# The Effectiveness of Digital-Based Service Innovation in The Personnel And Human Resources Development **Agency Of Ciamis District**

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#### Abstract.

As an institution responsible for government affairs in the field of personnel, the Ciamis Regency Personnel and Human Resources Development Agency realizes the importance of digitalization in services. There are obstacles in maintaining and integrating the digital service system even though the Apparatus Competency Development Information System in Ciamis with the provincial central agency, which indicates challenges in keeping the system operating optimally. Although digital service innovation has succeeded in increasing the efficiency of personnel services, challenges in implementation and integration still need to be overcome to ensure services can be provided optimally. Therefore, the Ciamis Regency Personnel and Human Resources Development Agency has launched several digital service innovations for employees in the Ciamis Regency work environment. This research uses a qualitative descriptive approach by collecting data through observation, interviews and documentation. This research aims to describe various digital service innovations available at the Ciamis Regency Personnel and Human Resources Development Agency. Digital services at the Civil Service and Human Resources Development Agency of Ciamis Regency are running effectively, even though the Information System for Apparatus Competency Development in Ciamis is currently in the maintenance phase due to integration with the provincial central agency. Focus on digital service innovation supports good governance. Collaboration between the Ciamis Regency Government and the Personnel and Human Resources Development Agency has produced digital service innovations that increase the efficiency of personnel services, but implementation and integrity challenges still need to be overcome to ensure optimal service provision.

**Keywords:** Innovation, Technology, Digital Services, Human Resources.

### INTRODUCTION

The era of globalization and Industrial Revolution 5.0 brought significant changes in various aspects of life, including in the field of employment and human resource development (Heri et al., 2021). Revolution 5.0 combines technological sophistication with humanitarian aspects, creating an ecosystem where humans and technology work side by side to achieve higher efficiency and innovation (Tangkas Ageng Nugroho et al., 2023). In this context, Ciamis Regency must adapt and respond to rapidly changing global dynamics, by emphasizing the importance of holistic and sustainable human resource development.

In this era, personnel management does not only focus on improving technical skills, but also on developing soft skills such as creativity, empathy and the ability to collaborate. Technologies such as artificial intelligence (AI), Internet of Things (IoT), and big data are important tools in supporting this process (Efendi, 2018). Ciamis Regency, through various programs and policies, seeks to increase the competency and productivity of the State Civil Apparatus by utilizing digital technology and a humanist approach.

The human resource development strategy in Ciamis Regency includes meritocracy-based recruitment, continuous training in accordance with the needs of the digital era, as well as transparent and accountable performance evaluation. Within the framework of Revolution 5.0, Ciamis Regency is committed to creating adaptive, innovative and highly competitive human resources, to support sustainable and inclusive regional development (Wilianto & Kurniawan, 2018).

The government has accelerated digital transformation in public services through a number of priority applications that are integrated with existing services, aimed at increasing public accessibility to public services. Innovation in public services through digital technology has become the main focus for many local government institutions, enabling fast and efficient communication and collaboration without being limited by space and time. Digital services include various platforms such as online services, mobile applications, and websites that enable people to access information, submit applications, and carry out transactions electronically. Digital services have many advantages, including

reducing costs and time required in the service process.

Opportunities for further innovation in public services are provided by the government. Initially carried out face to face, bureaucratic services were forced to change by optimizing technology-based public services. Apart from facilitating community interaction, bureaucracy can optimize the use of information and communication technology in carrying out government duties and encourage accountability and openness of public services (Sukarno, Ginting, Ichwanusafa, Qamara, & Rochmani. 2021). One strategy for realizing transparent and accountable services which is the basis of the Good Governance paradigm is service innovation through the use of technology. Therefore, public service providers have an obligation to continue to innovate. However, using this online system to meet various goals requires the ability to keep up with the latest technological advances (Sutisna, 2022). The Ciamis Regency Personnel and Human Resources Development Agency, an organization in charge of government activities related to personnel, understands the importance of digitizing services. In order to provide better services to workers in Ciamis Regency workplaces, the Personnel and Human Resources Development Agency has made a number of digital service improvements.

Previous research shows that digitizing services can increase efficiency and transparency. Hendy Setiawan's research (2021) evaluated the effectiveness of public service innovations for Siaga Village Bereaved Families at the Population and Civil Registration Service of Slemen Regency, Special Region of Yogyakarta, proven to be effective based on the aspects of relative advantage, compatibility, complexity, triability and observability. Meanwhile, research conducted by Mutiara Anjani (2019) shows that the management of personnel records at the Central Java representative Audit Agency Office is running well. This is reflected in the existence of index search facilities and a list of required archives. Therefore, it can be concluded that this research evaluates the effectiveness of managing personnel records in the office as adequate.

This research aims to comprehensively describe various digital service innovations that have been implemented by the Civil Service and Human Resources Development Agency of Ciamis Regency, with the hope of making a significant contribution in increasing the effectiveness and efficiency of public services in the era of the Industrial Revolution 5.0.

### LITERATURE REVIEW

### **Understanding Effectiveness and Innovation**

Effectiveness is generally defined as the process of achieving predetermined goals, meaning that a company or activity has succeeded in achieving its goals. One aspect of productivity is which is the direction of maximum work effectiveness. achievement, namely achieving time, quantity, and quality targets (Cornelis, 2021: Triyadin & Yusuf, 2021). The extent to which people perform tasks as expected and how well they do it is called effectiveness. This means that a task is said to be effective if it can be completed according to the plan in terms of costs, time and modules (Ravianto 2014:11). Effectiveness, in Prasetyo Budi Saksono's words, is the extent to which the output produced by an organization or individual is very similar to the expected results based on the quantity of input used. Based on the various views of the experts above, it can be concluded that one aspect of productivity is effectiveness, namely the process of achieving goals in a business or activity. It involves achieving goals related to time, quantity, and quality. Effectiveness also refers to the extent to which the results obtained and the inputs used are appropriate, as well as how well a task is completed producing anticipated outputs.

Then, According to Kasmir (2017:47), service is defined as efforts made by individuals or organizations to ensure client or coworker satisfaction. According to another expert's point of view, providing services to clients involves a series of crucial actions, interactions and activities, all of which are intended to generate profits (Mindarti 2016:2)

### **Understanding Digital Technology**

A digital representation of a number state is a representation that uses binary integers, such as 0 and 1, to represent on and off. The word "digital" comes from the Greek word "digititus" which means fingertip. Adults have ten fingers, if we count ten. There are two radixes that form the values 10:1 and 0. Digital data-based

systems are used by all computer systems. Otherwise known as bits (binary digits). Digital technology is the processing, storage and transmission of information through the use of electronics and computers.

Digital technologies are separated into three categories, according to Rippa and Secundo (2018): digital artifacts, digital platforms, and digital infrastructure. Digital applications, content media, and other elements that are incorporated into new products (or services) and provide functionality or value to users are referred to as digital artifacts. Information technology that places computer or digital tasks above human work is known as digital technology (Danuri 2019:119).

### RESEARCH METHODS

This research uses a descriptive method with a qualitative approach. This descriptive research aims to describe and understand the phenomenon being studied in depth and detail. The data collected is in the form of words, and images, and not numbers or statistics. Data collection methods in this approach include interviews, observations, field notes, photos, videos, personal documentation, and other notes. The descriptive qualitative approach focuses on providing a comprehensive description of a particular situation or event so that researchers can understand the context and meaning behind the data (Moleong 2005:4).

This research aims to describe various digital service innovations available at the Ciamis Regency Personnel and Human Resources Development Agency. The data sources used in this research come from primary and secondary data sources obtained through direct observation and interviews with informants, so they can provide a significant contribution to this research. informants in this research are part of the human resources analysis of young expert apparatus and information system analysis at the Civil Service and Human Resources Development Agency of Ciamis Regency. Informants were chosen because their roles and knowledge are relevant to the digital service innovation being studied, so they can make a significant contribution to this research

### RESULTS AND DISCUSSIONS

Staffing and human resource development in Ciamis Regency is a crucial aspect in improving the performance and quality of public services. The personnel structure in this district consists of various departments and agencies, each of which is responsible for a particular field, with personnel management including the process of recruitment, selection, placement, development and employee performance evaluation to ensure employees work optimally according to their competencies. The recruitment and selection process is carried out transparently and objectively through a series of tests to obtain quality employees. Competency development is carried out through technical, managerial and formal education training programs, both organized by regional governments and through collaboration with other institutions. The Ciamis Regency Government also pays special attention to employee motivation and welfare by providing incentives, performance allowances and other facilities, as well as creating a conducive work environment to support productivity and iob satisfaction.

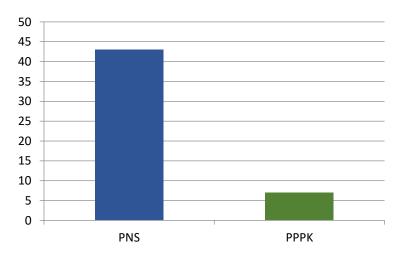
Performance evaluation is carried out periodically using an Employee Performance Assessment System based on Key Performance Indicators and job competency standards, the results of which are used as a basis for providing rewards and punishments as well as employee career development. However, challenges such as budget limitations, dynamic policy changes, and the need for more advanced information technology still exist, government continues to make improvements such as optimizing the budget, increasing cooperation, and developing an integrated system. With this personnel information systematic comprehensive effort, it is hoped that quality human resources will be created that are able to provide optimal services to the supporting sustainable and community, equitable regional development goals, so that personnel management and human resource development in Ciamis Regency continues to develop and achieve the expected results.

Human resources play a very vital role in determining the success of an organization or institution. They are not only an important element in carrying out their duties, but also the driving

force behind improving employee performance aimed at achieving predetermined company goals. Thus, human resources are not only a supporting factor, but also the main key to the company's success and growth. Civil servants are people who are employed under certain conditions by government institutions to government positions to provide public services. The Civil Service and Human Resources Development Agency of Ciamis Regency currently has a total of 50 employees including Civil Servants and Government Employees with Work Agreements. Employee data recorded at the Civil Service and Human Resources Development Agency of Ciamis Regency is as follows.

**Figure 1.** Employee Data from the Personnel and Human Resources Development Agency

## **Ciamis Regency Personnel and Human Resources Development Agency Employee Data** Year 2024



**Source:** Ciamis Regency Personnel and Human Resources Development Agency, (2024).

Based on the results of the data above, it is clear that employees at the Civil Service and Human Resources Development Agency of Ciamis Regency include 43 Civil Servants and 7

Government Employees with Work Agreements. Advances in information technology have entered all aspects of human life, including the government sector (Distel, 2018). With the application of information technology in the government management process, the e-Government concept has become a new trend in the 21st century (Rana et al., 2017). E-Government has a very significant impact on increasing government efficiency and transparency, so it is not surprising that many academic research has shifted its focus to studying this phenomenon in more depth.

Technological innovation, as an effort to create or develop better and more effective solutions to the problems faced by society, has become a major driver in changing the way we live, work and interact. The impact is not only limited to the social sector, but also has a significant impact on a country's economic growth. Technological innovation opens the door to new opportunities, increases efficiency and drives sustainable economic growth.

The role of technological innovation is not only limited to the technical aspects of a product or service, but also leads to the creation of new and better things in everyday life. Being able to overcome problems, replace existing solutions that are considered less efficient and provide better solutions are the main goals of this innovation. Innovation and technology play a crucial role in business development, supporting growth, discovering the unique characteristics of a product or company, and running a business effectively. In the context of national development, the role of technology and innovation cannot be ignored because it can bring positive impacts such as increasing productivity, creating jobs, reducing costs, economic growth and broad social benefits.

Digital service innovation is Indonesia's main focus to improve the quality of public services. In this context, the government is strengthening the principle of "Digital Services" in providing public services, aiming to get closer to the community, provide comfort and encourage people to be more innovative, creative and productive. However, the implementation of digital services in Indonesia also faces various challenges such as infrastructure, public literacy, data integration and data security. To provide quality digital services that all citizens can enjoy, the government must first address this challenge wisely. The

development of digital services must also be supported by the digital literacy competence of the community and the State Civil Service. Only 0.17% of government employees work exclusively in information technology, according to the National Civil Service Agency. The use of digital technology is also increasing in Indonesia, with 175.3 million people (64% of Indonesia's total population) using the internet, the majority using mobile phones.

To improve digital services, the government must also focus on developing digital public services which are increasingly receiving attention in the Joko Widodo government. Digitalization of public services is not just about providing digital tools/devices, but also the business processes that implement these applications, as well as demonstrating the principles of good governance such as transparency, accountability and professionalism of implementing officials. The government also invites regional governments to strengthen digital public services, with successful examples in countries such as the UK, Estonia and Singapore. Overall, Indonesia's digital services still face many challenges, but the efforts made by the government and society to improve the quality of digital public services will help improve people's welfare and make national life smarter.

Improving the quality of personnel services is an important foundation in increasing the efficiency and effectiveness of regional public services. In line with these efforts, the Ciamis Regency Government through the Ciamis Regency Personnel and Human Resources Development Agency introduced innovative overcome various challenges programs in personnel management at the regional government level. This program includes various digital services, including:

Management Information Personnel First. System. Personnel data and processes can be accessed and managed through this web-based tool. The Personnel Information Management System is an integrated information system that utilizes information to technology produce fast, accurate and comprehensive information to support personnel administration (Febrianti et al., 2024). Includes employee data collection, procedures, work procedures, and human resources data processing. The Personnel Management Information System contains information regarding

employee profile data, daily performance journals, performance allowances, absenteeism, leave management, permits, external service, automatic promotion, dossier and others (Sadat, 2019). The advantages of this application include a secure and responsive web platform, allowing access from anywhere via the internet (Widiyanti et al., 2021). Equipped with logging features, convertable reports, as well as data search and sorting capabilities. Supports responsive displays for mobile devices and provides mobile employee-self service features for employee access.

The Personnel Management Information System program which is accessed via the website provides great benefits for workers in the Ciamis Regency area. This is especially the case with the Ciamis Regency Personnel and Human Resources Development Agency utilizing the Personnel Management Information System not only in handling personnel data more effectively but also in carrying out general personnel administration responsibilities with increased efficiency and responsiveness (Yahya, 2017).

Second, E-Presence. To make it easier for employees to carry out daily attendance, e-Presence is a web-based online application for an employee attendance information system (Gunawan et al., 2023). This program functions as a system that collects fingerprint machine attendance data produce comprehensive, accurate and reliable attendance data (Ahmadi et al., 2023). Apart from tracking the presence of State Civil Servants, e-Presence is also used to calculate additional employee income or technology pay bonuses received by State Civil Servants (Haq, 2017). Computers, laptops and smartphones are among the electronic devices that can access e-Presence. Employees of the Personnel and Human Resources Development Agency will find it easier to carry out daily attendance with accurate and reliable attendance data with the help of e-presence (Setiva Putra & Adhim, 2022).

Third, E-Leave. E-Leave is a leave application system that is used electronically, which allows employees to submit leave requests via the organization's website (Siswopranoto & Saputri,

2023). E-Leave has many benefits, such as simplifying the leave application process, speeding up the application process, and making it easier to monitor the status of leave applications (Agusniar et al., 2023). Apart from that, e-Leave also makes it easier to ensure that employees who apply for leave have selected all the requirements, making it easier to ensure that the leave given is in accordance with company regulations and government regulations (Muzakkir & Herlambang, 2022).

Employees in Ciamis Regency can quickly and easily apply for leave using this electronic leave system, so there is no need to provide documents to supervisors. In addition, electronic leave can make it easier to verify that workers requesting leave have met the specified requirements, thereby ensuring that the leave is valid in accordance with laws and regulations (Purnomo et al., 2020).

Fourth, E-Performance. The e-Kinerja application is a website-based sharing platform developed by the State Civil Service Agency (Polnaya, 2023). The main features include integration with the State Civil Service Information System application, use of the State Civil Service System from the State Civil Service Agency, and use of data structures and reference tables according to the standard standards of the State Civil Service Agency. With this website-based application, regional officials in Ciamis Regency, especially the Personnel and Human Resources Development Agency, can manage the performance of State Civil Service employees from preparing to evaluating Employee Performance Targets more easily, effectively, efficiently and accountably (Jeon, 2021).

Fifth, Dynamic. The Dynamic Information System is an online application for digital personnel documents that allows users to apply for personnel services and store their personnel data safely in a document data bank (Iksaningtyas & Rukiyah, 2018). The zero paper or final paper program is one of the government initiatives that this application wants to support. In the Ciamis Regency work environment, the Dynamic Application manages pension and promotion applications for Civil Servants and Government Employees with Work Agreements (Prasetyo & Husna, 2021). The Dismissal Procurement and Personnel Information Section of the Ciamis Regency Personnel and Human Resources Development Agency created this dynamic application (Suprapto & Prehanto, 2020). However, apart from that, a number of factors caused the dynamic application storage server, which was first located at the Ciamis Regency Personnel and Human Resources Development Agency, to be moved to the Ciamis Regency Communication and Information Service.

Sixth, Si-Bangpeci. Information System for Apparatus Competency Development in Ciamis, with the help of this system the coordination process for analyzing competency development needs becomes easier. (Raffliansyah, 2018). Through a single point of contact in the government environment, this technology can also be used to develop the competence of the State Civil Service. The provision of equipment in Ciamis Regency will benefit greatly from the existence of an information system to increase apparatus competency (RLPPD-Kab\_Ciamis-2023.). The service website above is closely related to the digital service innovation offered by the Ciamis Regency Personnel and Human Resources Development Agency, especially the Personnel Management Information System which is integrated with other services. The main basis for managing personnel data is the Personnel Management Information System.

E-Presence can be connected to the Personnel Management Information System to receive comprehensive time and attendance data, as well as retrieve employee time and attendance data online. To monitor employee status when requesting leave, e-Leave allows electronic leave requests and can be integrated with the Personnel Management Information System. The State Civil Service Agency formed e-Kinerja. To monitor employee performance, e-Kinerja can exchange data with the State Civil Service Information System and the Personnel Information Management System. To obtain the required personnel data, the Dynamic and Apparatus Competency Development Information System in Ciamis can also establish a connection with the Personnel Management Information System. This has a positive impact on the effectiveness and efficiency of the Ciamis Regency Personnel and Human Resources Development

Agency in managing its human resources.

The effectiveness of a company in running its business determines how successful the company is. Because the digital services offered by the Ciamis Regency Personnel and Human Resources Development Agency are mostly functioning well, it can be concluded that the digital services offered there are effective. In accordance with what is stated in Cornelis, 2021: Triyadin & Yusuf, 2021, one aspect of productivity is effectiveness, which is the direction of achieving maximum work, namely achieving time, quantity and quality targets. A task is said to be effective if it can be completed according to the plan in terms of cost, time and module. This can be seen in the table below which provides information regarding the digital services offered by the Ciamis Regency Personnel and Human Resources Development Agency.

**Table 1.** Effectiveness of Digital Services at the Civil Service and Human Resources Development Agency of Ciamis Regency

No	Service		Information
1.	Personnel 1	Management	Effective
	Information System		
2.	E-Presence		Effective
3.	E-Leave		Effective
4.	E-Performance		Effective
5.	Dynamic		Effective
6.	Si-Bangpeci		Maintenance

**Source:** Ciamis Regency Personnel and Human Resources Development Agency, (2024).

Provided by the Civil Service and Human Resources Development Agency in Ciamis Regency, the majority operates efficiently, except for the Apparatus Competency Development Information System in Ciamis which is currently undergoing maintenance due to the transfer of the provincial central institutional integration systems and procedures.

### CONCLUSIONS

The use of information and communication technology has grown significantly in this global period, especially in government, with an emphasis on e-government. Setting innovation in digital services as a top priority is in line with the principles of good governance. To increase the effectiveness of personnel services, the Ciamis Regency Government and the Personnel and Human Resources Development Agency introduced several digital service innovations. This action is part of the government's initiative to improve digital services and improve the quality of those services. It has been proven how successful these innovations are: the Personnel Management Information System, Dynamic, e-Presence, e-Leave, e-Kinerja, and the Apparatus Competency Development Information System in Ciamis in building human resources in the local government environment. To ensure the best service delivery, there are still obstacles that must be resolved in the areas of integration and implementation.

The findings of this research imply that improving data backup infrastructure, servers, and supporting networks will improve service quality. This stage contributes to ensuring the quality and accessibility of Information Technology systems necessary to provide effective and efficient employee services.

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