considered by the state in taking positions and acting. Second, related to the first factor, along with the advancement of information technology that continues to grow and rapidly spread news to all levels of society, the government needs to immediately respond according to its role appropriately in responding to issues in society. Third, the increasing performance of the private sector must be accompanied by an increase in performance in the public sector in order to minimise inequality in standards and quality of service.

The application of the E-government concept implies that the government is willing to provide public convenience in the form of flexibility in dealing with the government anytime and anywhere through the access channels chosen by the government to reach

the public according to its function, namely liaison. In the basic principles that need to be considered include how the government can convince the public that E-government will still be useful even though it is not through conventional means, this is a consideration for the government to provide various forms of access channels that are familiar to the public so that it makes it easier for them. In addition, service providers from government, private, and non-commercial organisations must agree to use universal and internet-based technology so that people can have a choice of services. The government as a stakeholder must have a clear masterplan regarding the direction of development and strategies to be carried out, such as maintaining performance in maintaining products and services branding so that people are convinced in using E-government facilities (Indrajit, 2006).

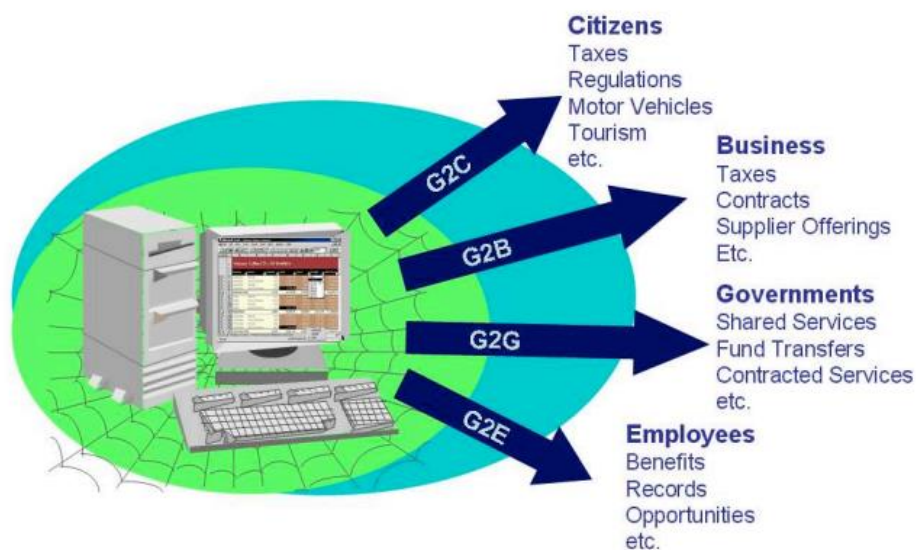


Figure 1. E-government Type Classification

Source: GSA Federal Technology Service

Based on Figure 1, E-government classified to four type of relations which are: Government to Citizens, Government to Business, Government to Government, Government to Employees. Indrajit (2006) describing each type of relations:

- a. Government to Citizens (G2C), is a general type that has the main objective to establish a closer relationship between the government and the public through various access channels so that the public can reach the government in fulfilling service needs. Services provided by the government can be through online channels such as websites and applications.
- b. Government to Business (G2B), It is the relationship between the government and private business entities or for-profit organisations that require information held by the government. The interaction between the two parties is necessary because it relates to the rights and obligations of profit-oriented organisations to facilitate business practitioners in running companies which directly or indirectly help the country's economic cycle.
- c. Government to Government (G2G), This intergovernmental relationship is not limited to diplomacy, but also in the cooperation of state entities including government, society, industry, organisations and others. Communication is related to administration, economics, political processes, and mechanisms of social and cultural relations.
- d. Government to Employees (G2E), is the relationship between the government and civil servants in improving the performance and prosperity of government employees who work for the state in various agencies as public servants.

The result of a study and research from the Harvard JFK School of Government in order to apply digitalisation concept in the public service sector needs to concern three elements related to succeed E-government, namely Support, Capacity, and Value (Indrajit, 2006).

1. Support

The first element that needs to be owned by the government is intention to implement E-government concept which “political will” is needed because the bureaucracy culture

is a “top down” management model where support for E-government programmes is given from the government from the top level to the lower levels. The expected forms of support are,

- a. The agreement on the E-government framework as one of the keys to the success of the state or local government in achieving the vision and mission of the nation or region, thus it should be given high priority as other keys to success.
- b. Allocation of resources (human, financial, labour, time, information, etc.) at every level of government to build cross-sectoral enthusiasm for the concept.
- c. Establishment of supporting infrastructure and superstructure to create a conducive environment for E-government development (e.g. clear regulations and specialised institutions in charge)
- d. Socialise the concept of E-government evenly, continuously, consistently, and holistic to all bureaucrats in particular and the public in general through various sympathetic campaigns.

2. Capacity

The second element is the ability or empowerment of the local government in realising the concept of E-government, there are three minimum things that must be owned by the government in the realisation of this element, as follows

- a. Availability of sufficient resources to implement various E-government initiatives.
- b. Availability of adequate information technology infrastructure as the foundation for successful E-government implementation.
- c. Availability of competent human resources who have the required expertise to ensure that E-government implementation is aligned with the expected benefits.

Therefore, it is necessary to consider the existence of these aspects to encourage the government to implement E-government. If the crucial facilities and resources are out of reach, the government must find effective ways to fulfil the requirements, such as collaborating and partnering with other parties.

3. Value

If the first and the second element is the point of view from the government side as the supply side, then this element looks at the benefits felt by the public as the demand side. Various E-government initiatives will be useful if the public feels the benefits of the concept implementation. Therefore, the government must be careful in considering the prioritisation of the type of E-government application that should be developed first in order to provide significant value to the community.

The combination of these three elements forms a network as the main key success in the government's focus on achieving success in E-government implementation (Indrajit, 2006).

The various forms of relations built by the government are not only to facilitate the government's relationship with the people, but the government seeks to improve the quality of governance performance which has an impact on the progress of the country.

Access channels are a medium used to connect the public with the government in order to make demands on the quality and performance of government services along with technological advances. related to the existence of layers in society, a service infrastructure is needed that can cover all three layers, namely Three Tier Channels as a strategy for distributing access channel facilities,

- a. The first layer is reserved for people who are ready and able to use modern access channels, namely the web-based internet.

- b. The second layer is provided for people who feel comfortable using the old access channel through the Call Centre but do not feel the need to have physical visit or interact directly with bureaucrats.
- c. The third layer is provided for people who feel the need and convenience to come directly to government offices.

1.7. Conceptual and Operational Definition

1. Conceptual Definition

The conceptual definition is an abstraction of the variable character that will be the focus of the research concept. Here the conceptual definition of this thesis:

1.1.E-government

E-government refers to use of information and communication technology (ICT) in the way to communicate between stakeholders and community which aims to provide the convenience public services by deliver services, engage with citizen, and conduct internal operation effectively and efficiently trough online platforms. In the implementation of E-government there were four type of relation concept whereas G2C, G2B, G2G, and G2E.

E-government initiatives encompass a range of access channels for online platforms and services, including government websites, mobile apps, digital forms, and online portals as the way to reach community. These facilitate access to information, submission of applications, payment processing, and interaction with government agencies without the necessity of physical visits. The G2C type of communication concept can be optimised by the government by noting the elements existence of support, capacity, and value that can support the public service development.

1.8. Operational Definition

The operational definition is the operationalisation of the factors that will be examined in the study.

Table 2. Operational Definition Research Variable

Variable	Indicator
Support	<ol style="list-style-type: none">1. The agreement to succeed the E-government framework.2. Allocation of resources such as human resources, financial, ICT infrastructure, and participation.3. Establishment of infrastructure and superstructure to supporting E-government development.4. Socialise E-government concept to bureaucrats and public.
Capacity	<ol style="list-style-type: none">1. Availability of sufficient resources.2. Availability of adequate information technology infrastructure.3. Availability of competent human resources.
Value	<ol style="list-style-type: none">1. The value of benefits obtained by the community in implementing E-government.2. The government prioritises the development of E-government application.

1.9. Method

1.9.1. Research Type

Qualitative methods are used in this research. Qualitative research is descriptive in nature where research is emphasised on the discussion of social problems based on the holistic, comprehensive, and detailed conditions of reality or natural settings. The research uses an induction approach that aims to construct theories or hypotheses through disclosure of facts. This thesis uses a case study approach as an exploration of a certain bound system in a time and activity and collects information in detail (Murdiyanto, 2020). Related to

knowing a system in government, qualitative can explore in depth about the research, in this thesis the researcher will examine through local government such as the Informatic Communication and Coding Department of Yogyakarta City Government (*Diskominfo* Kota Yogyakarta) and community as an object of research to answer the problem formulation in this thesis.

1.9.2. Research Location

Research location is a place where the researcher conducts research to obtain the required data. The research location is in Yogyakarta City, Special Region of Yogyakarta, researcher will collect data through Department of Informatics, Communication, and Coding of Yogyakarta City (*Diskominfo* Kota Yogyakarta) located at Kenari Street, Umbulharjo, Yogyakarta City, Special Region of Yogyakarta.

1.8.3. Type of Data

1. Primary Data

Primary data is data obtained directly through visits or interviews with main sources or actors which are stakeholders and community. The data related with the variable in operational definition aims to answer the problem formulation. To find out the success factors that influence the JSS application carried out by the local government of Yogyakarta, therefore in this thesis researcher will conduct interview with the sources from the Informatics Communication and Coding Department of Yogyakarta City Government (*Diskominfo* Kota Yogyakarta) and community.

2. Secondary Data

Secondary data is data obtained through documentation from related institutions for the study. The data can be obtained from literature such as regulations, news or

reports obtained from official government or ministry websites, research and articles that have been published by credible journal platforms, various news and reports that have been published by official government websites, mass media, etc. Researcher used the documentation technique to find data related to E-government framework, news and report published by the official websites in the implementation of the JSS application carried out by the local government of Yogyakarta to complete the research data in addition to the interview results.

1.8.4. Data Collection Technique

This thesis use interview and collect the report and literature for data gathering. The interview as primary data was conduct to obtain information from several informants which in this thesis the informants are from Dinas Informasi Komunikasi dan Persandian (*Diskominfo* Kota Yogyakarta) and community. The secondary data obtained from related document study.

1. Interview

Interview is one of the methods of collecting data by communicating through conversations conducted by two parties, namely the interviewer who asks questions and the interviewee who provides answers to these questions (Murdiyanto, 2020). Interviews were conducted with staff from Division of Informatics Communication and Coding Department of Yogyakarta City Government (*Diskominfo* Kota Yogyakarta,) and users from the community and the organisations that provide services integrated with the Jogja Smart Service (JSS) application. The interviews addressed matters related to the management of JSS and the usage of the application, and these formed the primary sources for this research.

Table 3. Table List of Interviewees

No	Name	Title or Institution	Address	Date of Interview
1.	Dicky Anggoro Wicaksono, S.Kom., M.Eng	Junior Computer Technician in Information System and Statistic Division, Division 3 of Department of Informatics Communication and Coding.	Department of Informatics Communication and Coding of Yogyakarta City (<i>Diskominfosan Kota Yogyakarta</i>) at Kenari Street, Umbulharjo, Yogyakarta City, Special Region of Yogyakarta.	15 August 2024
2.	Arily De Rani, A.Md	Head of the Medical Records and Health Information Installation of Rumah Sakit Pratama.	Rumah Sakit Pratama at Kolonel Sugiyono Street, Brontokusuman, Special Region of Yogyakarta.	12 August 2024
3.	Mahargyo, S.STP., M.M	Head of Sub-section of Operational Control of Department of Fire and Rescue of Yogyakarta City.	Department of Fire and Rescue of Yogyakarta City at Kenari Street, Umbulharjo, Yogyakarta City, Special Region of Yogyakarta.	6 August 2024
4.	Kholiq Munawar	User of Jogja Smart Service Application.	Sonic AC Jogja at Kadirojo 2 Sreet, Purwomartani, Special Region of Yogyakarta.	6 August 2024
5.	Hening Kinasih Wahani	User of Jogja Smart Service Application.	Yogyakarta City	5 August 2024
6.	Ahmad Fahmy Muhammad	User of Jogja Smart Service Application.	Yogyakarta City	12 August 2024

2. Document

Documents are sources of data obtained from various types of sources that are written, oral, and images can be in the form of agreements, laws, or reports (Murdiyanto, 2020). The researcher obtained documents related to programme information about evaluation reports and community engagement reports from Informatics Communication and Coding Department of Yogyakarta City Government (*Diskominfo Kota Yogyakarta*).

Table 4. Table of Data

No	Primary Data	Data Source	Data Collection Technique
1	The planning of agreement and allocation of resources needed to support E-government program.	Informatics Communication and Coding Department of Yogyakarta City Government (<i>Diskominfo Kota Yogyakarta</i>)	Interview
2	Resource capacity required to enable in running online public services.	Informatics Communication and Coding Department of Yogyakarta City Government (<i>Diskominfo Kota Yogyakarta</i>)	Interview
3	Yogyakarta City Government's effort in improving Jogja Smart Service (JSS) performance.	Informatics Communication and Coding Department of Yogyakarta City Government <i>Diskominfo Kota Yogyakarta</i>	Interview + Documentation (news and report published by the official websites)
4.	Utilisation of the Jogja Smart Service (JSS) by the community as application's users	Community (user of application)	Interview

1.8.5. Data Analysis Techniques

Data analysis is the process of searching and arranging systematically the data obtained from interviews, notes, documentation, and other resources thus easily understood. Data analysis techniques in qualitative research are carried out interactively according to Miles and Huberman (in Saleh, 2017) . The activities carried out in technical model in data analysis are data collection, data reduction, data display, and conclusions or verification.

1. Data Collection

Data obtained from interviews, observations, and documentation are recorded in field notes which are divided into two types, namely descriptive notes regarding data obtained by being viewed, heard, seen, and experienced by the researcher, and reflective notes such as impressions, comments, opinions, and researcher interpretations of the findings.

2. Data Reduction

Process of selecting data and transforming from raw data into conclusion. The data collections obtained need to be reduced to narrow, classify, oriented, and eliminate the unnecessary data to be processed into clear interpretation. The results of interviews and documentation of rough data will be sorted out again to get the data needed in accordance with the research objectives.

3. Data Display

Data presenting a set of information obtained and can be presented in the form of narrative text, network graphs or charts, and matrices. In this process, data will classify based on typology in accordance with the formulation of the problem.

4. Conclusion or Verification

Conclusions are drawn based on the results of data analysis obtained during the research to become the final conclusion. In the process, the conclusion requires verification to be tested hence the validity is guaranteed by confirming the interpretation of each data obtained, it is expected that the information obtained can support the achievement of research objectives.