

# CHAPTER I

## INTRODUCTION

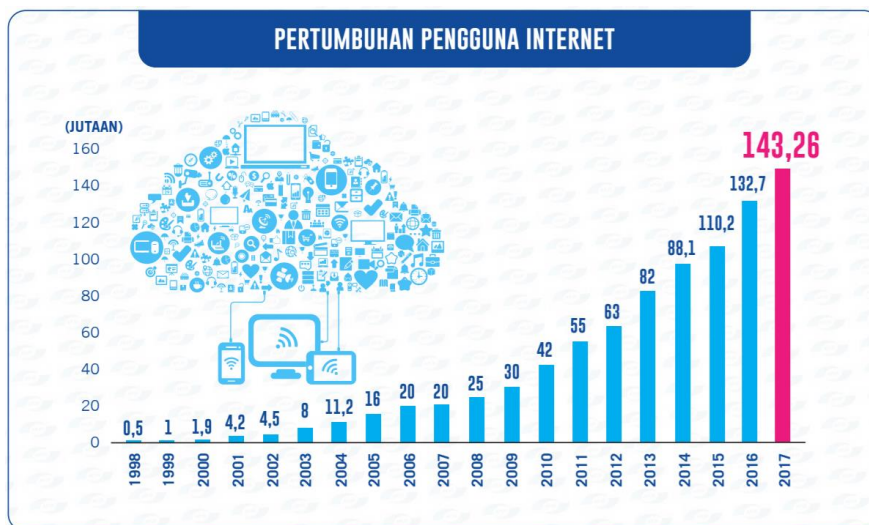
### 1.1 Background

The rapid development of technology can meet the needs of information very quickly and accurately. The current technology has been widely used in various fields, whether in business, government, healthcare, education, and many other sectors. E-government is an activity carried out by the government using information technology support in providing services to the public (Hasibuan and Santoso, 2005).

E-government is the utilization of information, communication technology, and internet network which also can transform relations with citizens, business sector, and other government agencies (TW Nugroho, 2017).

In 2003, the government issued Presidential Instruction No. 3 of 2003 as a continuing effort to support the implementation of e-government in order to improve the quality of service to the community, especially information services and to establish good governance.

**Figure 1. The Growth of Internet Users in Indonesia**



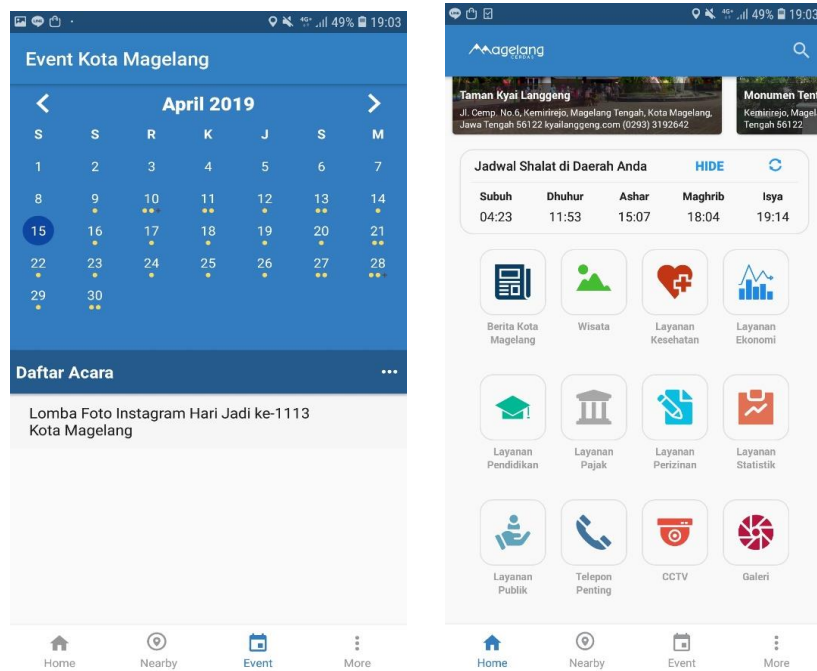
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Based on the picture above, it can be seen that the growth of internet users continues to increase which was recorded in 2017, around 143.26 million people are connected on the internet. It can be an opportunity for the government to integrate administrative services to the digital service so that the service is quick and efficient in which it will affect public services running optimally.

Service is one of the essential factors of customer satisfaction and is a necessity that must be optimized either by individuals or organization, because it reflected the quality of service provided by organization or individuals. Meanwhile Sutopo and Kumoro described public service as a series of activities undertaken by public bureaucracy to meet the needs of citizens. The users are the citizens who need public services (2017).

The government of Magelang city is committed to develop e-government as an effort to improve service to the public in the administration system. One form of the policies is being enforced in the development of services using information and communication technology (ICT) smart application named *Magelang Cerdas*. It is an embodiment of the initial concept of a smart city to maximize its resources to provide services to the public. The technological support is needed in the implementation, which is useful for public as an application which provides information and conduct transaction services.

**Figure 2. Magelang Cerdas Application**



Source: (GooglePlay)

*Magelang Cerdas* was officially launched by the government of Magelang city on May 24<sup>th</sup>, 2017. This application was developed by a third party, PT. Gamatechno Indonesia (Gamatechno, 2017). *Magelang Cerdas* application is one of the media that is provided by the city of Magelang to develop a smart city concept. It is the development of smart governance, where the governments improve the quality of public services, more effective bureaucratic management and efficient public participation in policy making and urban development. With *Magelang Cerdas* application, it is expected to be a starting point to develop a smart city in Magelang city in order to get easy access of services to society which is offered by the government.

Features contained in the application are quite informative as some features support the public service to the community. However, some of the reviews suggested whether *Magelang Cerdas* application requires improving by adding features, to increase the service for the community to achieve the initial concept of "Life in Hand". Following the actual

concept of a smart city, a city that understands the problems exist within and city with a maximum existing resources and services management to the community.

Based on the explanation above the research related to the implementation of e-government by the city government of Magelang is an interesting subject to be studied, in order to see how far reviews of these programs can improve the quality of service expected by the public.

## **1.2 Research Question**

Based on the background problems above, the research question is as follows:

How does the implementation of *Magelang Cerdas* Application improve the quality of public services in Magelang City Government?

## **1.3 Research Objective**

The objectives of the research is as follows :

Analyzing the implementation of e-government in *Magelang Cerdas* applications to improve the quality of public services.

## **1.4 The Significants of Research**

The significants of this research is to analyze the efforts made by the city government of Magelang in improving public services through the smart application. This research is expected to increase the knowledge in research on the application of information technology in governance. Furthermore, it can give advise for governments in the development of public service applications.

This research is expected to be useful for the public to know more about *Magelang Cerdas* application and its use as a community service-based technology.

## **1.5 Theoretical Framework**

### **1.5.1 E-Government**

In a broad understanding, e-government can be defined as the utilization of information and communication technology and internet network which also can optimize the relations with citizens, business sector, and other government agencies (TW Nugroho, 2017). Furthermore, the World Bank group explained that the purpose of reviews of the e-government is to improve access and deliver all aspects of government services for the benefit of citizens, businesses, employees and other stakeholders. Another definition of e-government is a process of using information technology as a tool to help run the government system more effectively and efficiently (Sosiawan, 2008).

Some of the benefits of implementation of e-government for public services according to Indrajit (Nugroho SA, 2017) are as follows:

1. Fixing government services to all stakeholders especially for performance efficiency and effectiveness.
2. Improving transparency, control and accountability in governance in the implementation of good governance.
3. Being able to reduce administrative costs.
4. Improving the relations and integration between the stakeholders issued by the government for the purpose of the service.
5. Providing opportunities for the government to get a source of income through interaction with other parties on the use of e-government.
6. Creating a new circle of people who can correctly answer the problems faced by the various trends of globalization.
7. Being efforts to empower communities and stakeholders as government partners in the public policy-making process.

According to (Nugroho SA, 2017), the scope of e-government is to apply the concept in every institution specified duties and functions, the type of information resource, and type of services provided agencies. Thus, this determined the structure of the concept for implementing the relationship of Government to Government (G2G), Government to Business (G2B), Government to Citizen (G2C), and Government to Employees (G2E).

Government to Citizen is the most common types among the four types of e-government classifications. G to C means implementing various information technology portfolios with the primary objective to improve the relations and interaction with the community (Nugroho SA, 2017). The primary purpose of the development of the G-to-C type of e-government application is to bring the government closer to its people through diverse access channels so that the citizen can easily reach its government to fulfil their various daily service and needs (Indrajit, 2002; Nugroho SA, 2017).

Examples of these executions are, where as the public can access the data/information from the Central Bureau of Statistics Republic of Indonesia, the public can register to the state via the internet, the public can find the announcement of exam results via short message service (SMS) from their mobile phones, and others.

Based on the results of the study and research of the Harvard JFK School of Government (Indrajit, 2002; Nugroho SA, 2017), in the application of the concepts of digitization in the public sector, three essential elements must be owned and cared for are described below :

### **1. Support**

The support element is the most crucial in the development of e-government which needs support or political will of public officials. It is so that the concept

of e-government can be applied, without the various development initiatives, and the development of e-government can not be implemented.

## **2. Capacity**

Elements of resource capacity is required in the construction and development of e-government in order to achieve the created concept to become a reality. These three resources, namely:

- a. Availability of sufficient financial resources to carry out various e-government initiatives.
- b. Availability of adequate information technology infrastructure must reach a minimum amount of 50% for the successful implementation of e-government.
- c. Availability of human resources who have the competence and expertise are necessary for the implementation of e-government to achieve the expected benefits.

## **1. Value**

Element value is based on the benefits derived by the government as service providers and the community as recipients of e-government services. A significant element of value, it determines whether or not the benefits of e-government for society as a recipient of the service.

### **1.6 Conceptual Definitions**

According to the results of previous research in applying digitalization of public services, the government should implement 3 essential elements, namely:

#### **1. Support**

Government support in implementing the digitization program for public services is critical. Without government support, the program will not run.

## **2. Capacity**

This element explains the importance of resources that must be available before the public service digitization program is implemented. Three resources that must be prepared, namely:

- a. Availability of financial resources from the government
- b. Availability of communication and information technology infrastructure to the government as a service provider.
- c. Availability of human resources who have expertise in the field of communication and information technology.

With the fulfillment of all the resources above, the application of digitizing public service programs can be optimally run.

## **3. Value**

This element explains the impact and benefits received by the government as a provider of public services and also the public as users of public services in this public service digitalization program.

### **1.7 Operational Definitions**

The operational definition shows the indicators that will be the main focus of the research, such as:

E-Government can be measured by several indicators as follows:

#### **a. Support**

Support will be measured by:

- a. Regulations made by the Magelang city government as a legal basis for the implementation of e-government programs in public services.
- b. The inclusion of e-government development in Magelang city development planning.



## **b. Capacity**

Three resources that should have, namely:

- 1) Availability of sufficient financial resources for the implementation of e-government framework is integrated into Magelang city government.
- 2) Availability of adequate information technology infrastructure must reach a minimum amount of 50% for the successful implementation of e-government.
- 3) Availability of human resources who have the competence and expertise needed for the implementation of e-government can be integrated into Magelang city under the principle of the expected benefits.

## **c. Value**

The indicators used in measuring benefits refers to the Indonesia's Ministry of Administrative and Bureaucratic Reform regulation number 15 of 2014 concerning public service standards which should have six aspects, including:

- a. Requirements;
- b. Service Procedures;
- c. Completion Time;
- d. Service Charge;
- e. Service Products; and
- f. Service Complaints.

## **1.8 Research Method**

The method used by the researcher aims to answer questions that have been formulated and discover new things that have not been found by previous studies following the procedures of proper research.

### **1.8.1 Type of Research**

In this study, researcher used a qualitative approach which means the approach taken by the researcher through the data in the form of text interviews, data fields, personal documents, records and other supporting documents relating to this study.

John W. Creswell (Ghony & Almanshur, 2016: 26) stated that a qualitative approach is an understanding of the investigation process which is based on separate methodological traditions that explore a social problem or a human. It is also an effort to build complexity, holistic picture, the word study - said, present a detailed report from native speakers, and study in a natural state, by researchers.

Qualitative research is concerned with how people think and act in their everyday lives (Taylor, Bogdan, & Devault, 2015). Meanwhile, other definitions that describe qualitative research is research that aims to understand the phenomenon of what is experienced by the subjects in a holistic manner and by way of description in the form of words and language, in a specific context naturally by utilizing various natural methods (Moleong 2005).

### **1.8.2 Data Collection Technique**

Data collection techniques used in this study are as follows:

#### **1. Interview**

The interview is a technique of a data collection that aims to find the problems being studied and find the answer for research question from the respondents by talking face to face (Sugiarto, 2015). Interviews are conducted with semi-structured methods where the interviewers ask questions that have been prepared. In this study, the interview was conducted to Chief of Informatics Technology Division, Section Chief of Information Technology and Data Development, Programmer Technical Staff and *Magelang Cerdas* application users.

## 2. Documentation

There is a sense of documentation, that is the source of the data used to complete the research, both in the form of written sources, movies, pictures (photos), and monumental works and all of them which provide information for the research process, (Nilamsari, 2014). This research requires official documents from the Department of Communications, Informatics, and Statistics such as regulation of development of *Magelang Cerdas* application, the standard operating procedures of *Magelang Cerdas* application, and evaluation report..

### 1.8.3 Type of Data

The researcher used primary and secondary data for this research (Sugiarto, 2015).

There are two types of data in these study items, as follows:

#### 1. Primary Data

Primary data is information obtained from primary sources (Sugiarto, 2015). Primary data in this study is all the information regarding the implementation of e-government in the city of Magelang through *Magelang Cerdas* applications which are sourced directly from the source at the study site which made the object of research. Here is the primary data in this study:

**Table 1. Primary Data**

<b>No.</b>	<b>Data</b>	<b>Data source</b>	<b>Data Collection Technique</b>
1.	Socialization to the community	Department of Communications, Informatics, and Statistics	Interview
2.	Human resource who have competence in the field of information, communication and technology	Department of Communications, Informatics, and Statistics	Interview
3.	The infrastructure of information, communication, and technology	Department of Communications, Informatics, and Statistics	Interview

4.	Budget development of e-government	Department of Communications, Informatics, and Statistics	Interview
5.	The benefits gained by the government as service providers	Department of Communications, Informatics, and Statistics	Interview

## 2. Secondary Data

Secondary data is information that is not obtained directly from the informant but a third party (Sugiarto, 2015). Secondary data in this study were obtained from the internet, journals, books, archives and directly from related parties that related to the subject of research. Secondary data used by researcher in this study is the supporting of data derived from the object items, namely:

**Table 2. Secondary Data**

No.	Data	Source	Data Collection Technique
1.	The legal basis for the development of e-government	Department of Communication, Informatics, and Statistics	Documentation
2.	Local Government Medium Term Development Plan	Department of Communication, Informatics, and Statistics	
3.	Standard Operational Procedures	Department of Communication, Informatics, and Statistics	Documentation
4.	Evaluation Report	Department of Communication, Informatics, and Statistics	Documentation

### 1.8.4 Data Analysis Technique

According to (Agusta, 2003) there are three lines of data to the analysis items, namely data reduction, the data presentation, and the conclusion. Data reduction is an electoral process, focusing on simplification, abstraction and transformation of raw data

obtained from the records, documents or the data from the field. It includes summarizing the data encoding, searching themes, and formulating clusters. A reduction is a form of analysis that sharpens, classify, direct, dispose of unnecessary, and coordinate the data in such a way that formed a conclusion.

Meanwhile the presentation of the data is an activity when a set of structured information, thus, giving the possibility of drawing conclusions and action taking. Here is the presentation of qualitative records:

1. Narrative text: derived from the data field.
2. Matrix, graph or chart: this form combines the information so that it becomes easy to be read and understood.

Furthermore, in conclusion, researcher will conduct an ongoing basis while in the field, from the beginning of the data collection, they were searching for objects, notes (annotations, causation), and other relevant qualitative approaches. From the conclusions that have been formed, it will then be verified by looking at the data in the primary and secondary data as well as from other sources.

## **1.9 Structure of the Research**

In this study, the systematics of writing will be divided into four parts items, below:

1. **Chapter 1**, consist of background, research question, research objectives, the benefits of research, theoretical framework, conceptual definition, operational definition, research methods, research location, and the data to the analysis technique.
2. **Chapter 2**, consist of city overview and Department of Communications, Informatics, and Statistics profile.
3. **Chapter 3**, Result and Discussion, this chapter, will analyze the realizing smart city in the management of local government through the optimization of *Magelang Cerdas* as a public service measured using e-government indicators.

**Chapter 4, Conclusion,** will describe the conclusion of the research and recommendation.