

CHAPTER I

INTRODUCTION

1.1 Background

The development of information and communication technology continues every year and is growing rapidly. It is considered very helpful in the everyday life of the people such as getting the information quickly. Besides, the factors of cheap cost as well as many choice of tools, gadgets, and devices make all groups of people from different level can enjoy it. From middle to upper level, middle to lower, and from other ages can maximize the use of information and communication technology. Therefore, no wonder if this information and communication technology continues to develop rapidly.

Therefore, in carrying out its duties, the government also applies technology as a tool to support them which is called E-government. The idea of E-Government itself is the essence of maximizing the quality of public services online. The public service itself is one of the Smart City concepts that aims to manage cities and districts using technology. Besides the easiness and the fast information and communication in the implementation of public services, the cost incurred are also cheaper and can increase coordination or cooperation between the government and the community, the government with the private sector and the central government with the local government (Hakim & Sobarudin, 2009). However, not only improving public services, the community can also take part in controlling government work through this E-Government system. The

implementation of E-Government in Indonesia that is easily accessible and transparent is expected to realize Indonesia to be a good and open government. However, in order to realize this good and open government, all people in Indonesia should work to make it happen, not only from the government that provides facilities through E-Government. In addition, the government needs capability in good public service since there are so many different demands from the community. Therefore, there should be a real step in realizing the public service itself. The idea of smart city is a concept that can be done in order to realize a good and open government in Indonesia.

The concept of Smart City has also been discussed in its development throughout the world. In Indonesia, the term Smart City itself is enough to be known by the public even there are several regions that are considered successful in implementing smart cities in their area. For example, Denpasar City that chosen as the highest value award in the Indonesia Smart City Index 2018 (IKCI) in the big category with a value of 61.70 that defeat Surakarta City and Malang City. The assessment that is used by IKCI is the Smart City model by Boyd Cohen. In this model, there were six assessment indicators namely: Environment, Mobility, Economy, Society, Government, and Quality of Life. Moreover, in his interview, Ida Bagus Rai Dharmawijaya as the mayor of Denpasar with merdeka.com said that the local city government continues to carry out innovations to improve the qualities of the city itself as well as the communities from various aspects such as health, welfare, and education. In the future, he also said that he would be more focusing on the creative economy and orange economy which could support the development

of the tourism and cultural sectors. The most important things according to him was how the benefits and the innovations of this government could be felt by the people towards the people's welfare. The Denpasar City Government is also improving through various innovations to facilitate access to public services, such as the existence of public service malls that make it easier for people to manage administration and other services in one building. The community will not only be facilitated by submitted administration directly or online through PRO application, but they will be also facilitated through other services that are on one network, so they are accessible anywhere and anytime. Whereas, in the environmental sector, the Government of Denpasar City began to initiate to reduce the amount of plastic waste by issuing Mayor Regulation (*Perwali*) by banning traditional and modern markets from providing plastic bags and that policy was being implemented in January 2019. Furthermore, in the economic sector, the Denpasar City Government implement a non-cash payment system. Lastly, for the mobility sector, Denpasar City Government has provided free school bus transportation and the installation of a number of CCTV at several points in Denpasar City, (Rahmadi, 2019) .

However, not only Denpasar City that improve its public services and innovate in integrating information and technology, but there are also some regions in Indonesia that began to make innovations which is D.I Yogyakarta. Special Region of Yogyakarta as one of the Provinces in Indonesia which has a population of more than 3.7 million in 2016 also has innovations in public services that utilize information and communication technology. In contrast to the City of Denpasar, D.I Yogyakarta, the special region, develops public service innovation by

combining information and communication technology as well as culture, by launching an innovation such as:

1. Jogja Special Mobile Apps which has been launched since September, 21, 2015. This special Jogja mobile apps has several excellent features such as tourist information in D.I Yogyakarta as a media campaign for regional tourism.
2. JITV (Jogja Istimewa Tv) was established since September 14, 2016 under the supervision of the DIY Information and Communication Department. Jogja Istimewa Tv is a 24-hour streaming TV that displays information on culture, art, and education in D.I Yogyakarta.
3. E-Report DIY is a government application that has the purpose of dealing with problems and concerns that are complained by the people around the D.I Yogyakarta, and was launched on October 6, 2018.
4. IDMC DIY or Integrated Development Management Center is a place where the system or application is integrated, which means this place contains data and information from all regions in D.I Yogyakarta that will be used to determine policy.

Moreover, in its development, several innovations launched by the D.I Yogyakarta government which were assisted by the Communication and Information Department were developing a system of data integration and collaboration between regions involving the D.I Yogyakarta Government and stakeholders in resolving strategic issues and developing the superior sectors by optimizing the use of technology that serve to improve the lives of the people who are more prosperous, health, safe and comfortable, which the innovation is called Jogja Smart Province (JSP). Furthermore, in the master plan of Jogja Smart Province, which is expected to be a supporter and accelerate in implementing a smart Regional Medium-Term Development Plan (RPJMD), JSP

itself has features that distinguish JSP from other regional smart city plans that incorporate the philosophy of Yogyakarta's specialty such as Sangkan Paraning Dumadi, Hamemayu Hayuning Bawana, and Gusti Manunggaling. These three distinctive philosophies are the soul of JSP which makes dimensions such as: smart living, smart culture, smart environment, smart society, and smart governance. The Smart Living dimensions focuses on mobility and tourism using the Jogja Istimewa application in its mobility, which contains information relating to tourism and public services, as well as mobility in transportations with the existence of Transjogja. Moreover, the Smart City dimensions takes care of the education and economic community that is involved in helping the development of economic potential of the community through UMKMs. Secondly, Smart Culture is a dimension that takes care of culture in D.I Yogyakarta by increasing the understanding of national culture and privileges to the younger generations. Thirdly, Smart governance is a dimension that takes care of the governance of DI Yogyakarta through integrated policy making, so as to facilitate local government in data integration, and obtain the latest information. Lastly, Smart Environment is a dimension that governs the governance and the environment itself. Therefore, the realization of collaborative data between regions in DI Yogyakarta is expected to be able to develop Yogyakarta in the mastery of data.

Sleman Regency which is part of the DI Yogyakarta Province consists of 17 sub-districts and has a population of almost half of the total population in DI Yogyakarta Province which numbered more than 3 million in 2016. The geographical location of Sleman Regency is bordered by Boyolali Regency, Province Central Java. The east is directly adjacent to Klaten Regency, Central Java Province. Moreover, to the west, it borders Kulon Progo Regency, DI Yogyakarta Province and Magelang District, Central Java Province. Furthermore, in the south it is bordered by Yogyakarta City, Bantul Regency and Gunungkidul Regency, DI Yogyakarta Province. In addition, Sleman Regency is also included in 4 regencies which are administratively adjacent to Mount Merapi, one of the most active

mountains in Indonesia, so it cannot be denied if Mount Merapi which has an eruption cycle with a frequency of eruptions between 2 and 7 years can have direct impacts on the people of Sleman Regency because the southern side of Mount Merapi is directly facing Sleman Regency. Hence, Sleman Regency needs to increase the supervision of Mount Merapi activities and early warning to vulnerable communities affected by the activities of the mountain. Although Mount Merapi is the most active mountain in Indonesia, it does not reduce the interest of local and international tourists to enjoy the beauty of Mount Merapi. However, not only the beauty of Mount Merapi which makes the Sleman Regency special, but the culture in Sleman Regency is also special so that it can attract tourists. Therefore, Sleman Regency is a district in the province of Yogyakarta which has taken part in the integration of data in Jogja Smart Province as stated earlier.

Moreover, in its design, Jogja Smart Province consists of data and collaborative integration between regions as previously described by combining several elements such as policy, process leadership, and culture. In other words, the data and collaborative integration of this region can also be reviewed as communication between Government to Government (G2G) as existing in the E-Government type. Furthermore, Jogja Smart Province also needs to be studied in data integration and collaboration between regions, as well as whether data collection between regions or institutions, especially in Sleman Regency Governments is considered as optimal or not.

1.2 Problem Formulation

Based on the background described above, in this study, the author seeks to explain about:

- How the development in the past year in collaboration between the Regional Government of DIY and the Regional Government of the Sleman Regency with the Jogja Smart Province data center managed by the DI Yogyakarta Communication and Information Department.
- How the collaboration that has been going on between several regional apparatus local organization in Sleman District and the Yogyakarta Special Province and how effective is the collaboration that is already underway and which is being developed.

1.3 Research Goals

Based on the formulation of the problem above, the objectives of this study are:

1. To find out how the collaboration between the DIY Provincial Government and the Sleman Regency Government is in supporting the Jogja Smart Province program.
2. To find out how much influence the Sleman Regency Government has on data integration in Jogja Smart Province.

1.4 Research Benefits

1. Theoretical Benefits

Theoretical benefits in this research are to provide or increase understanding in the collaborative governance process between Sleman Regency and the Jogja Smart Province data center.

2. Practical Benefits

The results of this study are expected to provide input in the collaborative governance process between the Sleman Regency government and the Jogja Smart Province data center if weaknesses are found in the process.

1.5 Literature Review

Since there is a lot of literature that are circulating at this time, in this study, the author will try to look for some of the latest literature for a maximum of the last five years which are related to the background of this study. The literature relating to this study include:

(Ma, Lan, Thornton, Mangalagu, & Zhu, 2018) in their research titled “Challenges of Collaborative Governance in the Sharing Economy: The case of free-floating bike sharing in Shanghai”, the authors focused on researching Free Floating Bike Sharing (FFBS) in Shanghai and studying how private parties, politicians and social actors relate to solving problems in increasing FFBS from perspective collaborative governance. In this research, the authors argued that social actors are still less involved in fulfilling Collaborative governance in FFBS, especially in sharing economy because according to the author, sharing economy is

a major challenge in Collaborative governance. The researchers also got the result that in addition to sharing economy which is the main development, it turns out that managing sustainability potential and trade-offs is also a challenge.

(Suhendra & Ginting, 2018) in their research titled “ Kebijakan Pemerintah Daerah dalam Membangun Smart City di Kota Medan”, the authors got results related to the policies of the local government in realizing smart cities in Medan, and explain the role of local government organizations in coordinating smart cities at the city level. In its management, the authors found that the city government has issued a regulation of Mayor of Medan No. 28 of 2018 concerning the smart city of Medan City. The author also said that the formation of the Mayor's regulation was based on the development and synergy of all potential and resources in an integrated manner. The Medan City Government also created a master plan in the development of smart cities which serves to build integration between OPDs (local government organizations). In creating a smart city in the city of Medan there are also obstacles as the authors have stated in their research. These constraints include: uneven infrastructure support in the application of TIK (technology, information and communication) in the smart city sector in the regional government, and human resources in charge of utilizing TIK in the process of governance, and public services are still not ready for better governance. However, in overcoming the obstacles, the city government of Medan has been prepared for a better governance.

(Hartina, 2017) in the research titled “ Smart Governance (Studi Kasus Pada Pelayanan Pendidikan Dasar dan Menengah di Kabupaten Bone)”, the author focused on the level of Smart Governments in Bone District in the field of primary

and secondary education services. In the discussion, this research discusses government collaboration in providing services to the community. Moreover, the author concluded that the Bone Regency Government is still at a stage that focuses on the goals and actions of providing services by collaborating across regional organizations / work units of regional apparatus, schools, and citizens by utilizing information and communication technology to obtain data access. This fast and collaboration in smart governance requires the involvement of all stakeholders to be involved in all government activities. In this study, the author obtained results that showed that in Smart governance the implementation of primary and secondary education in Bone Regency still had deficiencies due to the lack of four levels in the Smart governance stage itself. Hence, in Bone Regency, there is still a level where the level of citizen participation, information transparency, and collaboration are fully achieved only at the level of community participation because this community participation is higher than the level of transparency and the level of collaboration.

(Kartika, 2017) in the research titled “ Colaborative Governance Dalam Program Desa Digital di Kabupaten Bantul (Studi Kasus Desa Dlingo, Kecamatan Dlingo dan Pemerintah Desa Murtiganding, Kecamatan Sanden), the author got results that showed in the collaborative process that takes place in a digital village program in Bantul Regency which consists of two stages. The first stage is the collaborative process by Dlingo Village in Dlingo District with Combine Resource Institutions (CRI), and the second stage is a collaborative process by the Bantul Regency Data Processing and Telematics Agency and CRI. The author also

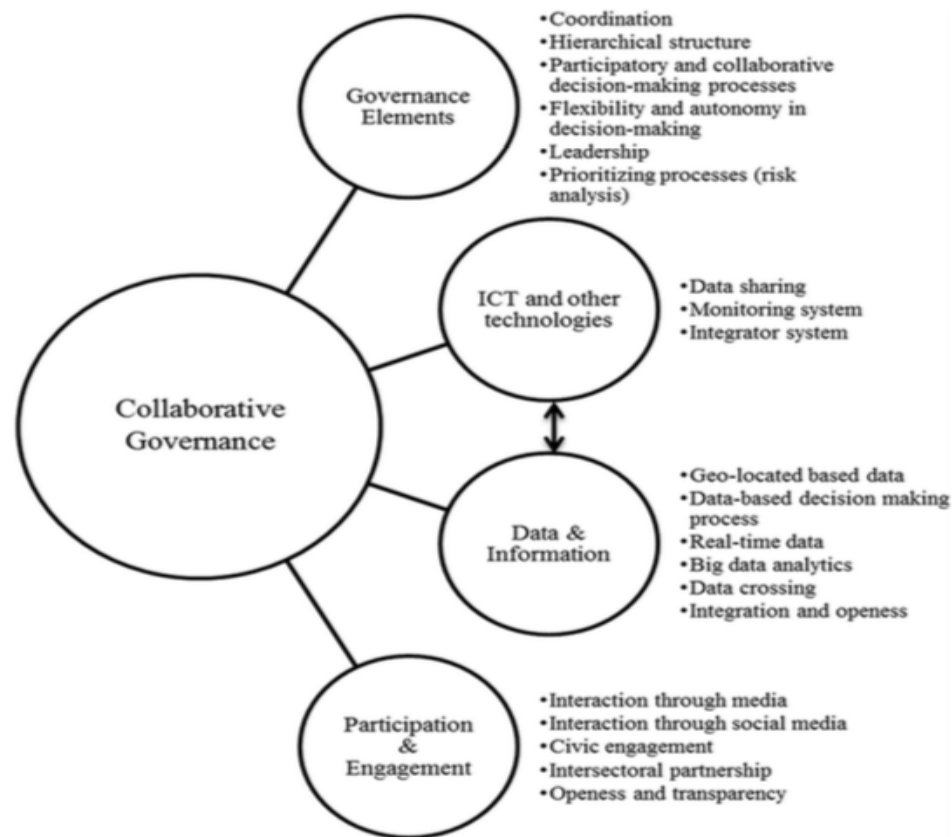
mentioned that in the process it causes some differences. Therefore, the differences include: differences in stakeholders involved, differences in the main factors driving the collaboration process, and the different stages of the collaboration process.

(Wahyuni, 2017) in the research titled “Collaborative Governance Antara Pemerintah Kabupaten Bantul dengan Swasta Dalam Pengelolaan E-Government”, the author got results that Collaborative Governance among Bantul Regency governments has not run optimally in the development of villages in Bantul Regency with information and communication technology facilities using programs that have been implemented in all villages in Bantul Regency. This program was initiated by a private sector namely the Combine Resource Institution in collaboration with the Bantul Regency government through the Department of Communication and Information. This also underlies the author to find out how Collaborative Governance between Bantul Regency governments and the private sector is in the management of e-Government. The conclusion of this study is that Collaborative Governance between the Bantul Regency government and the Combine Resource Institution in one village in the Bantul Regency has not run optimally due to problems in Facility Leadership. There is still no leader in charge of the village information system program, and the institutional design has not run properly, and the collaboration process has not run optimally due to the lack of synergy of the Regency Government, Village Government, and Combine Resource Institution.

(Viale Pereira, Cunha, Lampoltshammer, Parycek, & Testa, 2017) in their research titled “ Increasing Collaboration and Participation in Smart City Governance: A Cross-case Analysis of Smart City initiatives”, the authors tried to learn the concept of Smart Governance in Smart Cities, and focused on the phenomenon of Smart City. The researchers also conducted an analysis of how information and communication technology can play a role in developing collaborative governance and increasing government participation and involvement in developing smart cities to be smarter in Brazil. The researchers also proposes a framework based on the evidence of the research that has been carried out. The framework proposes for information sharing, integrated systems and departments as the main elements in planning the use of information and communication technology to realize collaborative governance with participation and collaboration. In addition, the authors also get results that information and communication technology (ICT) has an important role in helping provide information and integration between government agencies and external stakeholders including the community. Viale and friends also make framework for the use of Information and communication technology to be used in Collaborative Governance.

Figure 1. 1 Framework from the use of information and communication technology to be used in Collaborative Governance according to Viale et al.,

2017



Source: Viale et al., 2017

Sunberg (2016), in the research titled “Risk and Decision in Collaborative e-Government: An Objectives Oriented Approach” the author got result that showed how the Swedish government carried out an initiative on e-government projects in the provision of public services. The basis used in this initiative is in the collaborative e-service national strategy that is used as a guide in implementing the e-government project. The collaborative e-service national strategy in Sweden has several objectives, namely:

1. Making people’s daily lives become easier.
2. Creating government that can support participation and innovation.
3. Creating more equality and effective public services.

This journal also focuses on investigating how decisions and risks exist in this e-government project. What is interesting is the worst risk that arises because this project occurs because the value of public values is implemented and measured in practice. This occurs because of the level of uncertainty that arises in the decisions made considering the associated assumptions that are outside the control of the e-government project itself. Moreover, the existing political system also decreases the strength of public values.

(Cynthia, Hardi Warsono, 2015) in their research titled “ Analisis Pengembangan E-Government I pemerintah Kota Tangerang” in the Journal of Public Policy and Management, the authors get results that the development of E-Government in the city of Tangerang got a lot of support from the local government in the form of several regulations that support the success of E-Government in Tangerang City. Some of these regulations include: Presidential Instruction Number 3 of 2003 concerning National Policies and Strategies of E-Government Development, and Tangerang City Regional Regulation Number 05 of 2008 concerning Formation and Composition of Regional Service Organizations and Work Procedures for the Tangerang City Information and Communication Department.

(Putri, 2015) in her research titled “ Penerapan Electronic Government (E-Gov) Melalui Penyelenggaraan Situs Web Pemerintah Provinsi Riau Untuk Mewujudkan Transparansi Publik” the author got results that showed about the application of e-Government in the regional government of Riau Province in the form of a website portal. In this website portal there are two main classes which

should have three main classes. These three main classes arise because of the existence of benefits aspects related to how an application on the website for the public, business people ,and the government is related to the need for public services. These three main classes are: Publish class, which is the easiest implementation of e-gov because small scale projects and the majority of applications do not need to involve large data sources. Interacting class, is that there has been a two-way interaction between the government and the interested parties. The Transact class, is the same as the interact class, where two-way interaction has occurred but there are transactions related to the transfer of money referred to in this class is the costs that need to be spent by the community in services provided by the government or partners. In this study, Riau Province also still has not implemented a transaction service class due to a system that is still not integrated.

(Wicaksono, 2014) in his research titled “ Pengembangan Electronic Government pada Pemerintah Kabupaten Banyumas “ the author got results that showed that in the process of e-Government development, there are three aspects that influence the success of e-Government. The three aspects are support, capacity, and value, which were found by JF. Kennedy School of Government Havard University. In the aspect of Support, Banyumas Regency received some support provided by the district government in the form of policies and strategies through regional regulations (Perda) No. 4 of 2012 which contained policies and strategies for e-Government development in Banyumas Regency. This support affected the development of fund allocations that received improvements that resulting in a smooth development process. Whereas, in the capacity aspect, the researcher

concludes that in this aspect, Banyumas Regency especially *Dinhubkominfo* as the management institution still does not have the capacity to support e-Government development as needed. Furthermore, for the last aspect, namely the Value aspect, the development of e-Government in Banyumas in the form of utilizing e-Government services between government institutions in Banyumas in the form of e-Office services compiled by *Dinhubkominfo*, this service is used as a means of sending letters between regional working units (SKPD) in the Banyumas Regency Government. In addition to e-Office, Banyumas Regency also utilizes e-Government through the official website of Banyumas Regency. This website serves to provide information on public services and the government can interact with the community.

Difference with previous research on Collaborative Governance, in this study the author examined Collaborative Governance that was occurred in Jogja Smart province, the Provincial Government of Yogyakarta Special Region and the Government of Sleman Regency using the correlation analysis method. The author used this method to measure the strength of relationships between variables. The strength in question is how closely the relationships that exist in a variable are tight, weak or even not close at all. In this analysis, the writer used the help of SPSS 21 program.

1.6 Theoretical framework

1.6.1 Collaborative Governance

According to Sambodo and Pribadi in (Wahyuni, Sri 2017), Collaborative Governance is a way to respond the stakeholder requests in development planning and responses in agreements with governments that cannot meet government requirements, which are also developed to support the government with the aim of obtaining planning for development in accordance with the expectations of stakeholders. (Wahyuni, Sri 2017) also concluded that collaborative governance is a collaborative process between organizations that have the same goal to create better results. Since if a goal is to run smoothly there must be a supporting factor in managing it.

Moreover, in Collaborative governance, the actors who collaborate are Stakeholders who establish cooperation in order to achieve the goals. the stakeholders involved include: Government, Private Sector, communities, NGOs, and community groups according to Hee Bae in (Ayu, 2013). Whereas according to Abidin et al. (Anshar, 2018), actors who play a role in collaborative governance are minimized by making only three actors involved, namely the private government and the public, but broadly speaking, the intention of Abidin et al agrees with Hee Bee. From of all stakeholders involved as mentioned above, each character has their respective functions such as:

1. The government, in this case of course the government functions as the executor gives orders, oversees, and regulates the course of Collaborative Governance.

2. Private, is a party that has or provides capital while investing in a program that will be carried out with the aim of gaining profit.
3. Community, the community here comes from all aspects such as NGOs, and their community members all play a role in providing assistance in the form of input such as ideas and suggestions.

The model in Collaborative governance according to Ansell and Gash, 2007 in (Hermawan, 2017) consists of four stages as follows:

1. Starting Condition: at this stage the relationship between stakeholders tends to be unstable because each stakeholder involved has a different background, and this instability allows the appearance of an attitude that is not respectful.
2. Facilitative leadership: in this stage the government has a very important role as a facilitator who builds trust, sets rules, and analyzes mutual benefits between each stakeholder in the community (Hermawan, 2017). Moreover, Rayn also identifies three components of collaborative leadership that are considered effective, namely:
 - i. Adequate management of the collaboration process;
 - ii. Process the ability to implement technical credibility;
 - iii. Encure that the collaboration is held to make decisions that can be trusted and can be convincing for all actors.
3. Institutional design: Ansel & Gash (2007) in (Hermawan, 2017) describes that institutional design refers to the basic protocol and the

basic rules for collaboration which are the most emphasized are procedural legitimacy in the collaboration process.

4. Collaborative Process: This model portrays collaboration as a developmental stage. Gray in (Hermawan, 2017) defines three stages of the collaborative process, namely problem setting, direction setting, and implementation. In collaboration the most important part is to build good communication. Therefore, there are several stages that are passed to communicate in collaboration. The first communication is:

- 1) Face to Face Dialogue

What is meant by Face to Face Dialogue is to build trust between stakeholders by way of direct discussion. At this stage it is also useful in identifying mutual benefits in the initial collaboration stage. Besides, this direct dialogue also plays a role in building trust, mutual respect, and minimizing selfishness, and disrespect. In this stage, it is expected that each stakeholder can work well together to achieve common goals.

- 2) Trust Building

In this stage, it is a continuation of the previous stages. After the face to face stage, the hope is to build the trust of each stakeholder with other stakeholders, because it is important to

create trust and understanding to form a common commitment to collaborate.

3) Comittment to process

Output of the previous process in the form of this commitment certainly has a close relationship in the collaboration process. Commitment here is also a motivation to participate, close commitment to each stakeholder is expected to prevent risk in the collaborative process and to create mutual benefits, and achieve the desired results.

4) Share Understanding

From several stages of this collaborative process, actors are required to share an understanding of what stakeholders will get from the process. Sharing this understanding can also be called a shared mission, shared vision, the same ideology, clear goals and so on. In this stage, it can also be interpreted as a mutual agreement in interpreting a problem.

5) Intermediate Outcomes

This process is the result of a collaborative process that is likely to succeed, even though its nature is only temporary and there is a possibility of change. However, in this process besides providing the possibility of successful collaboration it can also provide opportunities to build successful collaborations.

1.6. 2 Jogja Smart Province

According to (Rachmawati, Ramadhan, & Rohmah, 2018) Jogja Smart Province (JSP) is an information media of DI Yogyakarta and an integrated information provider based on mobile applications called "Special Jogja" as a guide for the community and tourists. Integrated information media makes it easy to access information as a whole. The information contained in this special Jogja application is not only limited to tourism information, but covers all public services. Integration of this information in a media provides convenience for the community because it is more effective in its use and also Integration in this application is integrated with space and location.

Meanwhile, in accordance to (Potensi, Komunikasi, & Sari, n.d.) Jogja Smart Province is an information technology based regional collaboration that aims to support the resolution of strategic issues and development of DIY potential. The concept of Smart Province Jogja according to Sariy is a creative and innovative approach carried out by the DIY Government and Stakeholders involved in resolving strategic issues or developing the superior sector of DIY by data integration technology and regional collaboration.

1.6. 3 E-Government

In the presidential Instruction No. 3 of 2003 concerning national policies and strategies for the development of E-Government, it is stated that E-Government is an effort to develop an implementation of electronic-based governance in improving the quality of public services effectively and efficiently. Whereas,

Indrajit (2002) in Iswandi also argued that E-Government is a mechanism for new interactions, intergovernmental interactions with communities and interested parties by utilizing the use of information technology such as the internet, with the aim of improving the quality of service quality. Indrajit also provide the following types of E-government as follows:

a) Government to Citizen or Government to Customer (G2C)

In this type of Government to Citizen or Customers, it is clear that the government provides one-way information and services using information technology. The purpose of this type of E-government is to strengthen government and community relations by fulfilling various public service needs and information such as: online taxes, social security services, immigration services, health services, students, and others easily.

b) Government to Business (G2B)

Government to Business is an electronic transaction in which the government provides various information needed for business people to transact. This Government to Business leads to marketing a product and service to the government to help the government become more efficient through improving business processes and electronic data management. Applications that facilitate the interaction of Government to Business or vice versa are E-Procurement systems. Example are corporate tax and business opportunity.

c) Government to Government (G2G)

Government to Government allows communication or information exchange between departments or government institutions through an integrated database. For examples: online consultation, blogging for legislators, online education, and integrated community service.

d) Government to Employee (G2E)

This application is intended to improve the performance and welfare of government employees or employees who work in a number of agencies as public servants.

The implementation of E-Government certainly can also provide benefits to the community such as: improving the quality, effectiveness and efficiency of government services to the community, increasing transparency, as well as control and accountability in the framework of implementing good governance. Moreover, this implementation can reduce costs and provide opportunities for the government to obtain new sources of income through interaction with interested parties.

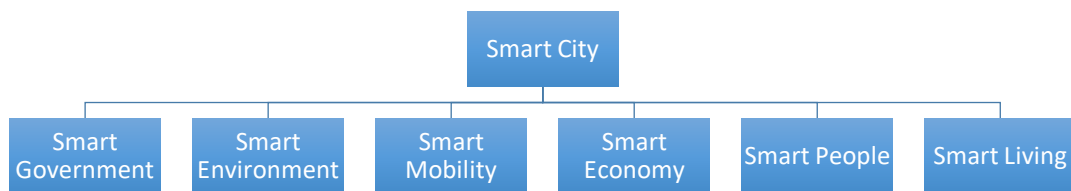
1.6. 4 Smart city

Smart City is the result of developing knowledge and creative strategies in improving social and economic quality. The emergence of smart cities is also a combination of several aspects such as: aspects of human resources, infrastructure, social, and entrepreneurial structures (such as creative business activities). In this case, a strong and trustworthy government that is assisted with creative human resources and open mindedness will be able to increase productivity and accelerate

the economic growth of a city according to Kourtit & Nijkamp (2012) in (Handy, 2017).

(Hidayatulloh, 2017) mentioned that IBM was the first company to launch the concept of smart city. IBM said that technology as a wheel that runs the life of a city uses technology so that life in cities that implement smart city can be more efficient. IBM also makes six indicators in implementing smart city as follows.

Figure 1. 2 Indicator of Smart City according to IBM



According to Cohen, Boyd (2014) in (Sandy Ma'rufinanto, 2016) Smart City is a broad and integrated approach in order to improve the efficiency of the operation of a city, improving the quality of life of its population and growing its regional economy. Not much different from Koutrit & Nijkamp, Cohen also defines that smart city is how to use ICT smartly and efficiently in using various resources and produce cost and energy savings, improve quality of life and service.

Table 1. 1 Indicator of Smart City according to Cohen

Dimension	Working Area	Indicator
Smart Environment	Smart Buildings	Sustainability – certified buildings
		Smart homes
	Resources Management	Energy
		Carbon Footprint
		Air quality
		Waste generation

	Sustainable Urban Planning	Water consumption
		Climate resilience planning
		Density
		Green space per capita
Smart Mobility	Efficient transport	Clean energy transport
	Multi modal access	Public transport
	Technology infrastructure	Smart card
		Access to real time information
Smart Government	Online Service	Online procedures
		Electronic benefits payment
	Infrastructure	Wifi coverage
		Boardband coverage
		Sensor coverage
		Integrated health + safety operations
	Open Government	Open data
		Open apps
		Privacy
Smart Economy	Entrepreneurship & innovation	New startups
		R + D
		Employment levels
		Innovation
	Productivity	GRP per capita
	Local and global connection	exports
Smart People	Inclusion	Internet – connected households
		Smart phone penetration
		Civic engagement
	Education	Secondary education university graduates
	Creativity	Foregin-born immigrants
		Urban living lab
		Creative industry jobs
Smart Living	Culture and well-being	Life conditions
		Gini index
		Quality of life ranking
		Investment in culture
	Safety	Crime
		Smart crime prevention
	Health	Single health history
		Life expectancy

1.7 Definition of Concept

In this study the author explains briefly about the theories that have been explained above so that there are no misunderstandings happend. Therefore, the conceptual definition is defined as follows.

1. Jogja Smart Province: An integrated information media based on mobile application developed by the Government of DI Yogyakarta with the Yogyakarta communication and information Department, which aims to provide tourism information and information about public services in DI Yogyakarta.
2. Collaborative Governance: The process of building a program that involves several actors in its development where each actor involved has the same goals and vision. Actors here come from the government or non-government private or community.

1.8 Concept of Operational

Operational definitions are used to measure social concepts that have been interpreted as more operational units. In other words, operational definitions are a kind of guidance on how to measure a variable. Therefore, the author proposed operational definitions as follows:

Table 1. 2 Operational Definitions

Variable	Variable concepts	Indicator
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<p>Model in Colaborative Governance</p>	<p>1. Starting Condition</p> <p>2. Leadership Facilitiy</p> <p>3. Institutional Design</p> <p>4. Collaboration Process</p>	<p>A. background from every stakeholder involved B. factors that encourage stakeholders to be involved</p> <p>A. sufficient management in collaboration process B. management ability to carry out technical capabilities C. ensuring that the collaboration is empowered to make credible and convincing decisions for all actors</p> <p>A. an opportunity for each actor to communicate with other stakeholders about policy outcomes B. claims that policy outcomes are the result of agreement by all actors</p> <p>A. face to face dialogue (face to face) B. (Trust Buliding) C. (Comitment to Process) D. (Share Understanding) E. temporary result(Interrmediate Outcome)</p>
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1.9 Hypothesis

H1: In the starting condition, all stakeholders have different interests and create a sense of disrespect among the stakeholders that causes discrepancies.

H2: in facilitative leadership, the central government as facilitator in providing rules as guidelines for future collaboration.

H3: In institutional design, every stakeholder is given the opportunity to communicate among stakeholders to equalize goals and negotiate to implement

policies in the Jogja Smart Province collaboration process.

H4: All processes in collaboration have been done, starting from direct communication, building trust among stakeholders, making the same commitment, and evaluating jogja smart province collaboration.

1.10 Research Methodology

The research method is used in obtaining data that has a specific purpose in a scientific way. The purpose of this research is as a guideline in conducting research, so that writer can think and act according to the stages in the research.

1.10.1 Type of Research

In this study, the author combines two existing research methods, namely quantitative and qualitative combined research, also referred to as mixed methods. According to Sugiyono in (Andi, 2017), a combination of research (mix method) is not carried out simultaneously between quantitative and qualitative, but its use is different with the intention to complement one another. Sugiyono also believes that this method can be combined but used interchangeably.

The first stage that will be done in this research is by using qualitative descriptive method. After qualitative data collection, the research will be using a quantitative method with a questionnaire approach. Therefore, from that this study uses a combination method with the Sequential exploratory model or it can be called a sequential combination of qualitative to quantitative, Sugiyono in (Andi, 2017).

1.10.2 Research Location and Time

This research was done in two places namely, Special Region of Yogyakarta Government and Sleman Regency Government. This reseearch was conducted on 16 January until 16 March 2020.

1.10.3 Data Collection Techniques

In this study, the author used four techniques in data collection. The first technique is to collect data in the form of interviews obtained after asking a number of questions that have been determined and discuss with the Yogyakarta Special Region Government and Sleman Regency Government regarding Collaborative Governance in Jogja Smart Province. The second technique is to collect data from a questionnaire addressed to 28 OPDs (Village Government Organizations), Sleman Regency. This questioner aims to find relationships that have occurred and formed for each OPD. After all the data gathered from questioeaire the next step is analyzied it using Correlation analysis with the help of SPSS 21 program. This correlation analysis is used to determine the correlation between variables with other variables that are considered influential, controlled or made as control variables. Therefore, the technical analysis used is Pearson Correlation Product Moment. This technique is used in examining variables in the form of interval data. According to (Sugiyono, 2013: 216), the third technique is Library research by collecting data from books, journal articles and other sources relevant to this research. Lastly, the author will use the documentation

or collecting secondary data in the form of documents that have been documented in the form of notes or photographs.

1.10.4 Types of data

In this study, the author uses two types of data, namely: primary data and secondary data.

a) Primary Data

Data is obtained directly from the field by researcher. Primary data is obtained from informants individually, thus this data will be in the form of interview conducted by the researcher (Udiani, 2016) in (Indri, 2018).

Table 1. 3 Research Primary Data

Data Name	Data Source	Data Collection Techniques
What drives the establishment of the Jogja Smart Province Program	Yogyakarta Special Region Government and Sleman Regency Government	Interview
Development of Jogja Smart Province for the past years	Yogyakarta Special Region Government and Sleman Regency Government	Interview/Questionnaire
Collaboration process in the implementation and development of JSP	Yogyakarta Special Region Government and Sleman Regency Government	Interview/Questionnaire

Obstacles in the implementation and development of JSP	Yogyakarta Special Region Government and Sleman Regency Government	Interview/Questionnaire
Stakeholders involved in the JSP program	Yogyakarta Special Region Government and Sleman Regency Government	Interview

b) Secondary Data

This data is obtained indirectly through documents, literature, and previous relevant research. The document from secondary data is also used as the object of research in the unit of analysis (Malelong, 2014) in (Agustiyara, 2016).

Data Name	Data Source	Data Collection Techniques
The organizational structure responsible for JSP	Sleman Regency and DIY Communication and Information Departments' archive	Documentation/ Library research
Collaborative Governance in the program of JSP	Books, Journal, Article and Media	Library research

1.10.5 Population

The population in this study are several Regional Apparatus Organizations (OPD) located in Sleman Regency, DISKOMINFO Special District of Yogyakarta and several NGOs involved in Jogja Smart Province.

1. Sampling Technique

Sampling techniques that use in this research is purposive sampling. The purpose of this purposive sampling is to make the writer can determine for himself who is the chosen respondent by indentifying several characteristic that able to fulfill the requirments as research respondent. After the identification, there are (28) department that fulfill the qualification of the respondent assessed can answer a questionnaire that will be given at least five questionnaires for each department. The following sample has been determined by the writer based on selection of respondents who are considered capable of answering and having PPID in their agencies:

Table 1. 4 List of Local Government Organization (OPD)

No.	Local Government Organization (OPD)
1.	Regional Secretariat
2.	Regional Disaster Management Agency
3.	Regional Inspectorate
4.	Department of Education
5.	Department of Health
6.	Department of Public Works, Housing and Settlement Area
7.	Department of Land and Spatial Planning

8.	Civil Service Police Unit
9.	Department of Social Affairs
10.	Department of Labor
11.	Department of Youth and Sports
12.	Department of Women Empowerment, Child Protection, and Family Planning
13.	Department of Agriculture, Foods, and Fisheries
14.	Environmental Department
15.	Department of Population and Civil Registry
16.	Department of Community and Village Empowerment
17.	Department of Transportation
18.	Department of Communication and Information
19.	Department of Cooperatives and Small Medium Enterprises
20.	Department of Investment and Integrated Licensing Services
21.	Department of Culture
22.	Department of Library and Archives
23.	Department of Tourism
24.	Department of Trade and Industry
25.	Department of Employee Affair, Education and Training
26.	Regional Development Planning Agency
27.	Department of Financial and Regional Assets
28.	Department of National Unity and Politics

1.10.6 Data analysis

In this study to produce the right information, data analysis used is qualitative analysis. The qualitative data analysis process takes place during and after data collection (Salim, 2006), but components in data analysis in the form of reduction, data presentation, and conclusion are still related at the time and after data collection. This component is according to Matthew & Hubberman in (Salim, 2006) called as interactive model data analysis sorted into three steps as follows.

1. Data reduction, which is the process of collecting, separating and simplifying or focusing data obtained from the field.

2. Data presentation is the continuation part from data reduction stage which allows the author to connect all the data that has been reduced and proceed by using Pearson Correlation that already existed to be easily understood.
3. Conclusion & Verification, in this stage the author draws conclusions and verifies during the research, which means that the concluded data will also be reviewed to ensure its authenticity.

1.10.7 Writing Systematics

To facilitate the author in understanding and writing, the author composes a systematic writing consisting of four chapters below.

Chapter I

Introduction, consists of: background, problem formulation, research goals, research benefits, literature review, theoretical framework, definition of concept, concept of operational, hypothesis, research methodology, type of research, research location and time, data collection techniques, type of data, population, sampling technique, data analysis.

Chapter II

Description of Kabupaten Sleman and Jogja Smart Province data center consists of: location of Sleman Regency and Department of Communication and Information of Special Regions of Yogyakarta, population in Sleman Regency, History of Sleman Regency, Sleman Regency vision and mission, and Department of Communication and Information of Special Regions of Yogyakarta

Chapter III

Result and Discussion: in this chapter the author will describe and explain from the research on Collaborative Governance between the Sleman Regency Government and the JSP data center, and discuss the data analysis that has been done.

Chapter IV

Conclusion, consists of: Conclusion of research, and suggestions. Obtained from research results.