E-READINE SS DEPARTMENT OF POPULATION AND CIVIL REGISTRATION OF BERAU DISTRICT IN PROVIDING PUBLIC SERVICES THROUGH THE *SI PENYU BERAMAL* APPLICATION

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ABSTRACT
This research is about the E-Readiness of the Berau Regency Population and Civil Registration Service in public services using the *Si Penyu Beramal* application. The research method used is qualitative with a descriptive approach, involving observation, interviews and documentation studies. The results show that electronic readiness is considered sufficient, with several factors influencing it, such as telecommunications infrastructure, connectivity, use of information technology, adequate budget, governing laws, and paradigm changes by employees. The main obstacle is the shift from offline to online systems and the failure to achieve three performance targets. Suggestions include improving infrastructure, human resource training, efficient budget management, and outreach to the community.

Keywords: *E-Readiness, District Population and Civil Registration Service Berau, Public Services Through the Si Penyu Beramal Application*

A. INTRODUCTION

The Berau Regency Population and Civil Registration Service introduced an innovative public service system using technology through an Android-based application called the Android-Based Population Service System for the Batiwakal Community (*Si Penyu Beramal*). This application was developed by the Berau Population and Civil Registration Department, aiming to facilitate the public in accessing population services online. Launched in November 2019, this application replaces manual methods with online services, utilizing digital technology. *Si Penyu Beramal* helps people submit applications and print their population documents more easily.

Before the *Si Penyu Beramal* application, population document services at the Berau Regency Population and Civil Registration Service were still done manually due to the lack of facilities and knowledge about digital services. People must come directly to the *DisdukCAPIL* office or District Office for the service process. However, with digitalization, it is hoped that the *Si Penyu Beramal* application can facilitate public access to population services more effectively and efficiently. Users can download the '*DisdukCAPIL* Berau' application from *the Google Play Store* , register, and immediately use the application to process the required documents. Studies related to customer satisfaction show that public services are often slow and complicated, causing public dissatisfaction with bureaucracy which is considered complicated, inefficient and corrupt.

This research is about *E-Readiness* The Berau Regency Population and Civil Registration Service in providing public services uses the *Si Penyu Beramal* application. The focus of the research is on the department's readiness to provide effective and efficient online-based services. Researchers are interested in analyzing the department's e-Readiness in implementing e-government programs, including telecommunications infrastructure, management of facilities and infrastructure, employee human resource development, budget availability, legal aspects, and employee adaptation to electronic-based systems. From the results of initial observations, there are still problems in the implementation of services, indicating that there are improvements that need to be made to ensure the effectiveness and efficiency of services through the *Si Penyu Beramal* application. namely:

1. The readiness of human resources in the government is still not optimal, as evidenced by user assessments of the *Si Penyu Beramal* application on the Google Play Store. Many users give low ratings (1-4 stars) due to slow response to complaints, lack of support, errors, delays in submissions, and lack of understanding in using the application.

2. Currently, the number of *Si Penyu Beramal* operators is only 5 people. Data shows that the small number of operators affects the completion of population documents . This indicates that the number of existing operators is not enough to meet service needs through this application.

3. Inadequate road infrastructure in Berau Regency, especially with 50% of roads badly damaged, causes accommodation costs for processing population documents to be high.

4. Suboptimal budget availability hampers the operation of *Si Penyu Beramal* application. There was no budget for application creation or development in 2019 and 2020. A new budget was available in 2021 of 35 million, but application development only started that year at the end of the year (ABT).

5. There are still barriers to application use, including lack of user understanding and limited access to smartphones. A guide to using the application is available in it, but some residents do not have smartphones, forcing manual service. This is a challenge for small groups of people who do not have adequate access to technology.

Indrajit's Theory of Readiness Factors identifies six key dimensions crucial for assessing e-readiness: Telecommunication Infrastructure, Level of

Connectivity and Use of IT by the Government, Readiness of Human Resources in the Government, Availability of Funds and Budget, Legal Instruments, and Paradigm Change. However, the application of this theory in practice may reveal discrepancies between these theoretical dimensions and the realities observed in the field. The research proposal titled "E-Readiness of the Population and Civil Registration Service of Berau Regency in Providing Public Services Through *Si Penyu Beramal* Application" aims to investigate these discrepancies. Specifically, the study will explore how well the six dimensions of Indrajit's theory align with the actual conditions and challenges faced by the Population and Civil Registration Service in Berau Regency."

B. LITERATURE REVIEW
E-Government

E-Government refers to the use of information and communication technologies (ICT) to improve the efficiency and effectiveness of public administration and public services. This technology allows the government to provide services online, replacing old manual methods and improving interaction with citizens and the business sector. Some important points about e-Government: Definition and Concept: E-Government is the use of technology such as the internet and computer networks by the government to improve relations with citizens, businesses, and other government agencies (Asmani, 2011; Oktavya, 2015).

This technology can improve government services, interaction with the business sector, citizen empowerment through access to information, and government management (World Bank, 2001). Purpose and Benefits: E-Government aims to make services more efficient, transparent, and accessible. It changes the way the government interacts with the public and improves the quality of services (Indrajit, 2006; Hartono, 2010). This process includes automated procedures that are paper-based, which allows for new leadership styles and better strategies (Rogers, 2006).

Implementation and Strategy: Based on Presidential Instruction No. 3 of 2003, e-Government includes data processing, information, management systems, and electronic performance to ensure easy and cheap access for the public. Overall, e-Government is an effort to utilize ICT in improving the quality of public services, efficiency, and transparency of government administration.

E-Readiness Concept

E-readiness measures the readiness of individuals or countries to utilize information and communication technology (ICT). This concept includes several important aspects:
a) E-Leadership: Government priorities and initiatives in technology.
b) Network Infrastructure: Condition and quality of telecommunications infrastructure.
c) Information Management: Quality and security of data management.
d) Business Environment: Market conditions and regulations that support technology.

e) Society and Human Resources: The spread of technology in society and education.

E-readiness assessment is important for preparing and implementing e-government, assessing readiness from technological, legal, institutional, human resources, and financial aspects. This helps design appropriate policies and identify problems and solutions in implementing e-government.

a. The Role of E-Readiness

E-readiness functions to:

1) Identify opportunities and challenges in implementing e-government.
2) Determine and achieve e-government implementation goals.
3) Increase competitiveness and efficiency of resource use.
4) Assist decision makers in investment and policy planning.
5) Assess progress and overcome obstacles in implementing e-government.

b. E-Readiness Models

Various e-readiness models measure readiness by aspects such as technological infrastructure, ICT use, human capacity, and policy. Examples of models include the UN framework, regional assessment methods, and the STOPE framework, which includes strategy, technology, organization, people, and environment.

c. Public Service

Public service is the provision of goods or services by the government or private sector to meet the needs of the community. The principles of public service include empathy, clarity of procedures, and transparency of costs. The main principles are simplicity, clarity, certainty of time, accuracy, non-discrimination, and responsibility. Elements of good public service include competent employees, adequate facilities and infrastructure, and effective communication.

d. *Si Penyu Beramal* Application

Si Penyu Beramal is an innovative application from the Population and Civil Registration Service of Berau Regency that makes it easier to process population documents via Android-based smartphones. With this application, Berau residents can process various documents such as Family Cards, Electronic ID Cards, Birth Certificates, and others without having to come to the office. How to Operate:

1) Download and install the *DISDUKCAPIL* BERAU application from the Google Play Store.
2) Register an account using your NIK, cellphone number, or email.
3) Submit a request for the required documents.
4) The application provides 14 application menus and a consultation/complaint menu.

C. METHOD

In research on the e-readiness of the Berau Regency Population and Civil Registration Service in providing public services through the Sipenyu Beramal application, researchers used the "Research Study at the Berau Regency Population and Civil Registration Service" design. This research method involves developing an in-depth analysis of a program, activity, or process. Data collection

techniques used include in-depth interviews, observation, documentation and literature study. Data collection was carried out through, firstly, in-depth interviews , researchers went directly to the field to interact with informants to obtain information about e-readiness in the delivery of public services through the Sipenyu Beramal application. Second, observation, researchers directly observe behavior and activities at the research location to get a comprehensive picture of the inhibiting factors and efforts in the e-readiness of the Berau Regency Population and Civil Registration Service. Third, documentation, documentation of office service facilities, public documents, progress reports on the Sipenyu Beramal application, and regional regulations relating to research. Fourth, literature study: Researchers collect data from literature that is relevant to the research problem.

The technique for determining informants uses purposive sampling, where key informants, main informants and supporting informants are selected based on certain considerations related to the research objectives. Key informants have comprehensive knowledge of the problem being studied, main informants have detailed technical knowledge, and supporting informants provide additional information to complement the analysis.

Table 3. 1 Key Informants and Main Informants

NO	INFORMANT	ROLE	AMOUNT
1.	Head of the Civil Registration Division (*CAPIL*) of the Berau Regency Population and Civil Registration Service	Key Informant	One person
2.	Head of Population Administration Information Management (*PIAK*)	Key Informant	One person
3.	Head of Population Registration Services Division (*DAFDUK*)	Main Informant	One person
4.	Head of the Berau Regency Population and Civil Registration Service	Supporting Informant	One person
5.	Secretary of the Population and Civil Registration Service of Berau Regency	Main Informant	One person
6.	The people of Berau Regency as Users of Sipenyu Charity	Supporting Informant	Three people

Research source 2023

Informants are selected based on the principle of subjects who master the problem, have data, and are willing to provide complete and accurate information.

The key informants in this research were the Head of the Civil Registry Division (*CAPIL*) and the Head of the Population Administration Information Management Division (*PIAK*), while the Head of the Population Registration Services Division (*DAFDUK*) was the main informant. Additional informants include the Head of the Service, the Secretary of the Population and Civil Registration Service of Berau Regency, as well as three residents of Berau Regency as users .

This research uses an exploratory qualitative descriptive approach. Data were analyzed in three stages that ran simultaneously: data reduction, data presentation, and drawing conclusions. Data reduction involves simplifying, abstracting, and transforming data, while presenting data using various forms of structured information such as matrices and graphs. Drawing conclusions is part of the data verification process, which takes place throughout the research. Then, data triangulation is used to verify the credibility of the data by collecting information from various sources and techniques. The research was conducted at the Population and Civil Registration Service of Berau Regency, East Kalimantan, from May to August.

D. DISCUSSION

In this chapter, the researcher will explain the results of research that the researcher has previously conducted regarding *E-Readine s of* the Population and Civil Registration Service of Berau Regency in Providing Public Services Through *Si Penyu Beramal* Application . The object of this research is the Population and Civil Registration Service of Berau Regency which is located at Jl. APT. Pranoto, Karang Ambun, Tanjung Redeb District, Berau Regency, East Kalimantan. The Berau Regency Population and Civil Registration Service is a government agency at the district level which is responsible for population and civil registration affairs in the Berau Regency area. As part of the district government, this Department has an important role in managing population data and the civil registration process for residents living in Berau Regency.

This research will analyze how the Population Service's E-Readiness applies in implementing E-Government to provide public services through the *Si Penyu Beramal* application. In this research, the researcher discusses an issue that is closely related to public administration, namely population administration and civil registration by the Berau Regency Government , especially the Berau Regency Population and Civil Registration Service in the form of a service program through *Si Penyu Beramal*.

The researcher presented findings in the field when conducting research on parties who were informants, especially parties involved in the E-Readiness of the Population and Civil Registration Service of Berau Regency in providing public services through the *Si Penyu Beramal* application based on the theoretical basis used by the researcher, namely as stated in proposed by Indrajit using 6 (six) aspects that determine the government's readiness in implementing E-Government, apart from that the researcher also found one other aspect as a research finding related to the topic of discussion which will be explained as follows:
1. Telecommunication infrastructure

2. Level of connectivity and use of IT by government
3. Readiness of human resources in government
4. Availability of funds and budget
5. Legal tools
6. A paradigm shift .

Telecommunications Infrastructure

Telecommunications infrastructure is the foundation for telecommunications, internet, and broadcasting services, supporting long-distance communications. The importance of this infrastructure in E-Government lies in the demand for accurate information and technological advances. Previous research highlighted the E-Readiness of the Berau Regency Population and Civil Registration Service, the focus was on the availability of telecommunications infrastructure to support the implementation of E-Government. For further details, see the explanation below.

Quantity of Available Telecommunications Infrastructure

In preparation for implementing E-Government programs in government agencies, it is important to ensure adequate telecommunications infrastructure. The quantity and quality of this infrastructure influences the effectiveness and efficiency of the institution. The results of the interview show that the telecommunications infrastructure at the Berau Regency Population and Civil Registration Service consists of hardware infrastructure and an internet network. Electronic devices, such as computers, laptops and netbooks, are provided to support the E-Government program. The availability of these devices is considered sufficient to meet service needs. Other facilities, such as printers and scanners, are also provided to increase efficiency in service. Confirmation from related parties shows that the existing telecommunications infrastructure is adequate to support population and civil registration services through the *Si Penyu Beramal* application.

Quality of Available Telecommunication Infrastructure

Telecommunication infrastructure must not only pay attention to quantity, but also quality. Adequate quality telecommunications infrastructure is very important in providing population and civil registration services through the *Si Penyu Beramal* application. The results of interviews with related parties show that the telecommunications infrastructure used meets the required quality standards. Apart from that, hardware such as printers and scanners are also considered to be of good quality to support administrative activities. It is also important to evaluate the quality of other facilities and infrastructure, such as internet connections. Based on the interview results, the available internet speed is considered adequate to support the work needs of each section without experiencing obstacles.

However, based on the results of interviews with the Head and Secretary of the Berau Regency Population and Civil Registration Service, it was stated that the network infrastructure in the office was good, but there were still network infrastructure obstacles that were not adequate in Berau Regency. Of the 13 sub-districts, only 3 city sub-districts are well covered by the network. The following is regional data and network conditions in the Berau Regency area.

Table 4. 1 Network Distribution Data in Berau Regency

NO	SUBDISTRICT	AREA	NETWORK
1	Tabalar	6 Villages	4 Blank Spot Villages
2	Biatan	8 Villages	5 Blank Spot Villages
3	Talisayan	10 Villages	1 Blank Spot Village
4	White Rock	7 Villages	3 Blank Spot Villages
5	Big Dipper – Big Dipper	6 Villages	1 Blank Spot Village
6	Maratua	4 Villages	1 Blank Spot Village
7	Derawan Island	5 Villages	2 Blank Spot Villages
8	Bayur Bay	4 Villages, 2 Subdistricts	Network Covered
9	Sambaliung	12 Villages, 1 Subdistrict	Network Covered
10	Mount Tabur	10 Villages, 1 Subdistrict	3 Blank Spot Villages
11	Satiated	13 Villages	6 Blank Spot Villages
12	Kelay	14 Villages	12 Blank Spot Villages
13	Cape Redeb	6 Subdistricts	Network Covered

Source: Diskominfo Regency and Berau 2023

Based on this table, several areas in Berau Regency, such as Tanjung Redeb, Sambaliung, and Teluk Bayur Districts, have good network infrastructure. However, 10 other sub-districts still have several blank spots in their network. Through triangulation of techniques and sources, perspectives from various officials at the Berau Regency Population and Civil Registration Service show that the quality of the hardware and internet network for population and civil registration services through the *Si Penyu Beramal* application has met good standards. However, there are still blank network spots in 10 other sub-districts. In the implementation of E-Government, hardware and telecommunications infrastructure play an important role. The infrastructure available at the Population and Civil Registration Service of Berau Regency is sufficient to support the E-Government program, although it needs improvement both in terms of quantity and quality to ensure the effectiveness and efficiency of population and civil registration services .

Level of Connectivity and Use of IT by the Government

The level of connectivity and use of information technology by the government is an important strategy in optimizing and maintaining technological infrastructure to support the government's daily routine tasks in implementing the E-Government program. Utilization and maintenance of this infrastructure is important to achieve effectiveness and efficiency in the implementation of E-Government. These technological facilities and infrastructure are key instruments in the implementation of E-Government, which have a direct influence on the quality of public services provided by government institutions to the community.

This research discusses the level of E-Readiness of the Berau Regency Population and Civil Registration Service in using and maintaining available technological facilities and infrastructure. The research objectives also include assessing financial or hardware assistance from other parties. Analysis of the use of these facilities and infrastructure is carried out to evaluate the extent to which

they are utilized optimally. The success in utilizing this infrastructure has a direct impact on improving services to the community in the field of population and civil registration, including access to public information that is available at any time and online services that can be accessed from various locations and at any time.

Funding and Hardware Assistance from Other Parties

In implementing the E-Government program, there is often collaboration with various parties to provide assistance both financially and in providing facilities and infrastructure. However, not all government institutions receive such assistance because financial and infrastructure needs are usually met from the government institution's own internal funding sources.

In this research, the Berau Regency Population and Civil Registration Service did not receive financial or hardware assistance from other parties for the provision of public services through the *Si Penyu Beramal* application. All financial support and infrastructure comes from the Regional Revenue and Expenditure Budget (*APBD*) of Berau Regency. The results of technical triangulation confirmed that there was no financial assistance or provision of facilities and infrastructure from other parties. From a financial perspective, this shows how important adequate financial resources are in implementing E-Government programs.

Utilization and Maintenance of Facilities and Infrastructure by Employees

The results of interviews with the Head of the Civil Registry Division (*CAPIL*), the Head of the Population Administration Information Management Division (*PIAK*), the Head of the Population Registration Services Division (*DAFDUK*), as well as the Head and Secretary of the Population and Civil Registration Service of Berau Regency, revealed that the Department uses the facilities and infrastructure, including hardware and software, to carry out population and civil registration services through the *Si Penyu Beramal* application. These facilities include six computers, two laptops, two netbooks, one printer, one scanner and internet service. Each computer is equipped with the Windows 10 operating system, Microsoft Office, Adobe Photoshop, and several other necessary applications. Antivirus is also installed to protect the hardware from viruses.

Officials stated that the hardware was used for various service-related activities through the *Si Penyu Beramal* application, including inputting user data, processing data, and use as a server. They stated that these facilities and infrastructure had been utilized optimally and well maintained by employees.

The results of the technical triangulation analysis show that the Berau Regency Population and Civil Registration Service has succeeded in utilizing and maintaining telecommunications infrastructure well. They have used the available facilities and infrastructure optimally to provide population and civil registration services through the *Si Penyu Beramal* application, in accordance with Indrajit's view which states that the readiness of an institution to implement the E-Government concept can be seen from the extent to which they utilize information technology in their routine daily.

Human Resources Readiness in Government

Human resources (HR) are a vital element in a government agency, playing an important role in achieving common goals. The success of a government agency depends greatly on the abilities and skills of its employees. Focusing on HR knowledge and skills will determine individual success in carrying out their duties. In the context of the E-Government program, support for employees who are professional, have high performance, adequate abilities, adequate training and quality skills is very necessary. Even though government agencies are equipped with adequate facilities and financial resources, without the support of quality human resources, the responsibilities of these government agencies will not be fulfilled properly.

Therefore, it is important to pay special attention to issues related to human resources in a government agency so that it can continue to adapt to increasingly advanced technological developments. In implementing the E-Government program, every government agency must apply the principles of good governance and provide support to employees to improve their quality in mastering information and communication technology so that they are not left behind. The implementation of the E-Government program also encourages employees to improve their quality, so that a close relationship between the implementation of the E-Government program and the quality and performance of employees in government agencies is very important. In the context of the Berau Regency Population and Civil Registration Service, the research will highlight the readiness of human resources in providing population and civil registration services through the *Si Penyu Beramal* application, to understand the extent to which employees are ready to face the demands of information technology in carrying out their duties.

Employee Quality in Providing Public Services Through the *Si Penyu Beramal* Application

Human resources (HR) play an important role in implementing E-Government programs, especially in managing online service systems. The quality of human resources determines the success of the program. The Department of Population and Civil Registration of Berau Regency needs to ensure the quality of its human resources to increase the efficiency of public services through the *Si Penyu Beramal* application. The results of the interview show that the readiness of human resources in the Department is still not optimal, as reflected in the assessment of application users who give low ratings on the Google Play Store. The main reasons include slow response to complaints, errors in submissions, and users' difficulty in understanding the application.

One of the causes of less than optimal quality of human resources is the heavy workload, especially for online operators who do not receive rewards. Along with population growth, the workload is increasing, including managing *Si Penyu Beramal* application which operates 24/7. To overcome this problem, the Berau Regency Population and Civil Registration Service has implemented strategies, such as holding training twice a year to increase HR competency in information technology. Apart from that, they also carry out regular outreach about new features in the application. However, the quality of human resources

still needs to be improved. Increasing HR capabilities is the key in developing information technology-based services, in line with Ardipandanto's view which emphasizes the need to increase HR capabilities for system use and mastery of ICT security systems.

Quantity of Employees in Providing Public Services Through the *Si Penyu Beramal* Application

The quantity of employees in providing public services through the E-Government program is a crucial factor that influences the effectiveness and efficiency of government agencies. In this case, the Population and Civil Registration Service of Berau Regency stated that the number of employees involved in implementing *Si Penyu Beramal* program was sufficient. However, technical triangulation evaluation from several sources shows that the readiness of human resources (HR) in the Department is still not optimal. This is reflected in slow responses to complaints, lack of adequate support, as well as errors and delays in service requests. Some users also have not yet mastered the use of the application, as reflected in the low rating of *Si Penyu Beramal* application on the Google Play Store.

Another factor that plays a role is the heavy workload for some online operators, who are not always rewarded. This shows that the balance between number of employees and workload still needs to be further evaluated. Thus, even though the quantity of employees is sufficient, the quality and readiness of human resources in providing public services through the *Si Penyu Beramal* application still needs to be improved in order to reach the optimal level in implementing the E-Government program .

Availability of Funds and Budget

The availability of funds and budget is a crucial element in implementing the E-Government program, because it ensures that the program can be carried out effectively. Development of technological infrastructure, procurement of hardware, and preparation of human resources require quite large funding allocations. A thorough evaluation of the readiness of funds and budgets needs to be carried out to ensure their effective use, including consideration of funding sources such as the *APBD* or *Bankeu* from the provincial government .

In the context of the Berau Regency Population and Civil Registration Service, the results of previous research regarding the readiness of funds or budget for implementing the *Si Penyu Beramal* application need to be taken into account. Further explanation of aspects of funding and budget availability in this context will be presented in the next sub-chapter.

Availability of Funds for Providing Public Services Through the *Si Penyu Beramal* Application

Activities carried out by government agencies with the aim of providing public services must be fully supported by adequate financial support. Usually, these costs in local government bodies are funded through funds that have been regulated in budget planning according to needs. In the context of providing population and civil registration services through the *Si Penyu Beramal* application, the source of funds for these services comes from the Regional Revenue and Expenditure Budget (*APBD*) of Berau Regency. According to the

results of interviews with the Head of the Civil Registry Division (*CAPIL*), the Head of the Population Administration Information Management Division (*PIAK*), the Head of the Population Registration Services Division (*DAFDUK*), as well as the Head and Secretary of the Berau Regency Population and Civil Registration Service, it was stated that in 2019 and 2020 there were no budget for application creation and application development . The available budget in 2021 is around 35 million for application development. There was also no time to budget for application development in 2020 because it was already the end of the year. Thus, the development of new applications is budgeted for 2021 with a pure budget .

Based on technical triangulation that has been carried out from several informants and based on source triangulation from several data obtained by researchers, it can be assessed that the budgeted funds for the development of the *Si Penyu Beramal* application are budgeted for 2021 with a pure budget .

The available budget is in accordance with the needs of providing public services through *Si Penyu Beramal* application

Budget calculations in implementing the E-Government concept through *Si Penyu Beramal* application must be carried out carefully, taking into account needs at the planning, development and system maintenance stages. First, the planning budget is directed at purchasing expert services for application creation, as well as telecommunications infrastructure. Second, the development budget is allocated for application development according to user needs. Lastly, the maintenance budget aims to maintain telecommunications infrastructure so that it can operate optimally. In this case, the budget allocation for 2019 and 2020 does not take into account the creation or development of *Si Penyu Beramal* application. The new budget allocated in 2021 is around 35 million for application development. However, this became an obstacle in operating the application due to the lack of previously available funds. Therefore, a more comprehensive evaluation is needed to ensure the availability of sufficient funds and budget for all stages of the program. Apart from that, aspects of legal instruments are also very important in the implementation of E-Government, especially regarding the protection of personal data and public financial security. The presence of clear and enforced regulations can increase public trust in E-Government programs. Therefore, an in-depth analysis of the readiness of applicable regulations needs to be carried out to ensure compliance in implementing this program.

Availability of Legal Instruments that are the Basis for the Implementation of Public Services

The availability of a legal framework in implementing E-Government programs has a significant impact because it can provide official guidance and legal protection to all parties involved. Several regulations that are relevant to the implementation of E-Government, especially regarding population and civil registration services through the *Si Penyu Beramal* application, include:

1. Instruction of the President of the Republic of Indonesia Number 3 of 2003 concerning National Policy and Strategy for E-Government Development: This is the main basis for developing E-Government in Indonesia, emphasizing the

integration of electronic information management systems to build a transparent public service system.

2. Law No. 24 of 2013 concerning Population Administration: Regulates population administration in Indonesia, including the implementation of an electronic-based population system to increase efficiency and accuracy of data.

3. Minister of Home Affairs Regulation Number 7 of 2019 concerning Online Population Administration Services:** Establishes guidelines for implementing online population administration services to facilitate public access.

4. Berau Regency Regional Regulation Number 61 of 2016 concerning the Organizational Structure and Work Procedures of the Berau Regency Population and Civil Registration Service:** Regulates the organizational structure and work procedures of the Berau Regency Population and Civil Registration Service, including its duties and authority regarding population administration.

5. Decree Number 65 of 2020 concerning Innovation in Population Administration Services at the Population and Civil Registration Service of Berau Regency:

6. Establish policies and innovative steps to improve the efficiency and quality of population administration services in Berau Regency.

The presence of this legal instrument is very important because it provides legal guarantees to the public regarding the security of personal data and provides guidance for the implementation of population administration services through the *Si Penyu Beramal* application. This is in line with Iswandari's view which emphasizes the importance of legal guarantees to build trust in digital-based bureaucratic reform. With the existence of regulations governing the implementation of online population administration services, as regulated in Minister of Home Affairs Regulation Number 7 of 2019 and Berau Regency Regional Regulation Number 61 of 2016, it is hoped that it can increase public trust in the E-Government program.

Socialization of Legal Instruments

Socialization of legal instruments governing the implementation of population and civil registration services through the *Si Penyu Beramal* application is an important step for government agencies and the community as service users. This has two aspects that need to be considered:

1. Employees are Aware of the Existence of Legal Instruments: It is important for government employees tasked with managing E-Government services to understand the regulations that govern their duties and responsibilities. In this way, they can carry out their duties in accordance with the standards set out in the regulations. Through interviews with employees of the Berau Regency Population and Civil Registration Service, researchers found that they had a good understanding of the regulations related to population and civil registration services using the *Si Penyu Beramal* application. This shows that socialization of legal instruments has been successful.

2. The public is aware of the existence of legal instruments: Equally important, the public as service users also need to understand the regulations that govern the services they receive. This knowledge will help people better understand

how to use these services and protect them from irresponsible parties who can make illegal charges. However, the results of interviews with the community show that their understanding of legal instruments related to population and civil registration services through the *Si Penyu Beramal* application is still lacking. This shows the need for further outreach efforts to the community.

By referring to Indrajit's views on the importance of the government having a legal framework that supports the effective implementation of E-Government, it can be concluded that aspects of legal instruments have been fulfilled well in the context of population services and civil registration through the *Si Penyu Beramal* application. However, further efforts are needed to disseminate these regulations to the public to ensure better compliance with the regulations.

A paradigm shift

The paradigm shift in the delivery of government services from the traditional model to E-Government, driven by the development of information technology and the internet, plays a key role in increasing the effectiveness and efficiency of public services. The bureaucratic paradigm that focuses on internal routines and authority is shifting to a paradigm that is more open, coordinated and oriented towards community service.

1. Paradigm Change in the Government Environment:
a. Transformation Towards E-Government: The development of information technology has encouraged a paradigm transformation in government from traditional bureaucracy to E-Government. The focus shifts from internal routines to building coordinated networks and community services.
b. Management Restructuring and Paradigm Change: E-Government requires restructuring the management system and changing the paradigm to a more modern direction by optimally utilizing information technology.
c. Awareness and Commitment to Change: This transformation requires awareness and strong commitment from government leaders and employees to change ways of working, attitudes, behavior and daily habits.
2. Berau Regency Population and Civil Registration Service E-Readiness:
a. Employee Paradigm Transformation: The adoption of public services through the *Si Penyu Beramal* application has significantly changed the way Berau Regency Population and Civil Registration Service employees work, although initially they experienced difficulties in accepting the change.
b. Adaptation from Offline to Online: The process of adapting employees from offline to online service systems takes time, however, research results show that employees are able to adapt well after several months.
c. Community View: Socialization to the community regarding the implementation of population and civil registration services through the *Si Penyu Beramal* application has been successful, but there are still obstacles related to understanding and accessing technology.
3. Suggestions for Improving Public Services:
a. Infrastructure Improvement: The community provides suggestions for improving road infrastructure and telecommunications networks to increase accessibility to population administration services through the *Si Penyu Beramal* application.

b. Community Participation: Involving views and input from the community in the implementation of public services to ensure that services meet community needs and satisfaction.

c. Sustainable Innovation: Continue to innovate and improve the delivery of online public services to increase public trust and satisfaction with the government.

By paying attention to the views of employees and the community and continuing to carry out evaluations and improvements, the Berau Regency Population and Civil Registration Service can continue to improve the effectiveness and efficiency of population and civil registration services through the *Si Penyu Beramal* application to better meet the needs of the community.

E. CONCLUSION

Based on the research results explained by the researcher in the previous section, it can be concluded that the Berau Regency Population and Civil Registration Service has reached readiness to implement public services through the *Si Penyu Beramal* application. This is due to the fulfillment of several determining factors that are relevant to the readiness to implement *E-Government* by the Population and Civil Registration Service of Berau Regency. There are five factors that have been fulfilled and one factor that has not been fulfilled related to factors that influence the E-Government readiness of the Berau Regency Population and Civil Registration Service. The five factors that have been met include telecommunications infrastructure, level of connectivity and use of IT by the government, budget availability and allocation, legal instruments, as well as changes in paradigm and community views.

This readiness can be observed from the availability of adequate facilities and infrastructure, in accordance with existing needs. These facilities and infrastructure have been used and maintained well by the employees. Apart from that, there are also legal instruments that regulate the implementation of online public services. Employees also show awareness and desire to adapt to change, and the public feels positive benefits from public services through the *Si Penyu Beramal* application.

However, of all the three factors that are problems, the first factor is telecommunications infrastructure and road infrastructure in Berau Regency, there are 10 sub-districts that still experience blank spots. Second, human resource factors , slow response to complaints or lack of adequate support, errors and delays in submissions, and some users not understanding how to use the application, the cause of the problem is that the quality of human resources is not yet optimal, one of which is because online operators do not get rewards, considering the workload. The work is quite hard, along with the increase in population until September 2023 there will be 3500 new residents in Berau Regency. The third factor, budget availability in 2019 and 2020, there is no budget for application creation or application development. The available budget in 2021 is around 35 million for application development. There was also no time to budget for application development in 2020 because it was already the end of

the year. Thus, the development of new applications is budgeted for 2021 with a pure budget.

Overall, after reviewing the results of the discussion regarding relevant factors and considering the community's views on the implementation of public services through the *Si Penyu Beramal* application, the researchers concluded that the Berau Regency Population and Civil Registration Service was ready to implement these services. This means that they can provide effective and efficient services to people who use the *Si Penyu Beramal* application.

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