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# Digital transformation of financial transactions of Mamala Negeri government to support the inclusion of village finance information system

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## CITATION

Tuanaya W, Wance M. (2024). Digital transformation of financial transactions of Mamala Negeri government to support the inclusion of village finance information system. *Journal of Infrastructure, Policy and Development*. 8(8): 6354. <https://doi.org/10.24294/jipd.v8i8.6354>

## ARTICLE INFO

Received: 12 May 2024

Accepted: 3 July 2024

Available online: 30 August 2024

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**Abstract:** Village Finance System (SISKEUDES) is a village financial reporting application policy. The application of the SISKEUDES is as a form of accountability to be accessible and known by the community. However, communication problems, resources, knowledge and limited internet networks in many regions still cause problems in reporting process. The research used a qualitative descriptive method by conducting in-depth interviews and document analysis of Mamala Negeri SISKEUDES. The policy implementation model according to George Edward III was used as an analysis tool. This research was designed to be carried out for 5 (five) months to explore various data from various information regarding this research problem. The research findings are that the provision of facilities and infrastructure for Mamala Negeri supporting human resources is still limited, making it difficult to apply the SISKEUDES 2.0 application. Besides, the village also needs more systematic transaction planning, which allows each transaction to be recorded completely both planning and realization.

**Keywords:** village financial management; village financial reporting; Siskeudes of Mamala Negeri

## 1. Introduction

The village government's contribution to a well-organized village illustrates the scope of the government's responsibilities. Giving responsibility is great, however, a good village government must also be accompanied by good human resource development. One of the performance outcomes that the village government can use to meet the objectives outlined in the national service standard, namely service quality, is to provide the best possible service (Pertiwi et al., 2021). The study of this urban issue has attracted the interest of many parties, and a number of problems can be researched and immediately corrected. Villages with weak economies are powerless in the face of market forces and their relationship with cities is unbalanced and unhappy. Indonesian villages often face the danger of injustice and underdevelopment (Suharyanto and Sofianto, 2012). Village government officials must change the paradigm to accommodate the mental revolution of the bureaucracy due to the demands of the community for the government to serve the community according to the needs of the government and the society. Whenever services are offered to communities, they demand high-quality work from bureaucrats who operate independently and responsibly. The idea of decentralization and regional autonomy is currently launched by the regions to solely focus on organizing business and accelerating development in their respective regions, departing from the temporary reality (Kusmana, 2019). According to Eko (2015) in Sumbogo (2019),

villages function as relationships for villagers to organize social, political, and economic affairs. Villages become the object of development in this new perspective. Village-based development with facilitation, emancipation, and consolidation techniques is a development model that needs to be created (Sumbogo et al., 2019).

The findings of Pertiwi et al. (2021) show that to realize transparency in village government in Bulu Timoreng Village, e-government is implemented through collaboration with the community to identify problems or benefits that may occur (Pertiwi et al., 2021). The findings of this study indicate that public services are provided in accordance with their job descriptions based on an analysis of the five dimensions of the service quality indicator which are tangible, reliability, responsiveness, assurance, and empathy (Kusmana, 2019). In Supriyanto's (2016) findings, it is recommended that the government should start the transition to e-government right away by creating a management system and utilizing advances in information and communication technology (Supriyanto, 2016). Tuanaya et al. (2020) report that the distribution of social assistance to Waiheru village residents has used the latest population statistics. Population data from the village government is then thoroughly checked to ensure the accuracy of the community who will get the social assistance (Tuanaya et al., 2020).

Government spending in 2021 will be concentrated on digital infrastructure, driving digital transformation, and boosting human resource productivity through the knowledge economy. Given the disparity in internet access in Indonesia, the development of digital infrastructure such as the internet is needed. West Java Province has an average household internet connectivity rate of 31.65%, compared to only 10.06% for Papua Province, 13.73% for East Nusa Tenggara Province, and 20.26% for Maluku Province. Digital change requires universal internet access, but it is not the only determining factor. Other important elements are skills, production innovation, and research and development (R&D) capabilities. Unfortunately, Indonesia's performance on these measures is not very positive (BPKP, 2020).

Villages now have enormous opportunities to manage their own governance and implement development to improve the welfare and quality of life of village communities in accordance with Law No. 6/2014. In addition, village governments are expected to have more autonomy in managing assets and governance, finance and other natural resources. The community has been given a great responsibility in addition to its enormous role. Therefore, the village government must be able to apply the concepts of accountability and transparency. Most villages used Microsoft Excel or other programs with non-standard formats to create budgets, bookkeeping, and financial reports until the Village Financial System (SISKEUDES) application was introduced. As a result, district governments had difficulty assessing Village Revenue and Budget (VRB or in Indonesia it is called Anggaran Pendapatan dan Belanja Desa or APBDes) and village financial reports. Hundreds of cities also used applications purchased from private developers but could not be updated to match regulatory criteria (Thareq, 2022).

The findings of the study show that Indonesia is still lagging behind other countries, especially in Southeast Asia, in terms of local government digital transformation. This is due to several obstacles, including the lack of standardization related to implementation, inadequate human resources, uneven infrastructure, lack

of community involvement, and lack of government commitment (Setyasih, 2022). In Sumbogo's (2019) study, it is found that village communities get easy access to population administration services due to the use of information and communication technology in public services. The village government was able to speed up services because of this innovation. Although some residents initially objected and voiced objections when the service innovation was publicly disseminated at the beginning, overall, residents' impressions of the ICT innovation were good. People objected because they found it difficult to follow the implementation of the new public service system by the Village Government (Sumbogo et al., 2019). The findings of Jamaluddin et al. (2018) in Kemal (2022) reveal that village finances, as defined in Law Number 6 of 2014, are all village rights and obligations that have a monetary value and all goods and services used to carry out village rights and obligations. The village government must prepare a report on the Realization of APBDes Implementation and an Accountability Report for the Realization of APBDes Implementation on village finances. This report was created using the village financial management cycle, starting with planning and budgeting, implementation and administration, and ending with reporting and accountability (Thareq, 2022). Research findings regarding the reports include: (1). The Hunuth/Durian Patah Village BUMDES has generated some money, however, it has not been sufficient to qualify as Hunuth's Original Village Revenue (PADes). (2). Hunuth BUMDES is at level 3 by which it should conduct a marketing feasibility study and training for capacity building (Tunaya et al., 2014).

Research conducted by Tuanaya (2022) show that the steps of distributing cash assistance to the community are as follows: (1) the village government first collects data on Waiheru community members, then verifies recipient data; (2) recipients of cash assistance through the Village Fund (DD) scheme are required to have an account at Bank Rakyat Indonesia to receive funds; (3) planning, implementation, and final stages of receiving cash assistance (Tuanaya and Wance, 2022). According to Puspasari and Purnama (2018) in Kemal (2022), the Financial and Development Supervisory Agency (BPKP) and the Directorate General of Village Administration of the Ministry of Home Affairs collaborate to create the Village Financial System Application (Siskeudes) which was formerly called SIMDA Desa. This application was created to improve the standard of village financial management. To make it easier for users to utilize the SISKEUDES program, its functions are made basic and easily accessible (Thareq Kemal, 2022). Thus, it is necessary to analyse and to find out how the Digital Transformation of Financial Transactions of the Mamala Negeri government in supporting the inclusion of the Village Finance System (SISKEUDES) and what are the determinants of the Digital Transformation of Financial Transactions of the Mamala Negeri government in supporting the inclusion of the Village Finance System (SISKEUDES).

## **2. Materials and methods**

The type of research used is qualitative. This type produces descriptive data in the form of images sourced from various informants and community behaviour that can occur in the field. The approach used in this research is descriptive in which the

purpose is to present a description of the details of the problem of a situation, or social relations and the approach taken by the government in resolving boundary disputes. Through the type of qualitative research, the data are used to describe the Digital Transformation of Financial Transactions of the Mamala Negeri government in supporting the inclusion of the Village Finance System (SISKEUDES). The data can also be analyzed as a determinant factor of the Digital Transformation of Financial Transactions of the Mamala Negeri government in supporting the inclusion of the Village Finance System (SISKEUDES). This research is located in Mamala Negeri, a village in Salahutu District, Central Maluku Regency.

This research adopts an in-depth qualitative approach to understand the Indonesian government's policy through the Ministry of Home Affairs to issue Permendagri Number 20/2018 on Village Financial Management to replace Permendagri Number 113/2013. The change was made by which all village governments in the Republic of Indonesia become cleaner, more transparent and accountable in managing village finances. It is expected that through the policy, all village governments are not trapped in mismanagement, which ultimately drags them into corruption. This approach is chosen since it can provide a comprehensive understanding on how all village government officials as users of the SISKEUDES application manage their works for most of them are not updated to technology.

The initial stage of data collection is conducted through in-depth interviews with relevant informants, especially those who are responsible for village financial management, both for the Village Fund Allocation (VFA) sourced from the APBD and for village funds (VF) which come from the Central Government. For this reason, the informants involved consist of the Head of the Mamala Negeri government, the Mamala Negeri secretary, the Mamala Negeri saniri, the empowerment group and several community leaders. The interview focus on obtaining direct views and experiences from stakeholders on how the digital transformation of financial transactions of the Mamala Negeri government in supporting the Inclusion of Village Finance Systems (SISKEUDES) is, and what are the determinants of the digital transformation of financial transactions of the Mamala Negeri government in supporting the inclusion of Village Finance Systems (SISKEUDES). Furthermore, direct observation is carried out to see and observe directly at the research location in order to obtain information about the readiness of the resources of village government officials and how they face the changes in government policy. These policy changes are related to village fund management, which amounts to billions of rupiah, and the availability of SISKEUDES technology support tools in the village.

In addition, these observations allow the researcher to gain a deeper understanding of the day-to-day practices and challenges faced in managing village finances through the use of digital-based technology applications that bring innovative changes to the quality of life of individuals and communities. Surely, this will be a problem for elements of the village government apparatus who do not have a high level of education and are far from technological advances. Therefore, to overcome the technical and physical limitations of the analog era according to Kwon et al. (2018); Yoon (2021), it is necessary to carry out digital transformation which refers to a strategy to reform analog systems and services from the past by adopting and applying digital technology to people, organizations, systems, and services, or

technology trends and services related to them (Park, 2020).

Meanwhile, document analysis is also carried out to analyze policies and regulations and other sources to support primary data obtained through books or references or documents related to this research. Secondary data include: documents in the form of archives from the determination of territorial boundaries, notes of community meetings with local governments, notes of Negeri government meetings and Mamala Negeri fund report documents. Furthermore, the data are synthesized through triangulation, which is comparing information obtained from various sources to strengthen the validity of the findings and ensure compatibility between information obtained from various sources (Ekoto et al., 2022). Through this approach, this research can provide a deeper understanding of the digital transformation of financial transactions of the Mamala Negeri government in supporting the inclusion of the Village Finance System (SISKEUDES). In addition, information is also obtained about the determinants of the Mamala Negeri government's digital transformation of financial transactions in supporting the inclusion of Village Finance Systems (SISKEUDES). The findings of this study can provide valuable insights for policy makers and practitioners in the development of effective and sustainable government financial transaction in the digital transformation strategies, especially for village government officials throughout Maluku province in particular and Indonesia in general.

### **3. Results and discussion**

#### **3.1. Digital adaptability of Negeri government financial transactions**

The Village Financial System (SISKEUDES), which is related to the implementation of Law Number 6 of 2014 concerning Villages describing the opportunity for villages to organize the administration of government and the implementation of independent development known as village autonomy including village financial management, is one of the implementations of Government-to-Government (G2G) (Choiriyah et al., 2022). In her research findings, Fitriansyah (2021) states that the latest development is the encouragement given to local governments to create "Digital Villages". According to the authors, the success of this program depends on money management and financial literacy, as well as the infrastructure of digital village equipment (Fitriansyah and Nuryakin, 2021). The emergence of an online public service delivery system known as e-government is just one example of how this technological breakthrough has had a major impact on government operations (Supriyanto, 2016). World Bank (2017) survey results that 40 percent of the world's poorest adults who earn the least are constantly in danger due to financial inclusion issues, especially in developing countries like Indonesia. Based on the survey and research findings from the Global Findex1 by Demirgu c-Kunt et al. (2015) on the referred cohort in Indonesia, it was found that only 22% of the overall cohort adult population had access to a bank account, other formal financial institutions, or mobile money services; of these, only 14% and 11% had made deposits and loans through an account in the previous 12 months (World Bank, 2017). All villages in Indonesia have routinely implemented the Village Financial System Application (SISKEUDES). **Table 1** below shows the data of villages that

have implemented the SISKEUDES application.

**Table 1.** The use of Siskeudes in Indonesia 2015–2019.

Year	2015	2016	2017	2018	2019
Village	9.920	19.608	64.756	69.875	71.249
Regency/City	60	164	403	414	417

Source: Ministry of communication and information, 2023.

The Village Financial System (SISKEUDES) has increased every year from 2015 to 2019; the largest increase occurred in 2017, when there were 45,148 more villages using the system compared to 2015. To encourage consistent use of SISKEUDES by providing socialization and technical support, the Financial and Development Supervisory Agency (FDSA) advocates the growth of village apparatus human resources related to village financial management based on the Village Financial System (SISKEUDES). This research found that under the Mamala Negeri government, operators have the ability to adapt to changes in the latest SISKEUDES 1.0 application. The ability to operate is supported by training and guidance conducted by the Central Government and the Central Maluku Regency Government. Training and guidance are very important factors for SISKEUDES operators in dealing with these changes.

### **3.2. Level of knowledge related to the village finance system (SISKEUDES)**

The technological inculcation of almost every element of people's lives is now affected by the development of information and communication technology (ICT). Almost every region in Indonesia, both urban and rural, is now using ICT. The ability of local communities, leaders and village officials to be able to manage village websites is crucial to have. The results of research by Pertiwi et al. (2021) show that although the village government uses a website, it is less transparent how village officials manage the community. This should increase public trust, but the opposite happened, which led to a decrease in public trust in village officials because the community considered village officials to be less transparent in governance (Pertiwi et al., 2021). In order to accelerate the national digital transformation agenda through five steps, President Joko Widodo gives five directives in a Limited Meeting on Digital Transformation Planning. These directives include (1) accelerating the development of digital infrastructure, (2), providing internet services, (3), creating a digital transformation roadmap in strategic sectors, (4), developing a national data center integration strategy, and (5), developing a national data center integration strategy (Setkab, 2020). According to Trisnadewi (2020) cited by Novita Anggraeni (2022), the expected result of the implementation of SISKEUDES is that the village government can implement various laws and regulations with a database based on the principles of effectiveness, economy, efficiency, transparency, accountability, and auditability in every aspect of village financial management (Novita Anggraeni, 2022).

Currently 78 local governments have adopted SISKEUDES online, the national APBDes preparation is 93.57%, and village financial administration is 80.69%. This

is the latest positive news. The SISKEUDES R.2.0.3 application provides the necessary tools for effective village financial management during the COVID-19 pandemic, including the ability to change the APBDesa in SISKEUDES multiple times, create an Unexpected Expenditure (BTT) implementation menu, and create BTL-DD absorption reports. The SISKEUDES application development team, administrators, regency/city governments, heads of provincial/regency/city and village community empowerment offices, and BPKP representatives made up the majority of the 500 participants (BPKP, 2020). The Central Maluku local government conducted Technical Guidance (Bimtek) for financial managers in the country or village and SISKEUDES operators to be able to have reliable knowledge, abilities, and technical skills. The training was carried out due to changes in the use of the SISKEUDES 1.0 application to SISKEUDES version 2.0 in Negeri financial management (ekpresimaluku.com, 2019).

Recent findings show positive progress in the implementation of the online Village Finance System (SISKEUDES) in Indonesia. With 78 Local Governments (LGs) having adopted SISKEUDES online and the national APBDes preparation rate reaching 93.57%, and village financial administration reaching 80.69%, signifies a significant step in improving the efficiency and transparency of village financial management. This positive news is further reinforced by the launch of the SISKEUDES R.2.0.3 application which provides essential tools for village financial management during the COVID-19 pandemic. The ability to modify the APBDesa, create an Unexpected Expenditure (UE) implementation menu, and compile BTL-DD absorption reports are features that support the effectiveness of village financial management. The Sinkeudes application development team, along with the local government, the head of the community empowerment office, and BPKP representatives, have been integral in the successful adoption of SISKEUDES.

In Central Maluku, the implementation of technical guidance to financial managers in Negeri or villages as well as SISKEUDES operators demonstrates the commitment of the Local Government in improving the necessary knowledge, abilities and technical skills. This training is necessary given the change from SISKEUDES version 1.0 to version 2.0, indicating an effort to adapt to new technology in public financial management. This reflects a real effort to improve village financial management processes to achieve greater efficiency, transparency and accountability.

### **3.3. Adequate human resources related to the management of the digital village finance system (SISKEUDES)**

The Director General of Village Administration of the Ministry of Home Affairs and BPKP have been working together since 2015 to oversee village financial management accountability and support all village officials in managing village financial accountability, according to Dadang Kurnia, Deputy Chairman of BPKP. In the BPKP for Supervision of Regional Finance Implementation, the needs of village officials can be met with SISKEUDES. Therefore, the Internal Control System in SISKEUDES for village officials has embedded a good village financial internal control system, including its output (BPKP, 2020). The SISKEUDES 2.0

application requires qualified human resources, supporting facilities and infrastructure. All of which are key factors in its implementation. There are still many human resources who are not qualified for their jobs and the lack of adequate infrastructure causes the implementation of the SISKEUDES 2.0 application to be less than ideal. In performing an activity, especially when running the SISKEUDES 2.0 application, human resources are the main component (Thareq, 2022).

Research findings from Anggreani and Yudiantoro (2022) state that the implementation of SISKEUDES in Tulungrejo village has not been fully utilized because human resources and in this case village employees do not fully understand the system, which has an impact on employee performance. It is already known that implementing a maximized system can increase staff productivity (Novita Anggraeni, 2022). Meanwhile, in Kemal's (2022) findings, it is found that the implementation of the SISKEUDES 2.0 application is less successful because there are still several obstacles to the resources. In addition, it is also supported by the ineffective operation of the SISKEUDES application by the apparatus due to the limited ability of users to master computers and information technology (Thareq, 2022). There are still several problems with the existing resources to support the implementation of the SISKEUDES 2.0 application (Wibowo et al., 2020).

*“So far, there have been no facilities by the local government to support the implementation of the SISKEUDES 2.0 application. It is still lacking and limited. Some of us use personal laptops for community services and the limited internet connection is also an obstacle”* (24 June 2023).

To overcome the constraints of human resources (HR), namely:

*“Regarding the constraints on apparatus resources in operationalizing the SISKEUNDES application, we are assisted by village assistants who understand and have expertise in operationalizing the SISKEUDES application”* (27 June 2023).

In addition to the results of interviews with SISKEUDES operators in Mamala Negeri, Leihitu District, Central Maluku Regency.

*“Financial planning using the SISKEUDES application in Mamala Negeri can help us organize a systemized and more organized APBDs. Planning using the SISKEUDES application is more reliable, organized and the results are more accountable and transparent”* (24 June 2023).

According to the findings from interviews with Mamala Negeri Siskeudes operators, when using this system, employees are still confused because proper data input is needed while the system recognizes errors and prevents confusion when errors occur. These results are consistent with the findings of Riani (2019) cited by Kemal (2022) that some of the obstacles in operating SISKEUDES come from various sources, such as a lack of understanding in computer operations. To have successful implementation of the operation, the team in terms of human resources in Mamala Negeri must consist of a number of staff and the expertise of implementers (Thareq, 2022). In fact, there are only 2 computers and they are used to implement services rather than to run the SISKEUDES program. This condition shows that resources in terms of facilities and infrastructure are not sufficient to support the program. Meanwhile, according to Thareq (2022), the disposition factor in the implementation of the SISKEUDES 2.0 application in Rupe village has not been



effective. The ineffective performance of the staff in operating the SISKEUDES application is caused by to the lack of knowledge and skills in the field of information technology and computers (Thareq, 2022).

In addition, government agencies that rely heavily on technology, IT, strategy and human resources must embrace digital transformation (Tulungen et al., 2022). Digital transformation is about taking value from a company's operations and delivering it to customers and utilizing data and analytics to create new experiences and ideas. In Rahadian's (2019) research findings, he states that an alternative approach to changing bureaucratic work habits and behavior is to revitalize the bureaucracy through e-governance (Rahadian, 2019). The implementation of e-government is expected to expand public service transactions that are not limited by time and place restrictions, and at a cost that is affordable to the wider community (Supriyanto, 2016). The transition from e-government to digital government requires the implementation of appropriate measures to make deeper changes in online service delivery through government portals and become a broader branch of government business (Setyasih, 2022). A great leader is the type of digital leader who can make decisions in the face of complexity by having deep knowledge and understanding and applying that knowledge for interpretation and synthesis of thought (Tulungen et al., 2022). The quantitative increase is significant, but the quality is still lacking due to limited human resources, infrastructure, and regulations (Rahadian, 2019).

The implementation of the digitization of the Village Finance System (SISKEUDES) by the Central Maluku Regional Government has resulted in findings that encourage the strengthening of various crucial aspects. One of them is through the SISKEUDES derivative regional regulation which is an important legal foundation for managing SISKEUDES effectively and in accordance with applicable regulations. In addition, the Regent Decree becomes an operational instrument that determines concrete steps in the management of SISKEUDES at the local level. First, strengthening the competence of human resources is a key focus, with targeted education and training/technical guidance that provides an in-depth understanding of the SISKEUDES concept and practical skills in operating it. Information technology education is also the key by ensuring that human resources are trained in using the digital infrastructure that supports SISKEUDES.

Second, infrastructure needs to be improved through intensive assistance, especially in terms of maintenance and development of information technology systems that support SISKEUDES. Education on inclusive technology infrastructure also needs to be prioritized so that all human resources are involved in understanding and optimizing the use of SISKEUDES. Third, connectivity and collaboration between various parties, such as local government, Negeri government, Non-governmental Organizations NGOs, and the private sector, is essential in mobilizing holistic support. This synergy not only expands the support network but also enriches perspectives, resources, and innovations that can be applied in the development and use of SISKEUDES. This close collaboration has a positive impact on improving efficiency, transparency and accountability in village financial management. With the strengthening of policies, human resource competencies, infrastructure, and strong connectivity and collaboration, the implementation of

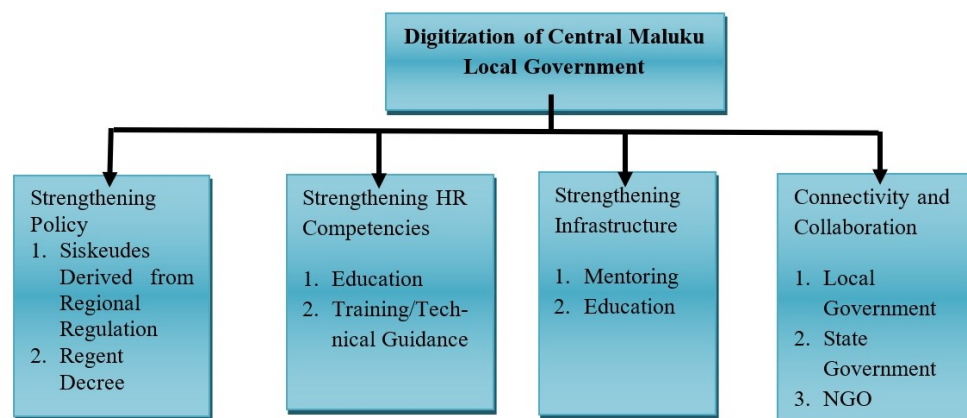
SISKEUDES digitalization in the Central Maluku local government can achieve sustainable success and provide maximum benefits for village communities in more efficient and transparent financial management.

### **3.4. Socialization of digital governance of the village finance information system (SISKEUDES)**

SISKEUDES governance according to Dina (2017) is expected to help increase the effectiveness of its apparatus in monitoring village finances. To realize or improve the professionalism of government officials and be able to assist the government's success in terms of implementing the village financial system, coaching is carried out in the financial sector (Novita Anggraeni, 2022). Saputri (2021) finds that financial success factors are influenced by first, central government support and local government commitment are very important for implementation; second, the availability of human resources with the necessary skills and competencies reflects the internal capability factor of the local government; third, the usability factor is that its implementation has the potential to benefit every component that uses it, including the government, outside parties, and the general public (Saputri, 2021b). The results of research by Basyiah et al. (2022) in the Malang, Pasuruan, and Madiun regions in 2016 found that the SISKEUDES system is more straightforward, secure, and more open to the public. However, some effects on the SISKEUDES system were operated, even if in the future more forward-thinking individuals because SISKEUDES is more secure and accountable (Basyirah et al., 2022).

Taufik (2019) found that e-government in Panjalu village using the Backus e-government solution model consists of three stages: informational stage, interaction stage, and transformation stage (Palvia and Sharma, 2007). E-government is used in this informational stage to deliver information from the village government to the community, private sector, and government as stakeholders. Stakeholders can communicate with the government directly during the interaction stage using available contact channels. The transformation stage allows all government services to be used by individuals with personal accounts in various public services needed by the community (Otong and Dini, 2019).

According to Nugraha (2018), creating a one-way management paradigm through top-down directives is necessary for an efficient digital transformation process in bureaucratic settings. The function of central government as top management has a significant impact on how well local governments utilize digital technology. The support needed to digitally transform financial transactions can be done in the following ways: (1) establishing a clear and directed vision and mission; (2) providing proper allocation of resources (human, time, finance, etc.); (3) supporting infrastructure and facilities; (4) providing even and continuous socialization to every element involved; and (5) building coordination and synergy (Saputri, 2021). **Figure 1** Below presents SISKEUDES Digitalization Flow in Central Maluku Regency.



**Figure 1.** Flow of Siskeudes digitization of central Maluku local government.  
Source: Research analysis results, 2023.

### 3.5. Strengthening the SISKEUDES policy in Central Maluku Regency

The policy governing the Task Force for the Acceleration and Expansion of Regional Digitalization was issued through Presidential Regulation Number 3 of 2021. This strategy is considered to provide opportunities for local governments in the era of digital transactions in administrative devices. The regional governments require the issuance of a derivative legal umbrella that regulates the electronicization of local government expenditure and revenue transactions. Only 210 LGs (45%) out of 467 registered LGs nationwide have issued such derivative provisions, according to Bank Indonesia statistics (Saputri, 2021b). Research by Nurchim and Nofikasari (2018) in Punggul Village, Bandung Regency, has developed a type of digital-based innovation that manifests itself in several ways, including: 1) provision of infrastructure to support community activities; 2) development of various web-based and mobile information systems and applications; and 3) introduction of community empowerment programs. Because of these developments, Punggul village was recognized as a “Digital Village” in 2019 and became the first example in Badung Regency (Putu et al., 2022).

The finding of Tulengen et al. (2022) study was the digital leadership in achieving digital transformation. Work procedures in the government sector will be further assisted by information technology. In addition, the use of big data facilitates the decision-making process of leaders (Tulungen et al., 2022). Innovative governance can be used to describe the management of Punggul Digital Village which still needs to be improved and optimized, especially in terms of partnership indicators and leadership and community empowerment (Putu et al., 2022). This is in line with the task of the Ministry of Home Affairs to activate the non-cash program in all financial transactions by all local governments. Regional financial management must be carried out in accordance with Law Number 23 of 2014 in a transparent and accountable ways. Efforts to digitize these transactions are considered important for improving public supervision and government accountability processes.

### 3.6. SISKEUDES connectivity and collaboration in Central Maluku

Local governments must be able to utilize technological advances through digital-based public services in order to keep up with the fourth industrial revolution.

The implementation of regional autonomy provides flexibility for local governments to catch up. One of which is related to their works implementation. The application of information technology in public services has the potential to accelerate and expand the bureaucratic digitization process. Local governments should use system development and information technology as a strategy to gain a competitive advantage in the digitalization era. To improve effectiveness, efficiency, and productivity within local governments, this strategic function needs to be improved. Digital transformation in financial transactions refers both to contacts between local governments and the use of electronic means in financial activities carried out by local governments with the public as a party offering services. The main objective of implementing this digitization process is to ensure accountability and transparency in every transaction conducted. To ensure the accountability and the transparency in every transaction, there should be a collaboration among institutions provided. Below is **Table 2** which shows the SISKEUDES collaboration in Central Maluku regency.

**Table 2.** SISKEUDES collaboration in Central Maluku.

<b>Institutions</b>	<b>Form of Collaboration</b>
Local Governments	<ol style="list-style-type: none"> <li>1) Integration of data and information.</li> <li>2) Pilot project program.</li> <li>3) Infrastructure assistance for villages</li> </ol>
NGOs	<ol style="list-style-type: none"> <li>1) Web development of village systems and applications.</li> <li>2) Instructors to assist community empowerment programs.</li> <li>3) Provision of internet network.</li> </ol>
Negeri/Village Governments	<ol style="list-style-type: none"> <li>1) Implementers and targets of village programs</li> <li>2) Policy advocacy</li> <li>3) Assisting the dissemination of village information</li> </ol>

Source: Research analysis results, 2023.

Nowadays, various software and applications have been created to assist public organizations in improving the quantity and quality of public services provided to the community. A leader can implement the ideas and principles of e-leadership by using the right information technology (Purwoko and Rokhman, 2022). The transfer of local government financial transactions to electronic formats is expected to improve public service standards. Through the use of digital media, local government agencies can improve their internal efficiency and open up more opportunities for public interaction (Saputri, 2021). The Directorate General of Village Government Development (Pemdes) of the Ministry of Home Affairs (Kemendagri) launched e-Prodeskkel or village profile and the Village Financial System Application (SISKEUDES) 2.0.5 with the addition of activity tagging features and monitoring features in the implementation of village expenditures for the government and local governments. This system is an official government application and the only application used by village governments in managing village finances (Jawapost.com, 2023). Therefore, to achieve organizational goals, leadership is very important in guiding public organizations. Leadership and organizational management are inseparable. However, leadership cannot be separated from organizational management (Adair, 2008). BPKP as the application developer must give approval before using the village finance application. The local

BPKP representative will consider requests from local governments for the use of this application. To activate the application to all villages within the local government concerned, the application will be coordinated by the local government (Bpkp.co.id, 2019).

The findings of this study reveal various forms of collaboration between local governments, NGOs, and village governments in supporting the implementation of information technology in villages. This collaboration is essential to accelerate the digitization of public services and improve effectiveness, efficiency, and transparency in financial and information management at the village level. Local governments play a key role in integrating data and information to ensure that all parties have equal access to the necessary information. They also run pilot projects that aim to test and refine the system before it is widely implemented. In addition, local governments provide much-needed infrastructure assistance to villages, such as computer hardware, internet access, and supporting software.

Meanwhile, NGOs contribute significantly to supporting information technology in villages in a more direct way. They are responsible for the creation of web systems and applications specifically designed for village needs. In addition, they provide trained teachers to assist in community empowerment programs, which are essential to ensure that villagers can use these technologies effectively. NGOs also often provide the internet network which is a key element in ensuring accessibility and connectivity in remote areas. Thus, the village government itself has a dual role as both the implementer and the target of the program. The village government is responsible for implementing the programs that have been designed and also plays a role in policy advocacy to ensure that the policies made support local needs and conditions. In addition, the village government assists the dissemination of village information, ensuring that the entire village community get benefits from the implemented information technology. The need for effective collaboration between local government, NGOs, and village government is expected to bring significant positive changes in village management, increase community involvement, and strengthen accountability and transparency in every transaction and activity.

### **3.7. Local governments support for the implementation of the village finance system (SISKEUDES)**

According to the results of the BPKP survey in 2014 on the distribution of financial budgets in the village, it needs to be managed transparently and accountably. The amount of budget in the village is large but the knowledge of village officials in managing the village finances is very poor. As a result, the SISKEUDES application is issued by the Ministry of Home Affairs (Kemendagri) and BPKP as a way to oversee financial management. SISKEUDES is donated (given) to villages throughout Indonesia by which regency/city governments can conduct training of village officials and operators in each district and involve facilitators from the Central Government and BPK (Kominfo.go.id, 2018).

The support from the government to set up the SISKEUDES infrastructure is training opportunities and resources for financial management are accessible. The

support can be done. (1) Regency and district officials need education on how to oversee village finances and assist communities as needed. To improve knowledge exchange between instructors and students, video tutorials, e-learning resources, and user discussion groups on social media are required. (2) The involvement of village facilitators in local capacity development is greatly assisted by village facilitators. However, these facilitators do not consistently assist with the implementation of SISKEUDES. Village facilitators can be engaged to support the implementation of SISKEUDES while the Ministry of Home Affairs, BPKP, and the Ministry of Villages, Development of Disadvantaged Regions and Transmigration (DRT) can coordinate this. (3) The obligation to use SISKEUDES means that villages should receive instructions from all regents and mayors (who are accountable to the governor) on how to use SISKEUDES to prepare their budgets and financial reports. (4) Technical evaluation where BPKP and the Ministry of Home Affairs conduct technical assessments or special audits of SISKEUDES to ensure that it complies with the rules, is error-free, and meets user demands. (5) Certification, which ensures quality and reliability, requires some sort of accreditation from an unaffiliated business. (6) Integration with other programs such as the Village Development Information System (VDIS at the Ministry of Villages) and the Village Fund Disbursement Application (VFDA at the Ministry of Finance) means that SISKEUDES should be the primary data source. (7). The online/web version is an online version of SISKEUDES that automatically synchronizes among villages and districts/cities. This version requires a strong network foundation (Keuangandes.com, 2018).

Moreover, the results of field analysis are described in the SWOT analysis in the **Table 3** below:

**Table 3.** SWOT analysis of the SISKEUDES digitalization cycle in Mamala Negeri.

No.	Analysis	Rank
<b>1</b>	<b>Strengths</b>	
	The Central Government and Central Maluku Regency Government carry out competency improvement through education and training.	1 (Major)
	Local governments are given autonomy through APBDes to manage related budgets according to program needs.	1 (Major)
	The formulation of a digital-based competency improvement plan with a local cultural approach.	2 (Minor)
	Career bureaucracy reform within the Central Maluku local government in increasing the number and competence of Negeri operator employees.	2 (Minor)
<b>2</b>	<b>Weaknesses</b>	
	The absence of a derivative policy by the Central Maluku Regency Government for the implementation of SISKEUDES Negeri transaction digitization.	2 (Minor)
	The long bureaucratic chain in the local government, hampering the acceleration and expansion of the SISKEUDES electrification program in the Negeri.	2 (Minor)
<b>3</b>	<b>Opportunities</b>	
	Support from the Central Government through Presidential Decree and Ministry of Home Affairs Circular Letter as the main legal umbrella.	3 (Major)
	Large budget allocation from the central government in the implementation of digitalization of local government financial transactions.	4 (Minor)
	Support from the central government, authorities, banks and e-commerce parties in building non-cash financial transaction service infrastructure in the regions.	3 (Major)
	Training and guidance from the Central and Local Government.	3 (Major)

**Table 3. (Continued).**

No.	Analysis	Rank
4	<b>Threats</b>	
	Geographical conditions in Central Maluku Regency cause gaps in the preparation of SISKEUDES network and technology facilities and infrastructure.	4 (Minor)
	The limited operation of the APBDes Negeri in providing facilities and infrastructure to support the implementation of SISKEUDES electrification.	4 (Minor)
	Public demand for fast, precise, integrated, and accurate data and information.	4 (Minor)

Source: Analysis of research documents, 2023.

Based on the results of field analysis through SWOT analysis, it is found that: (1) In the strength of the implementation of SISKEUDES, the factor of increasing competence through education and training becomes a strength but becomes a minor competence of operators on the Negeri which is weak. (2) The weakness factor is the absence of derivative regulations on SISKEUDES as a legal umbrella and derivative policies at the level of Central Maluku Regency and Mamala Negeri government or other villages in Central Maluku. (3) The opportunity factor is the availability of training and guidance from the central and regional governments to operators and Negeri financial managers to increase the capacity of SISKEUDES in Mamala and villages in Central Maluku Regency. (4) Threat factors are the geographical conditions in Central Maluku Regency causing gaps in the preparation of network facilities and infrastructure and SISKEUDES technology.

The results of this study are very relevant to the findings of Aryanti and Alfatih (2018) who state that the weak implementation of the SISKEUDES program is caused by relationships with communicators, media, and the availability of Procedural Operational Standards (POS) (Aryanti and Alfatih, 2018). In addition, this research is also in line with the improvement of the SISKEUDES system mentioned by Aritanto et al. (2022), which emphasizes the importance of meeting user needs in terms of flexibility, assurance, accuracy, and system security (Aritanto et al., 2022). This research also supports the findings of Bawono et al. (2020), which highlight the need to maximize participation in the management of village funds and carry out responsibilities to deal with work risks (Bawono et al., 2020). However, in contrast to Pratiwi's (2020) findings which state that user convenience has no effect on the use of SISKEUDES, this study finds that quality system has a strong influence on management support, training, and user involvement (Rahayu et al., 2019).

Thus, the Government needs to strengthen village technology infrastructure and provides ongoing training for village officials to optimize the use of SISKEUDES. This should be accompanied by the development of clear and simple SOPs, as well as improved system security and accuracy to protect village financial data. In addition, the government should ensure the system is flexible to local needs and integrate management support and regular training. Encouraging active community participation in the oversight and management of village funds is also important, along with continuous evaluation and monitoring for constraint identification and quick fixes. Finally, collaboration with the private sector and academia is needed to understand innovations in technology and capacity building and ensure effective

implementation of SISKEUDES and better village financial inclusion.

#### **4. Conclusion**

Researchers conclude that the SISKEUDES 2.0 application should be implemented in Mamala Negeri, Leihitu District, Central Maluku Regency based on research findings and discussion, namely: The findings of the digital adaptive capabilities of SISKEUDES are that the Central Government continues to oversee the digital transformation efforts of Local Governments as well as coordination and synergy efforts carried out by relevant authorities and stakeholders. The advantages of electrification in local government financial transactions in general are as follows: (1) practical and simple since it does not require cash in transactions and is also considered more hygienic; (2) wider access, because transactions are carried out through electronic channels and digital means, therefore non-cash transactions are considered capable of reaching a wider area; (3) transaction transparency, because through non-cash transactions, transaction actors are made aware of the transaction; (4) more systematic transaction planning, which allows each transaction to be recorded in full both planning and realization.

The finding of the Human Resources (HR) indicator is that the provision of facilities and infrastructure in supporting HR at Mamala Negeri is still minimal, making it difficult to apply the SISKEUDES 2.0 application. To be able to assess the problem and take action to improve facilities and infrastructure, the village government must communicate with the Community and Village Empowerment Office (CVEO) in Central Maluku Regency to provide human relation support facilities such as computers, operators or assistants, and internet networks. In addition, the low quality of human resources is influenced by the lack of continuous training and monitoring from the local government and the lack of professional graduates available at the Mamala Negeri office. The Central Maluku Regency Government and the Mamala Negeri Government need to prepare a draft local regulation on the application of SISKEUDES as a legal umbrella at the regional and Negeri/village levels.

The findings reveal that the apparatus knowledge or ability level indicator are inefficient in operating of the SISKEUDES application. There is an absence of apparatus knowledge and expertise in the field of information technology and computers. The disposition indicator shows reduced effectiveness. Because of their ignorance to always learning, the operators of the SISKEUDES application in Mamala Negeri, Central Maluku Regency have a less understanding on the application works. The official operators still have other people to make VRB reports using the SISKEUDES application. Age, education, and accessibility are the factors that cause the efforts to obtain financial and or digital facilities and services related to daily activities are still weak and need to be improved through continuous trainings.

The implications of this research finding for policy and practice indicate the need for significant improvements in several aspects to support the implementation of the SISKEUDES 2.0 application in Mamala Negeri or village, Leihitu District, Central Maluku Regency. The findings highlight the importance of policy support



from district and village governments to provide adequate facilities and infrastructure, such as computers, internet networks, and trained operators. In addition, improving the quality of human resources through continuous training and technical guidance is also crucial. The government also needs to develop supporting regulations such as regional regulations or state regulations to provide a legal umbrella for the implementation of the SISKEUDES application at the village level.

In practice, village governments should seek effective coordination with the Department of Community and Village Empowerment (DPMD) to ensure the availability of necessary facilities and training. The use of the SISKEUDES application can be enhanced through educational campaigns to improve digital literacy and technological understanding among village officials. In addition, it is important to conduct regular monitoring and evaluation to identify obstacles and make necessary improvements.

For future research, some areas that can be developed include: (1) Development of effective training programs: studies that examine the best training methods to improve the digital literacy and technological skills of village officials. (2) Regulation evaluation: studies that evaluate the impact of Perda or Perneg on the effectiveness and efficiency of SISKEUDES application implementation in villages. (3) Success case studies: comparative studies that examine the successful implementation of SISKEUDES in other areas that have similar conditions to Mamala Negeri, to identify best practices that can be adopted. (4) Technology infrastructure needs analysis: an in-depth study of technology infrastructure needs in villages to support digital transformation, including solutions to overcome existing limitations. (5) Community participation in village financial management: a study exploring effective ways to increase community participation in village financial management and evaluation toward the use of digital applications.

**Author contributions:** Conceptualization, WT and MW; methodology, MW; software, WT; validation, WT and MW; formal analysis, MW; investigation, WT; resources, WT; data curation, MW; writing—original draft preparation, WT; writing—review and editing, MW; visualization, MW; supervision, WT; project administration, WT; funding acquisition, WT. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by University of Pattimura grant number 1212/UN13/SK/2023 and Indonesian Education Scholarship (BPI) of the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia under the Education Fund Management Institute (LPDP) of the Ministry of Finance of the Republic of Indonesia grant number 00798/J5.2.3//BPI.06/9/2022.

**Conflict of interest:** The authors declare no conflict of interest.

## References

- Ariyanti, A., & Alfatih, A. (2018). Does the Implementation of the Village Financial System (Siskeudes) Program Improve the Quality of Financial Reports and Village Government Performance? *Open Access Indonesia Journal of Social Sciences*, 1(2), 1–12. <https://doi.org/10.37275/oaijss.v1i2.6>
- Ariyanto, D., Dewi, A. A., Hasibuan, H. T., et al. (2022). The Success of Information Systems and Sustainable Information

- Society: Measuring the Implementation of a Village Financial System. *Sustainability*, 14(7), 3851.  
<https://doi.org/10.3390/su14073851>
- Basyirah, U., Brahma, B., Syafira, A. P., et al. (2022). Public service innovation at Landungsari village office (Indonesian). In: Proceedings of the simposium nasional “Tantangan Penyelenggaraan Pemerintahan Di Era Revolusi Industri 4.0. pp. 440-463.
- Bawono, I. R., Kinasih, A. D. M., & Rahayu, A. K. (2020). Factors Affecting Accountability of Village Fund Management through Implementation of the Village Financial System (SISKEUDES). *Journal of Accounting and Investment*, 21(3).  
<https://doi.org/10.18196/jai.2103160>
- BPKP. (2017). Guidance on the implementation of Siskeudes in central maluku district (Indonesian). Available online: <https://www.bpkp.go.id/maluku/berita/read/18695/0/bimtek-implementasi-siskeudes-di-kabupaten-maluku-tengah.bpkp> (accessed on 2 March 2024).
- BPKP. (2020). Ministry of Home Affairs and BPKP Launch Siskeudes Application Release 2.0.3.(Indonesian). Available online: <https://www.bpkp.go.id/berita/read/26996/0/>(accessed on 2 March 2024).
- Bpkp.co.id. (2019). Operating Instructions for the Village Financial Management System Application (Indonesian). Available online: <https://www.bpkp.go.id/sakd/konten/2449/Petunjuk-Pengoperasian-Aplikasi-SisKeuDes.bpkp> (accessed on 2 March 2024).
- Choiriyah, I. U., Sabilillah, S. F., & Riyadh, A. (2022). Adaptability of the village financial system (siskeudes) in Larangan village, Candi Sub-District, Sidoarjo District (Indonesian). *Reformasi*, 12(1), 156–166.  
<https://doi.org/10.33366/rfr.v12i1.3235>
- Ekpresi Maluku.com. (2019). Regent of Malteng opens technical guidance on Sinkeudes Version 2.0 in Masohi (Indonesian). Available online: <https://ekspresimaluku.com/bupati-malteng-buka-bimtek-siskeudes-versi-2-0-di-masohi/> (accessed on 2 March 2024).
- Fitriansyah, F., & Nuryakin, C. (2021). Digital Village and Financial Literacy Level of Village Apparatus: A Case Study of Aceh Tamiang District (Indonesian). *Jurnal Ekonomi Dan Pembangunan Indonesia*, 21(2), 220–234.  
<https://doi.org/10.21002/jepi.2021.14>
- Herizal, H., Mukhrijal, M., & Wance, M. (2020). Public Service Accountability Approach in Following the New Paradigm of Public Administration (Indonesian). *Journal of Governance and Social Policy*, 1(1), 24–34.  
<https://doi.org/10.24815/gaspol.v1i1.17327>
- Internet Archive. (n.d.). GATR Accounting and Finance Review, 4(3). <https://doi.org/10.35609/afr.2019.4.3>
- JawaPos.com. (2023). Ministry of Home Affairs Launches E-Prodeskel and Siskeudes Applications (Indonesian). Available online: <https://www.jawapos.com/nasional/01420966/kemendagri-luncurkan-e-prodeskel-dan-aplikasi-siskeudes> (accessed on 2 March 2024).
- Kuangandesa.com. (2018). Siskeudes Q&A (Village Financial System) (Indonesian). Available online: <https://www.keuangandesa.info/2018/12/tanya-jawab-siskeudes-sistem-keuangan-desa.html> (accessed on 2 March 2024).
- Kominfo.go.id. (2018). Siskeudes Application for Village Financial Transparency (Indonesian). Available online: [https://www.kominfo.go.id/content/detail/15734/aplikasi-siskeudes-untuk-transparansi-keuangan-desa/0/artikel\\_gpr](https://www.kominfo.go.id/content/detail/15734/aplikasi-siskeudes-untuk-transparansi-keuangan-desa/0/artikel_gpr) (accessed on 2 March 2024).
- Kusmana, D. (2019). The quality of village government services in the implementation of law no. 6 of 2014 in Nagrarwangi Village, Rancakalong Sub-District, Sumedang District, West Java Province (Indonesian). *Transformasi: Jurnal Manajemen Pemerintahan*, 91–112. <https://doi.org/10.33701/jt.v9i1.612>
- Lee, J., Kim, Y., & Kang, J. (2023). Preparation for Digital Transformation: A Case and Empirical Findings of South Korean Multinational Corporations. *International Academy of Global Business and Trade*, 19(1), 57–74.  
<https://doi.org/10.20294/jgbt.2023.19.1.57>
- Novita, A., & Deny, Y. (2022). The Role of the Village Financial System Application (Siskeudes) in Village Fund Accountability and Apparatus Performance in Tulungrejo Village (Indonesian). *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 11(05), 643-650
- Ombudsman Republic Indonesian. (2020). Getting to know the Public Service (Indonesian). Available online: <https://ombudsman.go.id/artikel/r/artikel--mengenai-pelayanan-publik> (accessed on 2 March 2024).
- Otong, H. T., Dini, Y., Dadan, H. (2019). E-Government Based Village Government Towards Good Governance (Indonesian). *Dinamika: Jurnal Ilmiah Administrasi Negara*, 6(1), 245.
- Pertiwi, A., Dema, H., Mustanir, A., et al. (2021). Implementation of e-government in realizing transparency in village

- governance (Study on Bulu Timoreng Village Government) (Indonesian). *PRAJA: Jurnal Ilmiah Pemerintahan*, 9(3), 130–139. <https://doi.org/10.55678/prj.v9i3.508>
- Pratiwi, D. N. (2020). An Analysis of Village Official's Perception of the Village Financial System (Siskeudes). *Jurnal ASET (Akuntansi Riset)*, 12(1), 165–175. <https://doi.org/10.17509/jaset.v12i1.23067>
- Purwoko, S., Rokhman, A., Tobirin, T. (2022). E-leadership: the concept and influence of digital leadership in digital transformation in the government sector (Indonesian). In: *Leadership and Public Trust. Prosiding Seminar Nasional dan Call for Paper 2022 Magister Administrasi Publik*. pp. 170-181.
- Putu, N., Sari, M., Supriyanti, N. W., et al. (2022). Innovative Governance in Digital Village Management (Case Study: Punggul Village, Abiansemal District, Badung Regency) (Indonesian). *Jurnal Administrasi Publik: Citizen Charter*, 2(1), 1-15.
- Rahadian, A. H. (2019). Revitalization of bureaucracy through bureaucratic transformation towards e-governance in the era of industrial revolution 4.0 (Indonesian). *Prosiding Seminar Stiami*, 8(5), 55
- Saputri, O. B. (2021a). Swot analysis of digital transformation of local government financial transactions in supporting financial inclusion (Indonesian). *INOVASI: Jurnal Ekonomi, Keuangan Dan Manajemen*, 17(3), 482-494.
- Saputri, O. B. (2021b). SWOT Analysis of Digital Transformation of Local Government Financial Transactions in Supporting Financial Inclusion (Indonesian). *INOVASI: Jurnal Ekonomi, Keuangan Dan Manajemen*, 17(3), 482-494.
- Setyasih, E. T. (2022). Digital transformation of local government in the era of society 5.0: a case study in West Java province (Indonesian). *Papatung: Jurnal Ilmu Administrasi Publik, Pemerintahan Dan Politik*, 5(3), 59–66. <https://doi.org/10.54783/japp.v5i3.657>
- Suharyanto, S., & Sofianto, A. (2012). Innovative Integrated Village Development Model in Central Java (Indonesian). *Jurnal Bina Praja*, 04(04), 251–260. <https://doi.org/10.21787/jbp.04.2012.251-260>
- Sumbogo, T. A., Mahestu, G., & Dewi, M. (2019). Adoption of Communication Technology Innovation in Public Service Practices in Village Government (Indonesian). In: *Proceedings of the Conference on Communication and News Media Studies*. pp. 227-238.
- Supriyanto, E. E. (2016). Information Technology (IT) Innovation Policy through Electronic Government Program in Improving the Quality of Public Services in Indonesia (Indonesian). *Jurnal Ilmu Pemerintahan: Kajian Ilmu Pemerintahan Dan Politik Daerah*, 1(1), 141. <https://doi.org/10.24905/jip.v1i1.438>
- Thareq, K. (2022). Implementation of the innovative village financial system application (siskeudes) 2.0 in managing village allocation funds in Rupe Village, Langgudu Sub-District, Bima District (Indonesian). *Jurnal Ilmiah Multi Disiplin Indonesia*, 1(9), 1278-1285.
- TribunAmbon.com. (2022). Inspectorate of Central Maluku will monitor the use of village funds through the Siskeudes application (Indonesian). Available online: <https://ambon.tribunnews.com/2022/02/18/inspektorat-maluku-tengah-bakal-awasi-penggunaan-dana-desa-lewat-aplikasi-siskeudes> (accessed on 2 March 2024).
- Tuanaya, W., & Wance, M. (2022). The scheme of cash transfer distribution during the COVID-19 period through the waeheru village fund, city of ambon. *Sosiohumaniora*, 24(3), 420. <https://doi.org/10.24198/sosiohumaniora.v24i3.40801>
- Tuanaya, W., Tuhumury, J. J. (2020). Village Fund Management and Allocation Model during the COVID-19 Pandemic in Waiheru Village, Ambon City, Indonesia (Indonesian). Available online: <https://archives.palarch.nl/index.php/jae/article/view/5157> (accessed on 2 March 2024).
- Tulungen, E. E. W., Saerang, D. P. E., & Maramis, J. B. (2022). Digital transformation: the role of digital leadership (Indonesian). *Jurnal emba: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 10(2). <https://doi.org/10.35794/emba.v10i2.41399>
- Tuanaya, W., Khairunissa, A., & Wance, M. (2014). Institutional Studies of Saniri Institutions in Negeri of Hila and Mamala as Pillars of Local Democracy in Central Maluku. Available online: <https://ijersc.org/index.php/go/article/view/512> (accessed on 2 March 2024).
- Wibowo, H. T., Triyanto, D., & Sutojo, A. (2020). Implementation of the Village Financial System Application (SISKEUDES) 2.0 in Guru Agung 1 Village, North Kaur District, Kaur Regency (Indonesian). *Journal of Social Politics and Governance (JSPG)*, 2(2), 152–165. <https://doi.org/10.24076/jspg.v2i2.416>