

## **CHAPTER II GENERAL DESCRIPTION**

### **2.1. Digital Application Concept**

An application is a specific set of instructions designed for use in a computer for the purpose of completing specific tasks. Applications are a type of computer software that utilizes a computer's capabilities to perform tasks desired by the user. Usually compared to system software that integrates various computer capabilities. Another definition states that an application is a program developed to meet user needs in carrying out certain work (Vermaat, 2007). In the context of e-government, applications are very important to support implementation. Applications act as a means of communication between the government and the community. Bureaucratic efficiency and government services to the public depend heavily on proper application management. Applications must be designed according to society's current needs, so that they have flexibility and can adapt to changes that occur.

### **2.2. BEBUNGE (Bekasi Nyambung Bae) concept**

Bebunge is a one-stop service portal owned by the Bekasi Regency Information, Coding and Statistics Communication Service. Through Bebunge, the public can obtain information about government programs and other information. The Bebunge application acts as a platform for complaints and aspirations from the community which will be forwarded to related parties for follow-up. Apart from that, Bebunge also functions as a means for the community to access public services provided by the Bekasi Regency Government. Even though the Bebunge application does not yet have a specific legal basis because it is still relatively new, it is in the process of obtaining legality. In general, Bebunge refers to Regent Regulation Number 42 of 2020 concerning the Bekasi Regency Electronic-Based Government System Master Plan for 2020-2025 as its legal basis (Setiana, 2022).

Currently, there is a version of *Bebunge* available on the Google Play Store and can be downloaded using the Android operating system. This application allows citizens to access information and manage various matters, including health and population administration. *Bebunge* involves several regional organizations or services, such as the Communication and Information Service, Health Service, Regional General Hospital, Regional Disaster Management Agency, and Fire Department, as well as the Population and Civil Registry Service. However, even though the *Bebunge* application is available, there are still several challenges in using it. For example, the level of socialization of the *Bebunge* application among the people of Bekasi Regency is still low, so many people do not understand the online complaint procedures through this application. Apart from that, the application's performance as an online aspiration platform is still not optimal. There is a delay in handling emergency complaints due to the lack of facilities such as ambulances and fire extinguishers in each sub-district. In this case, there needs to be more intensive efforts in socializing the *Bebunge* application to the people of Bekasi Regency so that more people can use it. Apart from that, it is also necessary to improve facilities and application performance so that it can become a more responsive aspiration platform in responding effectively to community needs and problems.

There are several targets for the *Bebunge* application with the aim of providing general benefits to the community, including:

1. The public has media to obtain information on government programs and other important information;
2. The public has a medium to convey complaints and grievances which will then be accommodated and then forwarded to the relevant department for immediate follow-up;
3. Become a means for the community to enjoy public services provided by the Bekasi Regency Government.

The research results obtained through research observations using Indrajit's theory (2005) provide a useful overview of the important components that are requirements for implementing e-government. This theory shows that existing

indicators support each other. Some indicators in this theory include:

1. *Content Development*(Application Development)

Content development is related to application (software) development, selection of technical standards, use of programming languages, database system specifications, user interface agreements, and other aspects (Indrajit et al., 2005). Based on the results of interviews with various informants regarding the use of the *Bebunge* application, Diskominfosantik Bekasi Regency has developed the application. The updates carried out by Diskominfosantik have made it easier for people to access the application and changed the appearance of the interface to be more attractive and new. In developing the *Bebunge* application, the last update was carried out two weeks before the author conducted the interview, namely on December 15 2021. This can be strengthened by previous research which developed interactive modules using a learning content development system on dynamic electrical material. External test results show that the interactive module developed is considered interesting, easy to use, and useful for students as a source of learning dynamic electrical concepts. The interactive module's attractiveness quality score reached 3.14, indicating that the module was rated "interesting" based on these criteria.

2. *Competency Building*(Training and Competency Development)

Human resource procurement includes training and competency and expertise development for all employees in various parts of government (Indrajit et al., 2005). Based on the results of interviews with various informants, training and competency development at the Bekasi Regency Diskomfosantik was carried out on 23-25 November 2021. In implementing services to the community, the Bekasi Regency Diskomfosantik also provides services such as Friday Prayers by implementing the Covid-19 health protocol via the Application *Bebunge*. All these efforts aim to develop existing human resources at Diskominfosantik Bekasi Regency. Training and competency development is very important for a technology application operator. An operator has a crucial role in the planning process from start to finish, where they enter development planning data into the *Bebunge* system.

### 3. *Connectivity*(Availability of Communications Infrastructure)

The availability of communication infrastructure and information technology at the location of e-government implementation is very important (Indrajit et al., 2005). Adequate infrastructure is the main element that supports various activities. Without adequate infrastructure, various activities cannot run well and optimally. In Diskominfoantik Bekasi Regency, the availability and quality of infrastructure is quite good. Every year, equipment updates are carried out to ensure that the infrastructure available at Diskominfoantik Bekasi Regency remains current and adequate.

### 4. *Cyber Laws*(Legal Framework and Instruments)

The legal framework and instruments related to e-government activities at Diskominfoantik Bekasi Regency are based on Regent Regulation (Perbub) Number 79 of 2017 concerning Position, Organizational Structure, Duties and Functions and Work Procedures of the Regional Technical Implementation Unit (UPTD) Integrated Safety Service Center (Public Service Center) 119 Bekasi Regency. This decision is a policy from the Regent of Bekasi Regency which makes the Bekasi Regency Diskominfoantik responsible for developing innovation in the form of the *Bebunge* Application which focuses on public services in Bekasi Regency. However, there are no other legal regulations on which to base this policy.

Apart from that, efforts to develop e-government as a form of improving the quality of public services effectively and efficiently refer to Presidential Instruction Number 3 of 2003 concerning National Policy and Strategy for e-government Development. For other legal instruments that underlie the *Bebunge* system, there is Law Number 14 of 2008 concerning Openness of Public Information. The Bekasi Regency Electronic-Based Government System Master Plan for 2020-2025, which is regulated in Bekasi Regent Regulation Number 42 of 2020, is also the basis for developing the *Bebunge* application. This application is an Android-based application and website which aims to facilitate Bekasi people's access to public services. Gradually, the *Bebunge* application is planned to become the main portal that is integrated with public services such as licensing, population and online complaints. Even though the *Bebunge* application does not yet have a specific legal

basis because it is still relatively new, in general it refers to Regent Regulation Number 42 of 2020 concerning the Bekasi Regency Electronic-Based Government System Master Plan for 2020-2025. The process of legalizing this application is still in the development process.

#### 5. *Citizen Interface*(HR Procurement and Access Channel Development)

In e-government development, it is important to have various access channels (multi access channels) that can be used by the public and e-government stakeholders anywhere and at any time (Indrajit et al., 2005). Diskominfosantik Bekasi Regency has made efforts to socialize the *Bebunge* application in the following ways. First, the Bekasi Regency Diskominfosantik has created a special website to socialize the *Bebunge* application to the public. Apart from that, they also used banners around the Bekasi Regency Regional Government office complex. The aim of this effort is for the public to know about the "*Bebunge*" e-government program which has been implemented in Bekasi Regency. However, in terms of conventional understanding, there are still many people who do not know about the *Bebunge* application because of the lack of public awareness of the existence of this application. Second, Diskominfosantik Bekasi Regency also uses digital media and social media platforms such as YouTube, Instagram and Twitter through the official Diskominfosantik Bekasi Regency account. Through this social media, they are trying to increase the socialization of the *Bebunge* application. However, until now, Diskominfosantik Bekasi Regency has not created a special social media account that is directly related to the *Bebunge* application. This is due to the lack of clear ideas from the Bekasi Regency Diskominfosantik regarding this matter. With various outreach efforts through websites, banners and social media, Diskominfosantik Bekasi Regency hopes to increase public awareness about the *Bebunge* application and the existence of e-government in Bekasi Regency.

#### 6. *Capital*(Pattern and Capital)

In developing e-government projects, it is necessary to consider capital patterns, especially those related to costs after the project is completed, such as maintenance and development. The project team must think about various types of revenue models that can be applied in a government context (Indrajit et al., 2005).

In the case of the Communications and Informatics Service, budget availability is very important in implementing the programs they run. The budget must be able to help fulfill the obligations of the Communication and Information Department in providing regional information to the public. However, the capital owned by the Communications and Informatics Department is considered insufficient because many facilities and infrastructure are still needed which are quite expensive to provide optimal service to the community. One example is the renovation of the Information Tower which was recently carried out to speed up and simplify the delivery of data in implementing better e-Administration, e-Citizen, e-Services and e-Society. Therefore, a fairly large budget concentration is needed to improve better Information and Communication programs in the Communication and Informatics Service.

In the context of implementing the Bebung application, the Bekasi Regency Diskominfo allocates a budget in the Regional Revenue and Expenditure Budget (APBD). This budget is used for maintenance, device purchases and application operations. Although the capital contribution from the APBD is still limited, with the central government's increasing attention to the development of public services through grants, social assistance and cooperation with ministries, it is hoped that the capital burden can be further helped.

## **2.3. E-Government Concept**

### **2.3.1. Definition of E-Government**

According to Indrajit, E-Government is the use of information technology that allows the government to change its relationship with society, business and stakeholders. E-Government can also be interpreted as the use of the internet in carrying out government affairs and providing public services that focus on the community. The aim of developing E-Government is to increase the effectiveness and efficiency of public services by using electronic platforms (Muliawaty, 2020). According to Spirakis and Nikolopoulos, E-Government is the use of Information and Communication Technology (ICT) in administering government with the aim of increasing accessibility, effectiveness and government responsibility for public

services to the community (Rahayu, 2019).

Meanwhile, according to Estevez and Janowski, E-Government does not only see improvements in government services. E-Government is defined as the use of technology by the government to change interactions with society with the aim of creating an impact in running government. This impact can take the form of increasing public awareness and involvement in decision making. E-Government is also considered as a tool in achieving sustainable development. Thus, it can be concluded that E-Government is the use of technology as a tool to provide services to the community. E-Government is also expected to be able to realize democratic government, increase community participation, and achieve sustainable development (Rahayu, 2019).

### **2.3.2. Benefits of E-Government**

According to Indrajit, the application of E-Government in a country will certainly bring various benefits, including:

1. Improving the quality of public services to society, business and industry;
2. Improving accountability and transportation in government administration;
3. Reducing costs, communication and interaction in government administration;
4. Creating a new society based on quality information communication (Indrajit, 2007).

### **2.3.3. Variety of E-Government**

Amy YS Rahayu and Vishnu Juwono stated that E-Government can be categorized based on government interactions as follows:

1. *Government to Citizens*

Ganpathy and Kumar (2014) explained that E-Government enables interaction between government and society by providing easy access to government services. The main goal is to facilitate interaction between government and society, as well as providing information and public services easily, cheaply and quickly. Through E-Government, this interaction also aims to reduce

uncertainty and save time, because people do not need to queue at government offices or carry out administrative procedures manually. A concrete example of Government to Citizen interaction through E-Government is the provision of integrated services through the official government website. For example, people can report taxes, register for a business license, or apply for a passport online. This makes it easier for people to access government services without having to come directly to government offices, thereby saving time and energy.

## 2. *Government to Governments*

Wirtz and Daiser (2015) explained that E-Government also involves collaboration between government agencies in exchanging information. This collaboration can include data unification so that public data can be stored and has consistency in every government agency. Through this collaboration, government agencies can exchange information, which in turn reduces costs and increases effectiveness and efficiency by cutting bureaucratic procedures. A concrete example of Government to Governments interaction is the provision of data regarding Indonesian society and conditions by the Central Statistics Agency (BPS). This data is used as a basis for government institutions in making policies. With access to the data provided by BPS, government agencies can make better and more informed decisions in their efforts to carry out their duties and make appropriate policies.

## 3. *Government to Businesses*

Interaction between government and the business sector is an important aspect in E-Government. The government has a role in creating a conducive business environment to ensure the smooth running of the country's economy. On the other hand, the business sector needs information from the government to carry out its business operations, including obtaining permission from the government. E-Government not only helps the government in its administrative functions, but also provides an easier way to interact with external parties, including the business sector. A concrete example of Government to Businesses interaction through E-Government is the implementation of e-procurement which has been carried out by



several local governments. E-procurement helps in the process of procuring goods and services electronically. With this application, it is hoped that the government can be closer to the business sector. Apart from that, the government becomes more transparent because documents are recorded automatically in the online system. This provides benefits for the private sector in obtaining the required information and simplifies the process of collaboration with the government.

#### 4. *Government to Employees*

Interaction between the government as an organization and employees is an important part of E-Government. According to Ganpathy and Kumar (2014), E-Government to Employees has the main objective of providing useful information for policy making, providing employee training, and as an effective way for employees to share knowledge. Mahmood (2013) also revealed that employee training through e-learning services can be a tool to strengthen relations between the government and employees. Apart from that, E-Government can also be used to manage government employee benefits. A concrete example of Government to Employees interaction through E-Government is the e-BKD application owned by the DKI Jakarta Government. This application is used to register employees and determine the amount of allowances given to them. All data can be managed properly through this application, and this data can be used to measure and improve employee performance. With E-Government, administrative processes related to employees become more efficient and transparent.

#### 5. *Government to Other Institutions*

Other stakeholders who also have an important role in E-Government, according to Wirtz and Daiser (2015), are non-governmental organizations (NGOs) and other interest groups in society. This interaction reflects the relationship between government and non-profit organizations and other organizations outside government. The government and the non-profit sector need each other and work together in this context. A concrete example of interaction between Government and Other Institutions through E-Government is the provision of information by the government to non-profit organizations and other organizations outside the

government through interactive websites. The government provides relevant and useful information to these organizations through interactive websites. This allows non-profit organizations and other organizations to gain easy and fast access to the information they need to carry out their activities. Through E-Government, collaboration between government and non-government organizations can be improved and strengthen joint efforts in achieving mutually beneficial goals (Rahayu, 2019).

#### **2.3.4. E-Government Implementation Strategy**

*E-Government* has the aim of increasing the effectiveness and efficiency of services. According to Booz Allen and Hamilton, there are eight strategies in implementing E-Government:

1. Create holistic strategic planning that supports technology development and resource availability. This involves combining strategic planning with detailed field operations.
2. Establish a clear responsibility structure to ensure operations are in accordance with planning. This structure must be adapted to the capabilities and responsibilities of each department. Long-term planning including strategic planning and operations as well as success parameters need to be considered because technology implementation requires other stages and factors.
3. Make comparisons with the implementation of E-Government at the international level. This makes it easier to prepare and adapt plans according to local conditions.
4. Standardization of procedures and application system development. E-Government involves various government departments from various sectors. Standardization is carried out to facilitate interaction and exchange of data between different applications.
5. Prioritize user comfort and convenience. Active community participation is very important in implementing E-Government.

6. Integration and involvement of all employees through training and incentives that are measured based on the success of E-Government implementation. Employee involvement is important because a running system will not provide benefits if employees are not involved.
7. Cooperate with parties such as government and the private sector. Collaboration with various parties is needed in implementing E-Government, especially in the technical field (Indrajit, 2007).

### **2.3.5. Elements of Successful E-Government Implementation**

According to the World Bank, E-Government development consists of four stages: Presence, Interaction, Transaction, and Transformation. The existence stage aims to provide a website that provides basic information needed by the community. The interaction stage aims to provide interaction facilities between the government and the community, with more complete information and communication facilities such as email and downloads. The transaction stage aims to equip the website with public service transaction facilities. Finally, the transformation stage includes improving integrated public services by the government.

*Gartner Research* also has a model "The Value of E-Service" which consists of four stages for developing an E-Government website:

1. The presence stage aims to present a regional website that provides basic information needed by the community.
2. The interaction stage aims to provide interaction facilities between local government and the community. This website displays more varied information, as well as providing communication facilities such as email and file downloads.
3. The transaction stage aims to equip the website with interaction facilities in carrying out public service transactions.
4. The transformation stage is the stage where public services provided by the government increase in an integrated manner (Nugraha, 2018).

These two models show the stages of E-Government development which include

increasing presence, interaction, transactions and transformation in public services.

According to the results of a study by the Harvard JFK School of Government, there are three elements of success in implementing the digitalization concept in the public sector:

1. Support (Support):

- a. *Political willor* political will is a very important element in implementing E-Government in accordance with its principles. E-Government development and development initiatives cannot be implemented without support from public officials. This support starts from top level management, namely government leaders.
- b. Socialization is an important process to introduce the concept of E-Government to various groups, including bureaucrats and society as a whole. This socialization must be carried out continuously (Anwar, 2013).
- c. Continuity relates to the government's consistency in developing better electronic services, making them easier to use (Mandala, 2022).

2. *Capacity*(Capacity)

In the capacity element, there is an element of the local government's ability to realize E-Government. There are three important resource availability for the government:

- a. Availability of Human Resources (HR): Employees play a very important role in implementing E-Government policies. Human resources are needed who have the appropriate competence and expertise so that the implementation of E-Government can run well and provide the expected benefits.
- b. Availability of financial resources or budget: The government needs to allocate sufficient funds to implement E-Government. Adequate financial resources are required for system development, employee training, maintenance of technology infrastructure, and other related activities.
- c. Availability of infrastructure: Information technology infrastructure is also a key factor in the successful implementation of E-Government. The government needs to have adequate infrastructure, such as a reliable

communications network, adequate hardware and software, and guaranteed system security (Rahayu, 2019).

### 3. *Value*(Mark)

Implementing E-Government will not be useful if no party feels the value of its benefits. The party who first feels the value of the benefits of implementing E-Government is the community as service recipients. Therefore, it is important for the government to understand the aspirations and needs of the community, so that the implementation of E-Government can provide the expected benefits. Apart from that, related agencies that provide services will also feel the value of the benefits of the presence of E-Government. Therefore, E-Government should provide benefits for both parties, especially society.

## **2.4. Digitalization of Public Services**

Almost every government today claims to be a digital government because of the success that E-Government programs have achieved. The public sector is even ahead of private industry in terms of digitalization of public services. The potential of digital in public services is very promising because it facilitates direct interaction with the public, increases public trust, and enables the transition from government-centered services to community-centered services. Digitalization in public services also includes the presence of websites which are expected to facilitate interaction and communication between the government and the public, as well as serve as a medium for public information disclosure. One study shows that challenges in implementing digital public services can be overcome by having managerial competence and service competence. Superior service quality reflects the satisfaction of service users, and developing technologies such as artificial intelligence, mobile autonomy and the internet have a major influence on user demands for practical, economical, fast and precise services. Digitalization of public services is a solution to overcome these challenges. In Europe, digitalization has long been considered a key lever in the modernization of public services. In this context, some new elements such as the “one and only” principle (where users

provide certain information only once because the data is shared internally by the public administration office) have formed new steps in digitalization.

In the context of public services, digitalization is no longer just about exchanging information. The goal of digitalization has shifted over time to providing public services. For example, the BEBUNGE application in Bekasi Regency has made services easier for the community. Public services involve activities or a series of activities to meet service needs in accordance with statutory regulations for citizens and residents. Each public service provider institution is tasked with carrying out an action or series of public service actions. Service standards are a reference in providing public services and assessing their quality. Law no. 25 of 2009 concerning Public Services regulates the relationship between the community and public service providers as well as the rights, responsibilities, obligations and authority of related parties. Supervisors and people in charge are tasked with ensuring the smooth implementation of public services. They provide guidance, supervision and evaluation of the implementation of the duties of the person in charge. The person in charge, as head of the secretariat or appointed official, coordinates the implementation of public services, evaluates the implementation of public services, and reports to the supervisor.

#### **2.4.1. Definition of Digitalization**

Digitalization, according to Kumorojati, involves fundamental changes that go beyond simply changing work processes or products to digital. This includes the act or process of digitization that involves converting analog data, such as images, text, and video, into digital form. Meanwhile, according to Brennen and Kreiss, digitalization refers to the adoption or increased use of digital or computer technology by organizations, industries, countries and other entities. In other words, digitalization involves a broader transformation than just changing the form of data from analog to digital. It also includes the wider application and increased use of digital technologies in various organizational, industrial and public sector contexts (S, 2022).

### **2.4.2. Definition of Public Service**

In Law Number 25 of 2009 concerning Public Services, public services are defined as a series of activities aimed at meeting service needs in accordance with statutory regulations for every citizen and resident. These services include goods, services and/or administrative services provided by public service providers. This definition is also strengthened by the Decree of the Minister for Administrative Reform Number 63 of 2003, which states that public services involve government agencies at the central, regional levels, as well as BUMN or BUMD in the form of goods or services, in accordance with statutory regulations. According to several experts, public services are activities carried out by the government for the benefit of many people, provide benefits in a unitary manner, and provide satisfaction even though they are not physically tied to a product. Another definition states that services are activities carried out by individuals, groups or organizations to meet community needs in accordance with established rules. Public services also include meeting community needs in accordance with established rules and procedures. Apart from that, public service also refers to the ability of an organization or government to identify community needs, set service agendas and priorities, and develop public service programs in accordance with community aspirations and needs. Overall, public services are a series of activities that aim to fulfill the basic needs and rights of every citizen regarding goods, services and administration services that are regulated by law. Public services are provided by government agencies at both central and regional levels, as well as involving the private sector, to serve the community.

### **2.4.3. Basic Principles of Public Service**

In the Decree of the Minister for Administrative Reform Number 63 of 2003 concerning the Implementation of Public Services, there are 10 (ten) basic principles related to quality public services, namely:

1. Simplicity, related to service procedures that are not complicated, easy to understand and implement;
2. Clarity, regarding the existence of technical and administrative requirements for public services, work units or authorized officials responsible for providing services and handling problems in the implementation of public services, details of public service costs and clear payment procedures;
3. Time certainty, related to the completion of service implementation within the time period in accordance with the provisions;
4. Accuracy, related to public service products received correctly, appropriately and legally;
5. Security, related to public service processes and products capable of providing a sense of security and legal certainty;
6. Responsibility, the leadership of public service providers is responsible for providing services and resolving various problems in the implementation of public services;
7. Completeness of facilities and infrastructure, including work equipment, especially Telematics (Telecommunications and Information Technology);
8. Ease of access, places and locations that are easy for the public to reach and can utilize ICT;
9. Discipline, politeness and friendliness that service providers must have;
10. Comfort, related to the service environment, must be orderly, orderly, have a waiting room that is comfortable, clean and tidy. As well as providing toilet facilities, places of worship, parking and others.