

## Research Article

# The Role of e-Government to Improve the Implementation of Merit System in Indonesian Local Governments

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**Abstract.**

Digitalization has had an impact on changing various aspects of life, including the public sector. One of the adoptions of the use of information technology is carried out in the management of civil servants. This study aims to determine the role of e-government in improving the merit system in local government, with the locus of research in the Bali provincial government. This research uses a qualitative approach. The collection was conducted through interviews with the provincial governments of Bali, Indonesia, and studies of related documents. The results showed that the implementation of digital governance can improve the implementation of the merit system in local governments in Indonesia. The procurement of civil servants through an online selection mechanism has proven to cut the gap in the occurrence of nepotism in the procurement of civil servants. The quality of civil servants selected through the online selection mechanism is considered more competent. Information technology-based performance appraisals also make performance appraisals more transparent. The information technology-based competency development mechanism provides wider opportunities for employees to participate in competency development. Evaluation of competency development can be carried out directly by agencies through information technology. The personnel management information system, based on information technology, helps the implementation of the merit system. Through the integration of data and staffing processes, civil servant management based on the merit system is easier to do.

**Keywords:** digitalization, digital governance, meritocracy, e-government

## 1. INTRODUCTION

Human resource management of the apparatus has not been implemented optimally to improve professionalism, employee performance, and organization (Grand Design RB 2010-2025). This condition causes the performance of the bureaucracy is not optimal. Judging from the assessment of the performance of the Indonesian government at the global level, based on the Government Effectiveness Index released by the

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World Bank in 2018, it has not shown significant changes. Indonesia occupies the 75th position out of 193 countries. This position is still far behind when compared to neighboring countries, such as Singapore in position (1), Malaysia (35), Taiwan (24), Brunei in position (26), and Thailand (60). These data indicate that the success of a government is strongly influenced by the quality of the human resources of the apparatus itself. Then, Indonesia's competitiveness has also decreased. One of the efforts to improve the quality of human resource management for ASN is through a merit system. The merit system in the management of State Civil Apparatus (ASN) HR is as important as an effort to realize superior and competitive HR. The merit system was born based on fairness, ability, achievement, and performance as the foundation in the process of recruitment, salary, development, promotion, retention, discipline, and employee retirement.

Based on the results of the merit system assessment by KASN in 2021, the highest score is in the procurement aspect of 73, 9%, then the needs planning aspect of 73.2%. While aspects of career development 31% and aspects of promotion and transfer of 41.5% are the lowest aspects in its application. This shows that the ASN procurement process is now more open and objective, one of which is the implementation of the computer assisted test (CAT) as a recruitment medium. World Bank Global Report: Public Sector Performance 2018 even named CAT BKN as a superior product from Indonesia in the Civil Service Management category which succeeded in reforming the Indonesian ASN recruitment system (<https://yogyakarta.bkn.go.id/>). As viewed from the implementation related to the merit system in Indonesia, the spread of its implementation has not been evenly distributed even though it has been running for almost 9 years since the promulgation of the ASN management policy in 2014.

The implementation of the merit system still has many challenges and inconsistencies. Challenges and inconsistencies come not only from within the bureaucratic ecosystem alone, but also from ecosystems outside the bureaucracy which indirectly affect it. As is the case in the aspect of filling positions, for example, political elements and subjectivity often dominate in every filling of structural civil servant positions related to (Salim, 2015) the bureaucracy to intensify the spirit of gaining political support from the community or ethnic groups. This has increasingly triggered the public's negative view that placing a civil servant in a structural position is more determined by the likes or dislikes of political officials and is also related to the culture of the Indonesian people (Hasan, 2012). In local governments, the merit system process is still difficult to achieve, this condition according to Nurprojo (2014) drags the bureaucracy into a condition that is still tied to the past bureaucratic culture which was very patrimonial and authoritarian with low

behavioral maturity among bureaucrats who pragmatism of bureaucrats pursued power in exploiting the potential of regional autonomy. to achieve many interests (Nuraini, 2017).

The Monitoring Committee for the Implementation of Regional Autonomy (KPPOD) encourages the government to strengthen the role of the State Civil Apparatus Commission (KASN) to enforce the merit system and prevent problems related to regional planning and budgeting policies. KASN is considered to be able to overcome the problem of the lack of quality human resources, especially in the local government sector, as an obstacle in making appropriate regional planning and budgeting policies. The strengthened role of KASN can also be realized through the revision of Law (UU) Number 5 of 2014 concerning State Civil Apparatus. Thus, oversight of the merit system in the regions can be optimized. Bureaucracy is a driving machine that runs the state system (Setiyono, 2016). The existence of a bureaucracy is very important for a country. Its essence is as a tool of the state to ensure the fulfillment of the needs and rights of the community, which is an element of the establishment of a state. This is in line with what Hegel said about bureaucracy. According to him, the bureaucracy is a bridge that connects the state and its people (Yusriadi, 2018).

Implementation of merit system which is the goal of administrative reform at the local level is still not running, so institutional changes are needed (Institutional Change). The pathology faced by the bureaucracy at the local level in particular can be reduced by institutional changes. One way to accelerate the process of bureaucratic change is by adopting information technology. Digitization is a tool to improve the merit system at the regional level. The use of information technology is a way to minimize the potential for political influence on the application of the merit system. Development of existing communication technology has changed the dominant communication paradigm which previously felt one-way between the government and the community. The development of communication technology also opens up opportunities for two-way communication, namely between the community and the government and vice versa.

Currently, both central and regional governments seem to be initiating a digital-based bureaucracy. Almost everything related to bureaucratic activities has been digitized. Even now, local governments seem to be "competing" to initiate and improve the quality of their digital bureaucracy in order to provide better access and services so that they are able to label their regions as smart cities (Yusuf & Jumhur, 2018). E-government is the use of the internet network in disseminating information and government services to the public (United Nations, 2006). E-government provides opportunities to improve the quality of government services to the public and the private

sector through increasing transparency, control, and accountability in governance. The existence of a digital bureaucracy is followed by expectations of the efficiency and effectiveness of bureaucratic work, including in providing services to the community (Setiyono, 2016). The digital bureaucracy allows the development of a transparent system and accountability to the public through the disclosure of various information related to the bureaucracy ranging from performance reports, budget reports, services, providing space to provide feedback to the public on the performance or services provided by the bureaucracy, and so on, so that it is expected to be able to keep the bureaucracy from existing problems (Indrayani, 2020).

According to the instructions of the President of the Republic of Indonesia Number 3 of 2003 concerning the National Policy and Strategy for the Development of E-Government, which states the formation of a government that is clean, transparent, and able to respond to the demands of change effectively, namely first, the community demands public services that meet the interests of the wider community in throughout the country, reliable and trustworthy, and easily accessible interactively. Second, the public wants their aspirations to be heard, so the government must facilitate public participation and dialogue in the formulation of state policies. An in-depth analysis is needed regarding the application of digital governance and institutional change in the merit system process in local government in Indonesia.

## 2. THEORETICAL STUDY

### 2.1. Digital Governance

The meaning of digital governance is an effort to involve the public and the role of all elements or people in digital management or governance (Gao & Lee, 2017). Digital governance has an effective role in the implementation of the digital transformation process, a functioning data governance policy that ensures the efficient development of data and proper handling of the data. Experts explained that digital management must involve all elements or elements, so that policies can be implemented properly and managed efficiently. Digital governance is characterized as the use of information technology in the implementation of activities in the government to improve the delivery of public services to people or others such as users of government services, individuals and organizations (Twizeyimana & Andersson, 2019). Meanwhile, Schlæger (2010) explains that the digital governance model focuses on the interaction between ideas, institutions, and technology, in an integrated manner rather than segmented so

that this policy can encourage change. Change is only possible when these institutions and technologies are combined with ideas about the benefits of marketing things to develop institutions.

Digital Governance or E-Government according to Choi & Chandler (2020) and Wang et al.(2018) explains:

1. Interaction between government, community, and companies
2. Government internal activities, described as: implementation of electronic means to simplify and improve governance in the political, government and business aspects

Meanwhile, Kettl (2015) explains "Governance" how the government connects political, social, administrative and environmental aspects.

The implementation of digital governance is characterized by technological transformation to improve public services. Digital governance must be focused and integrated from all elements or elements to support institutional change so that services and productivity are increasing and of value. Change can also be supported by the dissemination of information and services electronically via the internet or other digital means (Sundberg, 2019). According to Fenton et al. (2019), a digital transformation that reflects ready-to-use and continuously prepared technology, changing the way people live, work, think, engage, and connect with people. This increases productivity, cuts costs, and delivers new services quickly and flexibly through an effective digital transformation process. It has the effect of bringing and enhancing experience and efficiency. In line with Fenton, Kale (2019) explains that fundamental changes in services must be distributed to people in various fields, including health, education, safety and security. Another important stuff in digital governance is paying attention to data management for all organizations, including universities or other organizations, is indispensable for the digital transformation process (Leignel et al., 2016).

## 2.2. E-Government

E-Government is a term used in the process of utilizing information technology which acts as a tool to help the government system run more efficiently. Therefore, in interpreting E-Government, it is not seen only in terms of 'E', which means electronic but must focus on how to use technology in the process of running government with online media or internet facilities. Thus, the application of E-Government is not only a tool and transfer of all systems from conventional to digital. However, what are the

results of its use, how is the government's ability to use technology, whether or not the purpose of implementing digitalization in the public sector is to improve services to the community. Thus, the function of the SPBE or E-Government policies can achieve its essence or become an efficient and good government (Good Governance). Concept of E-Government itself, there is no omission or substitute for the government's way of communicating/communicating to the public. However, the presence of E-Government will present communication procedures that are faster, more efficient, and in accordance with the rules. Thus, the public is still able to communicate with government service agencies through various media, which will be more varied and friendly to use through the use of digital-based information technology (media with the use of internet and non-digital networks (telephone and newspapers)).

In its implementation, communication, transactions, and information between the government and the community will be carried out using internet networks. Thus, the benefit of this application is that the service administration system will take place in a matter of hours, not days or weeks. In addition, the access to information that the government provides for the public will be much easier to access or in other words, the government's information gate will be wide open. This openness is not only for the government, but the community also needs to be open to the government. Both openness or transparency will lead to much more effective two-way interaction and communication. Thus, democratization will be formed and administrative and political transparency will be created. In addition, this method can reduce despicable actions such as policy and budget irregularities, because the transparency between the two will be much easier to monitor. The E-Government model that is applied to several countries outside is to use a four-stage development model, namely:

1. First phase: Appearance of a website that contains basic information needed by the public.
2. Second phase: The information content displayed is more varied.
3. Third Phase: The transaction stage is in the form of applying an online form.
4. Forth Phase: The stages of transformation in the form of integrated services, which connect many parties, not only the community and the government (collaboration).

### **2.3. E--Government Application**

As one form of embodiment of the implementation of E-Government is the creation of applications as media or tools used by central and local governments. The real

implementation of the embodiment of the E-Government application that has been commonly regulated and carried out is the creation of a local government website. The website owned by the local government is a form of the first phase in the development of E-Government in Indonesia, which has the aim of making it easy for the public to access local government services and information needed by the community. And with the aim of increasing public participation in democratization and participatory development in Indonesia through the use of internet media (Kominfo Guidebook, 2003).

From the statement above through the application, it can be seen that the development of E-Government applications in Indonesia is carried out through 4 levels, namely:

1. Level 1 (Webpresence), which is in the form of preparation for making a website as a medium of information and communication at every government agency as well as a form of socializing the website for the public and also internal agencies.
2. Level 2 (Interaction), this phase is a stage of maturation in the form of making a public information website that has an interactive nature and is connected with other institutions/agencies.
3. Level 3 (Transaction), after maturation, this level enters the stabilization stage in the form of making a website with the nature of public service transactions and making applications that can interact with other institutional frameworks and application data.
4. Level 4 (Transformation/integration), this level is the final stage to realize utilization in the form of making applications for services that have the characteristics of 4 E-Governance models, namely (Governance to Government (G2G), Governance to Employee (G2E), Governance to Business (G2B), and Governance to Citizens (G2C)).

There are number of criteria set by the Ministry of Communication and Information of the Republic of Indonesia (Menkominfo) in the guidebook for the administration of local government websites. The criteria that have been determined are in the form of a key description of the basic form that local government websites must have, namely:

1. Accessibility, Functionality, and Usability: the information content of local government websites must be oriented to the needs of the community, namely by providing information and services desired by local communities. In this criterion, it is emphasized that there is no act of discrimination for users.
2. Collaborating: regionally owned websites must be able to collaborate to unify the vision and mission of the government as a whole. All documents uploaded on the

website must have a fixed URL (Uniform Resource Locator), so that search engines (search engines) can directly link the desired information.

3. Effective content content: website users i.e., the public should be aware that there is some information they may need on any government website. Users (users) have the right to get the content or information on the website is the latest and correct data.
4. Two-Way Communication: Communication available on local government websites should be in the form of two-way communication. Thus, the community has the opportunity to contact government officials to explain the aspirations/views of the community.
5. Evaluation of Success: Local government websites must have a system to evaluate the performance of their websites, and be able to determine whether the site has met the needs of the users (community). At the very least, government websites can display statistics on visitors, users, number of pages, and successful and unsuccessful requests.
6. Ease of Finding Websites: Local government agencies must be able to socialize their websites and register them on search engines. So, people can find local government websites easily. In addition, for the public to know the existence of a local government website, they can carry out socialization or promotion through the press, brochures, and Local Government Public Relations (Regional Government Public Relations).

## 2.4. Institutional Change

Digital governance must be integrated into a strong system supported by various elements to create strong institutions, adaptive to technological developments. This is in line with the thinking of Cambell (1998) that digital governance models should focus on the interaction between ideas, institutions, and technology, integrated in a systems perspective. The aim is to link ideas and insights from new institutional theory that those ideas are important for understanding and interpreting institutional change. The concepts of ideas, institutions, and technology form the core of the digital governance model. Ideas are assumptions that are taken for granted and concepts and theories that are articulated (Campbell 2004). An institution is a relatively enduring collection of organized rules and practices (March & Olsen 2006). Technology is the use of scientific



knowledge to determine how to do things in a reproducible way, and the artifacts used in the process (Castells 2000: 28).

A characteristic of digital governance models is dialectical 'affordability' thinking (Hutchby 2001). The claim is that technology defines the boundaries of action, but does not fully define how actors shape institutions. Institutional change is not seen as a one-way process but as a dialectical structuring process (Giddens 1984) in which technology also plays an important role (Bijker 1995). In other words, how technology and institutions shape opportunity structures and how actors apply these contingent structures to change institutional frameworks. When institutions are enforced, this model assumes that actors also have the capacity to change these institutions. Actors can take advantage of the opportunity structure created by the interaction of ideas, institutions, and technology to suit their interests or beliefs. This capacity is referred to as strength. (Schlæger, 2010)

The implementation of digital governance is characterized by technological transformation to improve public services. Digital governance must be focused and integrated from all elements or elements to support institutional change so that services and productivity are increasing and of value. Change can also be supported by the dissemination of information and services electronically via the internet or other digital means (Sundberg, 2019).

## 2.5. Merit System

Merit System based on Law Number 5 of 2014 concerning State Civil Apparatus (UU ASN) policies and ASN Management based on qualifications, competence, and performance in a fair and reasonable manner without distinction of political background, race, color, religion, origin origin, gender, marital status, age, or disability. The purpose of implementing the merit system is to ensure that positions in the government bureaucracy are occupied by people who are professional, in the sense of being competent and carrying out tasks based on basic values, code of ethics and ASN code of conduct without any political intervention. This study also discuss the management of ASN. ASN management is the management of ASN to produce ASN employees who are professional, have basic values, professional ethics, free from political intervention, free from corrupt practices, collusion, and nepotism. ASN Management includes PNS Management and PPK Management.

The scope of the management of civil servants includes preparation and determination of needs, procurement, rank and position, career development, career patterns,

promotions, transfers, performance appraisals, salaries and benefits, awards, discipline, dismissals, pension and old-age benefits and protection. While the management of PPPK includes determining needs, procurement, performance appraisal, salary and benefits, competency development, awarding, discipline, termination of employment agreements and protection. The difference between the management of PNS and PPPK is that there is no provision of pension and old-age benefits for PPPK employees.

## 2.6. Regional Autonomy

Vincent Lemieux in *deconcentration and decentralization: a question of terminology* (1986), explains that regional autonomy is the freedom to make political and administrative decisions while respecting the laws and regulations. As for Sarundajang (2000), regional autonomy is the right or authority to manage one's own household for an autonomous region. These rights and authorities include governance arrangements, development management which is handed over by the central government to local governments.

When referring to Law Number 9 of 2015 concerning Amendments to Law Number 23 of 2014 concerning Regional Government, it explains that regional autonomy is the right, authority and obligation of autonomous regions to regulate and manage their own government affairs and the interests of their local communities in a unitary state system. Republic of Indonesia. The authority to regulate and manage the interests of the local community according to its own initiative based on the aspirations of the community in accordance with statutory regulations.

Digitization of governance in this study would like to explain that digitalization must have the duties and functions of being one of the tools or means in supporting institutional change in the management of ASN based on meritocracy in an autonomous region so that its implementation is not interfered with by political interests.

Readiness, challenges and impact of implementing Digital Governance.

Readiness, challenges and impact of digital-based government in improving services.

## 3. METHODS

This study uses a qualitative descriptive approach, namely to see how the digital governance process and institutional change: the role of E-government in improving the merit system in Local Government (Study in the Bali Provincial Government). The data sources of this research are primary data and secondary data. Primary data was

TABLE 1

Year	Researcher	Research Title	Journal	Topic	Analysis Tools	Analysis Objects
2010	Jesper Schlæger	Digital Governance and Institutional Change: Examining the Role of E-Government in China's Coal Sector	Policy & Internet	Impact of digital governance and institutional changes in China's Natural Resources (Coal) Sector	study case	institutional changes in the case of coal allocation reform in China.
2018	Marudur Pandapotan Damanik, Erisva Hakiki Purwaningsih	Regional Government e-Government Readiness Towards Smart Province Development (Study on the Mandailing Natal District Government of North Sumatra Province)	Journal Study Communication and Media	How Local Government E-Government Readiness Towards Smart Province Development.	Study Case	Regional Government e-Government Readiness Towards Smart Province Development
2018	Bevaola Kusumasari, Widodo Agus Setianto, Li Li Pang	A Study on Digital Democracy Practice: Opportunities and Challenges of e-Health Implementation in Indonesia	A Study on Digital Democracy Practice: Opportunities and Challenges of e-Health Implementation in Indonesia	What are the opportunities and challenges in implementing Digital Democracy in Indonesia.	Qualitative method	Opportunities and challenges in implementing Digital Democracy in Indonesia, a case study of e-Health Surabaya Implementation

obtained through in-depth interviews with key informants and participant observation. Interviews were conducted to informants consisting of: leaders and staff at the Ministry of Communication and Informatics, BKD and BPSDM of Bali Province.

Other than interviews, primary data was also obtained through observational studies in agencies that have implemented digitalization policies. Secondary data was obtained through literature study and literature study of related primary data, results of previous research, and regulatory documents related to digitalization policies and institutional changes that have an impact on ASN management, one of which is the merit system at the regional and national levels.

Data collection techniques in this study were carried out using in-depth interviews, observation and document review methods. Interviews and observations in this study are used to see how the digital governance process and institutional change through

the role of E-government in improving the merit system in local governments, as well as the challenges and impacts that arise from the process. Document reviews or literature studies are used to obtain direct information related to the implementation of digitalization in governance in the management of ASN, Regional Regulations, and other related laws and regulations. The locus in this study is the Province of Bali. The selection of this location is based on the achievements of the Bali Province as a province that has implemented an electronic-based government system policy.

## 4. RESULTS AND DISCUSSION

### 4.1. Digital Governance in Indonesia

With the high level of public consumption of technology or internet access, so that it has an impact on the movement of Government Apparatus to take advantage of technological developments. The movement carried out by the government has the aim of realizing effective, accountable, transparent and clean governance as well as providing quality services to the public. For this reason, the government issued a policy on the Electronic-Based Government System which is regulated in Presidential Regulation of the Republic of Indonesia Number 95 of 2018. In addition, the main pioneer or basis of E-Government policy in Indonesia is related to Presidential Instruction Number 3 of 2003 concerning policies and strategies for developing E-Government. Government. In order to create and improve the efficiency of the policy integration of the Electronic-Based Government System, it is necessary to have overall or national governance and management of the Electronic-Based Government System.

Because, basically the implementation of E-Government in Indonesia has the aim of expanding the range of services for the community through the use of information technology. In addition, one of the main functions produced by the implementation of E-Government is the creation of a clean, accountable, transparent government, and able to answer complaints/demands effectively and efficiently. For this reason, one of the implementations of implementing E-Government policies is the availability of quality local government web-based sites. The website itself is a collection of pages of various sites, which are usually summarized in a domain. The purpose of the implication of the local website itself is to make it easy for local and foreign communities to access information and benefit from government services, so that the utilization of information can be absorbed in large quantities accurately and quickly by the community.

In assessing a good quality website based on the main function of E-Government, namely if the website carries out the principles of accountability, transparency, and is effective and efficient. These principles are, of course, the same as the principles of good governance. Because the implementation of E-Government itself is an effort to realize good governance. Meanwhile, the assessment of quality local websites in Indonesia already has certain criteria determined by the Ministry of Communication and Information, namely the availability of content at a glance, local government, geography, regional and resource maps, regional regulations or policies, as well as guest books and news. By applying these elements to every website in Indonesia. Thus, the regional website will have a high level of quality, be inclusive, and present a good image of the government.

In practice, the implementation of E-Government itself in realizing Good Governance is often considered not running optimally, because there are obstacles or obstacles in it. There are several factors that hinder the implementation of E-Government in the government sector, namely the limited number of competent experts in the field of Engineering and Information Technology, limited budget, lack of standardization of supporting infrastructure, and the minimum level of information security. So that these things are factors that cause delays in the implementation of E-Government in Indonesia.

However, in the context of implementing E-Government, one of which is in the Province of Bali and in other cities such as Bekasi City, the use of regionally owned official websites serves to optimize service delivery, information provision, and publication of local government documents, and budget transparency can be said to be almost universal. optimal. because, it is known that Bekasi City has received an award related to regional digitization for some time. This, of course, is a proud achievement. However, it is necessary to prove that the website owned by the City of Bekasi is in accordance with the Goals/Principles of E-Government to achieve Good Governance.

The implementation of e-government is a communication effort that bridges the interaction between the government, society and other stakeholders and also increases understanding in the fields of politics and government as well as business. This is in line with the thoughts of Choi & Chandler (2020) and Wang et al. (2018) that:

1. Interaction between government, communities, and companies.
2. Internal government activities, described as: implementation of electronic means to simplify and improve governance in the political, government and business aspects.

With this e-government, it is an effort to change the mindset by integrating various elements and elements that exist in the community separately and manually into a unified whole to provide services to the community in the region, especially in the province/district/city so that service productivity continues to increase. and value and change behavior patterns at work, think fast, be flexible as presented by Sundberg(2019) and Fenton et al. (2019).

## 4.2. Digitalization and Institutional Change in the Bali Provincial Government

The implementation of digitalization in ASN management along with the opportunities and obstacles in its implementation in the context of accelerating the merit system in ASN management. The role of institutional changes in encouraging the implementation of digitalization in accelerating the merit system. The initiation of the implementation of digitization in the government in Bali Province began in 2012 by building a data center. In that year, digitization was also carried out in regencies in the province of Bali and also health centers in the province of Bali.

In 2018 there was a regulation that mandated digitalization from the central government through Presidential Regulation Number 95 of 2018 concerning the Electronic-Based Government System (SPBE). Following up on the regulation, the Bali Provincial Government made a breakthrough to build an integrated SPBE. In 2018 there were approximately 160 information systems, but they were not integrated. With the regulation on SPBE, the Bali Provincial Government began to improve by building a Single Sign On (SSO).

Digitization in the Bali Provincial Government is led directly by the Regional Secretary, and its members are all OPD leaders. In 2020, the use of e-office is expanded to be used in all OPDs. In April 2021 all OPD will conduct TTE (Electronic Signature). All services are provided digitally, as well as business processes that were originally manual to digital. In the Bali provincial government, all organizations have implemented digitalization such as in the implementation of basic CPNS training, the implementation of PKP, PKN, learning with laptops and the existence of electronic certificates. In the implementation of training, all fields have measurable performance in terms of quality and quantity. In 2021 the Bali Provincial Government received a very good assessment in implementing the merit system with a score of 330.

One proof of the good practice of digital-based HR management in the Bali Provincial government is in the recruitment of CPNS. BKN came directly to the province of Bali in the implementation of the ASN SSC.

1. The preparation of the need for using information in the implementation of career development is carried out by an assessment by the ASN Center at the BPSDM of the Provincial Government of Bali. Although the full online assessment cannot be done, the registration process uses information technology. And the assessment result data is stored in digital form.
2. Management of competency development using the SIPKA application.
3. In the implementation of mutations and promotions, talent management and digitalization are carried out in the assessment of the selection of candidates for officials using Google forms.
4. Performance Management through sikkopo which is an integration of the attendance system with a face detector.
5. Reward and discipline functions using sikepo.
6. For protection and service there is a staffing team and there is a virtual office that can be accessed directly by all employees within the Bali provincial government. While the personnel application uses a SIM information system or an integrated personnel management information system.

Some of the challenges in the implementation of digitization include the first, the commitment of this leadership has an important role to determine the success of digitization; second, people's view of the application that this technology is just a tool but that determines the success of the implementation of services with digital it still returns to its human resources; third, related to digital transformation, this digital transformation was carried out initially just to convert physical files into digital files, but now digitization extends to digital-based business processes.

The digital transformation in the Bali Provincial Government takes place, after the electronic signature, then digitization in the process of promotion. In the implementation of digitizing files or files, the obstacle is uploading it is the employee. So if the employee in question feels that he does not need or does not need to do so, then the data will not be complete. The impact of digitization on personnel services is that the provincial government is able to provide faster and more secure personnel services because there are already digital cabinets for each individual. The digital staffing file is uploaded

online in the personnel information system (SIMPEG). The BKPSDM of the Bali provincial government itself has many applications and there is always development of the applications used, for example previously there were online civil servants applications and SIMPEG which then now these two applications have been integrated into one SIMPEG application. then the sikepo is used to measure employee performance achievements digitally. In implementing the merit system in the Bali provincial government, an UPTD assessment center unit has been established as a form of the leadership's commitment to ASN management, and there are also applications used by the assessment center.

In planning the succession plan through digitization, the assessor can see the qualifications of prospective applicants from the applicant's track record in SIMPEG to see the competency map of each applicant. The results of the assessment carried out can be accessed digitally by the employee concerned, and there are several related units that have the right to access the data. To see the performance can be seen from the application in Kepo. From several applications owned by the Bali provincial government, talent management is formulated to obtain valid and reliable data.

### **4.3. Challenges in Digitalizing Human Resources Management**

The challenge in HR management within the Bali provincial government is to make the management of HR management more integrated. In the implementation of digitization in the field of HR management in the Bali provincial government, in each general staffing section, 1 administrator is placed in each OPD who will help if there are obstacles or difficulties in using the application. Some of the obstacles experienced in digitizing human resource management in the Bali provincial government include 1) digitizing the key is behavioral change; 2) strict arrangements, for example, meetings are not allowed to bring books; 3) shared understanding of the concept of digitization and digital transformation; 4) related to supervision which is usually carried out in the Bali provincial government through inspections carried out by the leadership; 5) there are perceived advantages of being faster and more efficient; 6) in each organizational unit there is an IT team; 7) in the implementation of PKN there is an IT team that accompanies; 8) there is an amplifier (stick) in the digital transformation.

### **4.4. Digitalize in Competency Development**

The implementation of competency development within the Bali Provincial Government has been carried out digitally. The implementation process is done by registering



online, then the team uploads modules and assigns tasks, through the application. The implementation of competency development in the Bali provincial government, for example in the implementation of PKN II, the Bali provincial government has an application to carry out blended learning, and the certificate is given in the form of an electronic certificate.

The challenge faced in implementing competency development is that there are different abilities among participants. For example, participants from Sumba and NTT have different abilities from other participants, so a special team is prepared to assist participants during learning at PKN II, because learning is conducted online. In the implementation of competency development, the SIPKA application is used which is an integration of information systems previously known as e-Registration and e-teaching. The development of this information system has been carried out since before the pandemic. The benefit of implementing online competency development is being able to streamline the budget for ATK spending, budget for eating and drinking for meetings, especially for consumption costs, streamlining space and electricity costs. The challenges faced are the unequal connection positions and the limited number of budgets.

“So on the human resource plotting side, if we used to prepare activities manually, now we switch to digital, there will be considerable efficiency. However, the negative impact is that the mechanism for shifting learning from offline to online affects the amount of income with blended BKPSDM cannot finance facilities and infrastructure The results are better online” Sumarijaya, Head of the Bali Provincial Government BPDSM.

However, it is realized that digitalization is very helpful in implementing lessons if learning is carried out 100% virtual, the challenge is that the network conditions for each participant are not the same so that it is circumvented by the participants staying on campus or in dormitories even though the learning is carried out virtually. For example, in the implementation of basic CPNS training because the training also aims to shape character, it must be done face-to-face so that the choice of whether the learning will take place face-to-face or from that very depends on the situation.

#### **4.5. Digitalization in The Execution of Assessment**

Of the approximately 10,000 employees in the Bali provincial government, in 2021 an assessment has been carried out for 1100 employees held at UPTD and 400 employees conducting assessment centers outside the UPTD. Through the assessment center, it is known the competency map of the employees in the. the Bali provincial government to

fill the existing positions. The results of the assessment carried out by the Assessment Center are currently developing a management model. The process of implementing the assessment center includes registration which is done digitally, and the process of implementing the assessment center to see a map of potential and competency development needs. Employees as users, namely employees who are bersangkutan, can access the results of the assessment but there are results that are excluded because they are protected by the Law on Public Information Disclosure. Apart from the employee concerned, several units have the right to access the assessment results. The results of the competency assessment through the assessment center are useful in the field of transfers, which can be useful for obtaining employee competency maps. From the field of development, the results of the assessment become the basis for the preparation of a competency development plan, where the big house is in SIMPEG. The assessment results data are prioritized to be used by the mutation and development sector in the field of human resource development. The assessment results data apparatus is used to map what training and education are needed by employees in the Bali provincial government.

In the implementation of employee competency development within the Bali provincial government, there is a quality assurance of training and widyaiswara. In the implementation of the education and training, an evaluation of the education and training is carried out with a one-door system where everything in this class is standardized.

The implementation of digitization in ASN management in the Bali provincial government is supervised by the Ombudsman and the State Civil Apparatus Committee (KASN), besides that it also involves a panel of academics and practitioners who are tasked with supervising and also providing advice or input on the implementation of digitalization within the provincial government of Bali.

Based on the results of interviews conducted, it is known that digitalization in the management of the state civil apparatus has succeeded in improving the quality of ASN management. For example, the quality of the ASN output system obtained from the online selection mechanism is much better and of higher quality than the offline PNS recruitment system. In the online recruitment mechanism starting from registration, the committee does not meet directly with applicants because registration is done online. The document verification process is also carried out online so that accountability and transparency in ASN recruitment which is carried out online is better.

This is as stated by the Head of the BPSDM Planning Division of the Bali provincial government in the following interview:

"Quality with the ASN output system through the online mechanism when registering has never met verification nor has we ever met, we just know the number and we don't know who the person is, so the results dip to the substance of the required competencies." Head of the BPSDM planning division of the provincial government of Bali.

In addition, the recruitment mechanism with this online system attracts more prospective registrants and from the committee side it is lighter. The problems that arise may be more about the issue of the rebuttal period, but the problem occurs because of the misunderstanding of the participants. Technical constraints that have been faced in the implementation of online recruitment, because previously the implementation was carried out by mirroring where in its implementation it directly accessed from the Central BKN server, the implementation of the online selection at the Bali provincial government had broken down for approximately 10 minutes. This happened because there was a request time out on the BKN server because there was a move from the BKN server to Telkom.

Based on the results of interviews, it is known that the output of ASN recruited by the online system is much higher quality than the results of recruitment carried out offline as stated by the Head of the BPSDM Planning Division of the Bali provincial government as follows:

"Outputs from different results are more critical, they are really selected and they are more alert to respond to work. The selection is also tighter because through online selection we can attract more potential applicants." Head of the BPSDM planning division of the provincial government of Bali.

The implementation of online recruitment also reduces the potential for corruption, collusion and nepotism in ASN recruitment. "It's calmer down with this online mechanism because people can no longer entrust them. Besides that, their competence can compete nationally. Anyone who has the competence and is in accordance with the qualifications can apply because we are also integrating with the districts to conduct the selection here."

Technology will enter all aspects of government. In the management of the personnel management information system, which from time to time updates the business process, the rules also change. Therefore, the information system in personnel management will definitely continue to develop or change with the aim of effectiveness and efficiency.

Digitization is carried out in the form of hardware, brainware and software. From the brainware aspect, we change the process from manual to business processes based on information technology. Digital infrastructure within the Bali provincial government

was built starting in 2012. In the transformation process that applies is management by horror, meaning that if we don't follow it, we can't access services.

An example of the benefits of digitalization in promotion is that in the past, when promotions were still processed manually, promotions were not monitored. However, with the existence of information technology, there will be notifications for people who have been able to apply for promotion. Similarly, in the implementation of retirement, if previously the data for employees who will retire were not monitored, now there is notification so that 3 months before retirement, the decree has been printed. Likewise, there is a change from the documents that were originally in manual form to now digital. Another benefit is in the implementation of talent management, by using the digital data, the implementation of talent management can see the staffing data in the staffing team.

Regarding data security, the Bali provincial government is assisted by the BSSN in monitoring and securing data through data security. From the aspect of bandwidth, it is sufficient.

The digitalization process in the Bali provincial government was carried out long before the pandemic occurred, but it was realized that the pandemic had driven the acceleration of digital transformation. The government process cannot be separated from the previously developed model. The commitment of the leadership as SPBE coordinator at the Bali provincial government level determines the sustainability of digitalization. In the implementation of digitization, digitization is something that is expensive because it is not only preparing the infrastructure but also the people must be educated.

In the process of digitizing there are what are referred to as general applications and special applications. Common applications are managed by the central government. However, there are general applications made by the regions because there was no application from the center at that time, for example the personnel management information system in the Bali provincial government.

#### **4.6. An Organizational Bureau**

The organizational bureau is a part that has an important role in managing the organization. One of the innovations made in the implementation of digitalization is the formation of a Virtual Office for the Bali Provincial Government. The virtual office was previously an e-office in 2019. Each employee has their own virtual office account. In this Virtual Office all correspondence and disposition through the virtual office, including correcting, sending drafts and approvals. The basis of this virtual office is a circular

which is distributed to all agencies and other agencies related to the existing sector in each field.

In the Bali Provincial Government the services provided to employees use the system. The digitalization management of all available systems is prepared by the operators as admins. The implementation of this digitalization, in addition to the support of the leadership, is also supported by the employees.

The benefit of this digitalization innovation is efficiency because it minimizes the budget, such as reduced office stationery by almost 50 percent because it reduces the use of paper in correspondence because there is no need to print a lot of paper and the efficiency of providing human resources who have to deliver letters, ease of job mapping. supervisors and administrator positions because they have become more organized, although not all have been done for administrator positions.

The steps taken before being applied were carried out by technical guidance first, how to use a virtual office and then as the process began to run, it was followed by assistance from Kominfo.

Other innovations that support the performance of the Organizational Bureau, such as conducting digital attendance with a radius of 200 meters from Kominfo, SIKEPO with planned attendance will be integrated with attendance and performance appraisal. Rating superiors, equals and subordinates, from three subordinates choose two 360 degree assessments. However, due to a change in policy, in 2022 the assessment will only be carried out by superiors. If analyzed, it actually experienced a setback, but there are other mechanisms in carrying out an objective assessment.

The challenge is, at the beginning of the integration, most of the employees still use communication tools that are not in accordance with the needs that can be integrated with the system, but thanks to the support from the leadership and employee support this can be overcome because they can adapt to supporting technology.

Employees within the Bali provincial government are also involved in the Kerti Bali Sejahtera program, to make the program a success, including local fruit, plastic waste reduction, traditional clothing and other programs. On Thursdays, activities use the Balinese language, in addition to holding national and international meetings, traditional clothes must be used. In addition to preserving Balinese culture, letterheads use Balinese script, Balinese language month is held, KBS every month employees return to their regions.

#### **4.7. Digitalization in Supporting Merit System in Province of Bali**

#### 4.7.1. HR Management

Digitization in HR management began with the implementation of the SIKa application in 2016 which initially consisted of 2 features, and was developed into 5 features owned by SIKa.

With digitization, it encourages reducing the use of paper (already paperless). The employees are coerced, trained in computer labs.

Some applications for example: SIMPEG, Applications used for promotion, SIKEPO for performance appraisal which is a product of training and education IV, and developed into innovative products produced in Diklatpim 4, then all applications must be launched to be known by the leadership.

The merit system has been digitized. It can be seen from the open bidding in Bali Province that it received the best award, although it needs to be improved as well. In recruitment, digitalization has succeeded in reducing political intervention or entrustment to get the best candidates, similar to CAT in accepting ASN. Regarding digitization, we first prepared the database as proof of work.

The use of digital technology here is common, and for administration there is a virtual office for numbering, sending, signing. Letters that are submitted to the virtual office are only approved, sometimes while reminding and informing employees. Through a virtual office, it is easy to track letters where they are, traces of compiled/recorded work records, including drafted, disposed and other letters.

If there are still employees who have not mastered technology, they can be given a job as a virtual courier to track mail. With a virtual office, time is more efficient, speed is also more efficient.

#### 4.7.2. Education and Training

Digitization in the Province of Bali supports learning in education programs and employee training to be more practical, as is the case during the Covid-19 season, learning in education and training is not a problem because it already has applications and is used to (using) even though it continues to be developed during the pandemic. As for the implementation of basic CPNS training because there are sections that are character building, there are several JP that need to be done face-to-face.

In the province of Bali so far the technical training has been carried out fully online, but participants are in the mess, quarantined, so that no signal reasons appear and so on.

Based on the description above, the use of digitalization in supporting the development of employee competencies to become professional, competent, understand the values in carrying out their duties and functions, so that the effect of digitization on this merit system, there is no need for open bidding because we prepare DIKDUK, conduct Education first and if needed, stay on, so that echelon II officials already have the skills to occupy positions.

Therefore, the presence of an assessment center has an important role, to provide assessments and considerations in developing employee competencies, employee placement patterns, promotion considerations and employee development efforts. Currently the Assessment Center in Bali Province is formulating an online assessment pattern and will adopt virtual coaching. As for the other roles of the assessment center as explained by Sudewo (2017) in the implementation of the merit system, among others:

1. *Assessment center* plays a strategic role in recommending prospective employees and prospective officials who will be placed in positions according to the results of the potential and competency assessment.
2. *Assessment center* play a role in identifying employees who have superior potential and competence, as well as information on intellectual potential, personality and work attitudes of employees as material for consideration in the formation of a talent pool group that will be prepared as high leadership officials, administrative officials or organizational functional officials.
3. *Assessment center* plays a role in increasing employee confidence in the ASN management process and the organization because the promotion and career development process is carried out fairly and transparently through potential and competency assessments in accordance with the merit system principle..
4. *Assessment center* play a role in evaluating the implementation of the merit system in government organizations.

This is in line with what has been done by the Bali provincial government, such as in the field of competency development, compiling competency gaps that will be analyzed by HR analysts. Then the performance appraisal is carried out 360 degrees, now only by superiors for performance appraisal. In addition, the Bali Provincial Government is in the process of adopting another ministerial regulation on performance management. In its implementation, BPSDM will prepare so that a virtual assessment can be carried out.

In improving the understanding of competency development for employees, since 2018, the Bali provincial government has attended workshops at institutions that have duties and functions in developing competency policies such as LAN on smart bangkom to map competency development needs. With the identification of HR profiles juxtaposed with the SKJ, there will be a gap to map the need for competency development following PP17/2018 concerning ASN Management.

The challenge faced by the Bali provincial government is that not all competency dictionaries are available, so the mapping of competency needs has not been maximized. Districts are also still adjusting to this digitalization, but in terms of infrastructure it is already good. On average, the readiness of the participants was good to use digital technology in training. When the participants are less proficient, usually for PKN Tk 2, the BPSDM has prepared a special assistant for the IT section. If the participants from PKP and PKA are ready and speak on average.

However, the negative impact of this digitization process is that the staff tends to be ignorant, the interaction is not good. Thus, in relation to Bangkom, the function of attitudes and behavior cannot be replaced (its development) online. Work attitudes and behavior cannot be assessed and trained online.

The supervisor in the implementation of this merit system is the ombudsman. Cooperation with the regional ombudsman is good. So that people want to leave it is also not good. The implementation of digitalization is also felt by competency development teachers because they benefit more from virtual learning, from 9 hours of lessons, the first session is on-class, the next session is offline. The implementation of digitization in supporting the merit system is in line with what was stated by the key informants as follows:

### 4.7.3. Digital Divided

Digital divided must be felt between millennials and employees who are old. Millennial employees have a faster adaptability. Bureaucratic reform requires one of them to be egotistical, and it is emphasized by the rules from the SPBE Menpan no later than 2018 that it must be implemented in the regions. These arrangements inevitably encourage digitization, must be adapted. Digitization is the essence of the network. In 2021 there will be a program from the provincial government for wifi to enter the village.

The Bali Provincial Government is developing the tourism sector, so awareness to adopt digitalization and take advantage of this opportunity is growing.



#### 4.7.4. Benefit of Digitalization

Pandemic has also accelerated the use of technology, although in Bali before the pandemic had also adopted digitalization, such as the use of video conferencing. We use the computer lab to provide technical training, computer use training and new programs or applications.

The benefits felt by other stakeholders from the CPNS latsar participants felt that the screening results were better, their abilities were much improved, they had more skills in the use of technology. It feels like the results through the CAT PNS in the future are sophisticated if they want to develop their competencies. They have an actualization plan which is usually in the form of technology and if the supervisor is not careful, this could be Diklatpim 4.

The social impact of online selection is more serious for the participants. From registration already using IT. The difference between online and offline training in terms of quality is the same and does not have a significant impact because on average, except for the background, the participants already know each other.

But better indeed blended training mode. Because if you keep meeting in class you can get bored. And with blended participants also indirectly get digital skills. And latsar need face to face to form attitudes and behavior.

Online recruitment of applicants is more than offline because where can apply, and if you register first (offline era) it takes time and money. With more online participants, the quality of participants is better, and it is more national (wider range of participants). In general it is not much bothered, usually it is disturbed for the network of applicants from Papua.

Digitization makes people understand the system is unplayable. In the past, the CPNS SK had been deposited for appointment, later to be asked for a promotion again. Commitment from the leadership, here from the Regional Secretary plays a vital role in digitization. Because the Regional Secretary administratively has a strong influence. The implementation of the next competency development will follow the LAN instructions, until now the LAN instructions are still blended. Performance appraisal of 60 percent of the performance appraisal results, and 40 percent of absent.

Another program with Kerti Bali Sejahtera – civil servants return to the village and this is a performance target. We carry out activities and there is a monitoring and evaluation report every 3 months to run provincial programs. And what we do is part of the performance. For residents from outside Bali, they get a target area according to their domicile.

## 5. CONCLUSION

The implementation of digitization in the public sector improves the implementation of the Bali Province merit system. Several applications have succeeded in facilitating the implementation of services, especially in the field of HR management. Digitization has made it easier to carry out work and create efficiency in time and cost, as well as faster service.

In the implementation of digital governance has realized the transformation of technology to improve public services. The Bali Provincial Government has adapted to various policies in developing the competence of its employees so that employees are prepared to provide services. Digital governance has been integrated from all substances or elements to support institutional change so that services and productivity are increasing its value.

### 5.1. Suggestion

The weakness in the digitization process in supporting the merit system is the integration of the system that has been created. The provincial government of Bali through Diskominfo must be able to harmonize existing innovations so that they are not partial. Some have the same database that could ideally be simplified. Institutional changes that occur in the digitalization process are influenced by the leadership of the Bali Provincial Secretariat. Internalization of the use of IT in the process of supporting the merit system needs to be improved.

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