CHAPTER I

INRODUCTION

This chapter provides a background, objective and the significance of the study. It also highlights the research questions and hypotheses that the study was founded upon. In addition, this chapter also explicates the theoretical and practical benefits that this study would serve including the scope and limitations of the research.

1.1. Background

Indonesia is among the countries developing the concept of smart city. (smartcityindonesia.org, 2018). There are several elements in smart city concept such as smart government, smart education, smart building, smart mobility, smart technology, smart healthcare, smart infrastructure, smart development planning, smart energy, smart security and smart citizen (Siti, 2018). All these elements are interconnected. Thus, the concept of smart city will not be effective and efficient if not supported by smart citizen. Smart City refers to the synergy between technology and its

citizens; without smart people, smart city development will not run well. Intelligent societies are urgently needed as the main driving force of the digital economy which is expected to produce significant change in the future of the economy. According to Pew Research (2014) in Comptutrade Technology International (2016) states that a citizen or community who often use the internet will likely to be more productive. The more connectivity a person has, the more information they can get. This makes wireless technology a very important tool in building intelligent people, and smart citizens.

Apart from Sleman regency, many regions in Indonesia have already implemented the concept of smart city which include the following: Balikpapan, Makassar, Yogyakarta, Bandung, Surabaya Banyuwangi, Tomohon, East Lombok, Sukabumi, Badung, Samarinda, Semarang, Tangerang, Bekasi, Bogor, Cirebon, Pelalawan, Banyuasin, Bojonegoro, Gresik, Sidoarjo, South Tangerang, Mimika, Kutai Kartanegara, Siak, and Jambi (Nova, 2018). Each of those regions or cities shows innovation in smart cities such as smart hospitals, where health services built are

much more accessible to the public (Nova, 2018). Smart hospitals that can facilitate the community, adding a sensor device on the patient and board status placed in the waiting room to track the existing condition of patients (Nova, 2018). Moreso, another example is the smart parking censor platform¸ which is a feature of filling up gasoline and adding features vehicle wash and service.

Specifically in the Special Region of Yogyakarta, some regencies have implemented the smart city innovation. For example, Sleman Regency is the pilot area for the smart regency project of Ministry Of Communication And Informatics of Indonesia in terms of the application of smart city (Indera, 2018). On the year 2017, Sleman regency was awarded the recognition of "smart regency" , with its committment to continusly support the implementation of smart city, together with 24 other cities/regencies in Indonesia (slemankab.go.id, 2018). On the same year, Sleman has completed five quick win in one data of Smart Medium Enterprises? (SMEs) smart room, *Lapor Sleman*, Sleman Creative House, and Sleman Creative Space (slemankab.go.id, 2018). Needless to say, leadership is crucial in implementing the

smart city concept. In the case of Sleman, Regent Sri Purnomo is fully committed to make it Smart Regency in 2021. The application of smart city concept in the regency of Sleman is based on the application of integrated information and communication technology. This road map strategy is found in the regional medium term development plan (RPJMD) of Sleman 2016-2021. The implementation of functioning information technology ultimately supports the process of determining the direction and policy of the organization, as in this case the local governance in Sleman regency. In doing so, there will be the realization of the vision towards a more prosperous Sleman community, which is independent, cultured and integrated system of a smart regency in 2021 (RPJMD Sleman 2016-2021).

In cognizance of the role of Sleman Regency in the innovation and development of a smart regency, the following components are entrenched in the vision of the regency government for a smart city innovation (RPJMD Sleman, 2016-2021), namely:

1. Improvement on utilization of technology and human resource towards the commitment to realize excellent services in local governance.
2. Simplification and standardization of procedures, time and cost efficiency for the internal efficiency of the bureaucracy in the Sleman regency.
3. Establishment of inter-governmental network institutions for resource sharing, particularly related to data resources.

Based on Nam and Pardo (2011), a comprehensive view of smart city emphasizes smart city as a commitment to innovation in technology, management and policy. There are three vital components making up a smart city, namely; smart government, smart technology, and smart citizen. All this three components are being continuosly developed by Sleman Regency to stregthen its commitment towards being a smart regency. There are basic applications that have been made by Sleman local government to facilitate the community in obtaining services more easily, effectively, and efficiently such as the lapor mobile application. In addition, smart citizen is an equally important component of a

Smart city innovation. The component of smart citizen is an essential tool in the development of a smart city. Intelligent societies are urgently needed as the main driving force of the digital economy which is expected to produce a change in the future of the economy. A citizen or community who often use the internet will most likely be more productive (source?). The more connectivity a person has, the more information they can get. This makes wireless technology an important instrument in building intelligent people, and smart citizens. The table below shows the smart city apps currently under operation by the regency government of Sleman.

Table 1. 1. A List of Smart City Apps Issued By The Sleman Regency Government

The Name of Application	Description
Sleman TV	Manage by Department of Communication and Information that provide visual video under the theme smart city, tourism, medium micro enterprises, etc
One Data of UMKM (Medium micro enterprises)	The integration information system about UMKM
Home Creative Sleman (State-Owned Enterprises)/BUMN	In collaboration between government, academic proffesional, business and community to create economic creative
***Lapor Sleman* App**	The application provides incidence reports (i.e. missing persons, damaged properties, etc.)

Sleman Smart App	The application is based on the android/smart phone created to give access to information related to Sleman website, amazing sleman, permissions, Sleman map, etc.
E-patient	The e-patient website provides the information about the medical officers, and allows the community to directly register for medical checkup.
Online Tax	To facilitate the paying of taxes online, so that taxpayers do not need to come to the agencies concerned.
CCTV Monitoring	The application created to monitor peace and order and security-related cases, through 24jam.sleman.go.id.
Sleman Emergency Service	This application provides ambulance services for emergency purposes through the call center (0274-8609000).
Sleman Smart Room	Created to facilitate the government especially to deal with policy making, meeting, coordination, etc. The smart room is equipped with the technology information and communication (ICT) resources.

Source: *Kedaulatan Rakyat*, newspaper (28 February 2018).

The application oftened used by the people in Sleman is *Lapor Sleman* (Sleman Report) based on the interview with Ariya (2018) staff of department of communiaction and information in Sleman. Every year, there are about 1500 complaints coming into government through *Lapor Sleman.* This application is used as a conduit of the community in managing various problems or conflicts occurring in the region of Sleman. Through the Lapor

Sleman, community concern such as public infrastructures can be reported and monitored, ranging from the condition of damaged roads, handling waste, licensing, and criminal activities (Ariya, 2018). This makes Sleman Regency as one of the areas with high tech adaptation, and can be a model commmunity in the Yogyakarta region. *Lapor Sleman* can be accessed in smartphones (android) and via www.lapor.slemankab.go.id website. In here, government collaboration with the community for development is highlighted as Sleman's "smart city" initiative. This means that the *Lapor Sleman* application is built to support the vision and mission of Sleman Regency Government in its medium term development goals (2016-2021). The *Lapor Sleman* application is included in the Smart Digital Public Connectivity program, as a liaison between the community and the government.

Procedurally, online services of the Lapor Sleman is done through the following steps: (1) logging in or register using e-mail; (2) Acknowledging the received report from the admin operator, assigned to the desk of the public communications section and complaint. Subsequently, the section of information and public

communication under the Office of Communication and Informatics forwards the reports to the moderator for response. But if the report is under the authority of other SKPD (what is SKPD?), the report will be disaggregated by category (Yudatiningsih, 2018); (3) Reports received by moderator from each department in government admin report will be filtered by SKPD (Work unit) admin to be distributed to field or section or need handling up to head of service; (4) There will be a report analysis and follow-up then the report's response from the respective office is notified by the moderator for answer via the response column in the report in question and (5) The report status is tagged as "resolved" once the report is completed (Yudatiningsih, 2018).

The smart city applications created and updated by the government in order to realize the smart regency will be meaningless, if not supported by the conscious people utilizing the technology as envisioned by smart regency innovation in Sleman. With the success of Sleman regency, albeit slowly, it is interesting to study the concept of smart city focusing on the citizens' behavior on using *lapor sleman* application in institutionalizing the Sleman

smart regency. It is noteworthy that studies on citizens' behavior on using technology to build smart citizen are still few hence this study is undertaken.

1.2. Research Question

1. What are the factors that influence citizens' behavior in the utilization of Lapor Sleman?
2. How does the citizens' behavior affect the Sleman Smart regency vision 2021?

1.3. Objectives and Benefits of The Research

Objectives of The Research

This research primarily seeks to explain the factors that influence citizens' behavior in the utilization of Lapor Sleman and secondly, to examine its effects on the institutionalization of the Sleman smart regency vision of 2021.

The Benefits of The Research

a. To develop a study on the citizen behavior on using *lapor sleman* application to build the Sleman smart regency.
b. To complete the reference study on the citizen behavior on using *lapor sleman* application to build the Sleman smart regency.