

Research Article

Disparity Between E-Government and Human Resources in The Village

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Abstract

This paper examines technology-based governance (E-Government) and the impact of an information technology-based financial management system (hereinafter referred to as Siskeudes) in the village. Village Law No. 6 of 2014 has opened space for financial autonomy as well as encouraging technology-based financial management models (Siskeudes) in the village. The purpose of this study was to examine the impact of Siskeudes in Panaikang Village, Gowa Regency, South Sulawesi Province using qualitative research method. Data collection techniques were carried out through direct observation and interviews with village officials such as the village treasurer, the Siskeudes operator, and a village staff member. Furthermore, the results of the study were reduced, then described by linking several secondary data and field notes. The data obtained was finally presented as a result of the study. The results found that the Siskeudes triggered a disparity between technological developments and the availability of human resources in the village. The disparity referred to here is the unequal social gap. On the one hand, the development of E-Government in the village, especially the village governance went rapidly; while on the other hand, the capability and skills of human resources are still lagging.

Keywords: *E-Government; Information Technology; Village Government; Financial Management*

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INTRODUCTION

This paper examines the impact of the Siskeudes (Village Financial Information System) on village governance. The main focus of this study is the extent to which the availability of human resources in the village can respond to the dynamics of digital-based financial management. To date, the focus of scholars in Indonesia towards the phenomenon of governance in the village still rarely review the impact of digital penetration in the administration of government. In fact, in the context of several developing countries in the world, digital penetration in village governance has become a serious issue. Some examples include the case of China. Over the last ten years, the issue of digital penetration in villages has been debated by scholars in China. Scholars such as Yong Liu, Hongxiu Li, Vassilis Kostakos, Jorge Goncalves, Simo Hosioa, and Feng Hu are some people who seriously observe the digitalization process that takes place in Chinese villages (Liu et al., 2014). They generally observe the cellular impact on village governance. Meanwhile, in India, digitalization in villages has been observed for a long time by Kumar & Best (2006). Just like in China, digital penetration has become an inseparable part of the development process that takes place in Indian villages. Kumar & Best saw that digital penetration in India had reached the villages. Furthermore, observations made by Atieno and Moturi (2014) have revealed that the penetration of digitalization in villages has been used by villages in Kenya as part of development. In Kenya, digital penetration into villages is called Digital Village Projects (DVPs), a concept that seeks to be applied for development that will take place in villages.

In Indonesia, the issue of Information Technology (IT) in villages began to be heavily discussed along with the enactment of Law No. 6 of 2014. In substance, Law No. 6/2014 regulates the position and authority of the village government. In Law, one form of regulation referred to is the village information system. This elaboration is a follow up to the efforts to present a more professional village governance system with the principles of transparency, accountability, and participation (Diansari, 2016; Fitri et al. 2017; Syaifullah, 2017). In addition, this regulation strengthens the position of Presidential Instruction No. 3 of 2003 concerning the application of E-Government. Although so far, the implementation of E-Government is still limited in the regencies scope (Widya & Sensuse, 2017).

Furthermore, the Government made the Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 10 of 2016 concerning Guidelines for Information and Data Management for Villages, Disadvantaged Regions, and Transmigration. This regulation departs from the foundation that in order to provide accurate, precise, and accountable data and information, it is necessary to manage data and information in villages, disadvantaged regions, and villages in transmigration areas.

One form of elaboration of a series of regulations on IT which has been widely practised in villages is Siskeudes. Siskeudes were introduced as a form of technology implementation that took place in the village. Although this claim can still be disputed, to track precisely the first time the presence of technology was used as part of the financial management system in the village is a question that invites prolonged debate. At the very least, the presence of Law No. 6/2014 as a legal tool regarding village funds is can the basis for implementing the Siskeudes in the village to date.

Up to 2018, as many as 69,875 villages have used Siskeudes. This figure is significant when compared to 2017, which only reached 64,756 villages. In 2015, since the application was first released in Indonesia, the number has reached 15,000 villages. This means that in a year, as many as 5,000 villages will be integrated with Siskeudes; and if it continues in 2019, all villages in Indonesia will be integrated with Siskeudes as showed in Table 1.

Table 1. Siskeudes Implementation Rate by Province in Indonesia

No.	Province	Implementation Rate (%)
1	North Sulawesi	96,66
2	Central Java	91,36
3	East Java	97,55
4	North Kalimantan	86,35
5	East Nusa Tenggara	98,81
6	West Papua	98,11
7	Papua	25,61
8	26 Other Provinces	100

Source: Ministry of Communication and Informatics, 2018

In South Sulawesi, the information and communication system that took place in the village through the Siskeudes application has reached 100%. All villages have been integrated into Siskeudes, including one that took place in Panaikang Village, Gowa Regency. However, in its development, there are still several scientific arguments that develop regarding the impact of Siskeudes implementation in the village. Therefore, the balance of narrative regarding the obstacles encountered after the Siskeudes implementation has not been found. In fact, as a new system, it

is highly important to narrate in a balanced manner between the successes and failures of the Siskeudes application so that improvements can be made to certain aspects.

Research on Siskeudes has not been much studied on by researchers, let alone research that specifically focused on the impact of Siskeudes on financial management in the village. Research on villages concerning the implementation of technology tends to take a normative viewpoint of argumentation. These kinds of research often build a thesis on the implementation of various regulations on technology application after Law No. 6/2014. The conclusion usually ends with various policy recommendations as an effort to perfect Law No. 6/2014 and its derivatives. One example is the research that took place in the village of South Bamban, Hulu Sungai Selatan Regency, Banjarmasin (Fitri et al., 2017). This research focuses its attention on the implementation of e-government that takes place in the village. The results of the study showed the implementation of IT in the Bamban Village through the development based on Village Information System (SID) which is an embodiment of an effort to implement Presidential Instruction No. 6/2001 concerning the Implementation of Electronic Governance.

In addition, the argumentation viewpoint that is often used in viewing technology and village issues to date is a contradictory perspective. The existence of technology is often seen as something that endangers the lives of rural communities (Wahyudi & Sukmasari, 2014). The argument stated that along with the development of technology into social activities, the life of the village would also change. Unfortunately, the paradigm that is often built always sees village changes in an unbalanced view. The village is always identified with a very pessimistic view. Thus, it often ends in the emergence of excessive fears towards technological developments taking place in the village.

Nevertheless, not all technological developments which take place in the village always lead to a very pessimistic narrative. In certain aspects, the existence of technology has become one of the pillars of effective service delivery (Aini & Rosdiana, 2018). In addition, the presence of technology has helped democratic activities in the village, as in the case of Lombok, West Nusa Tenggara Province. In Lombok, the presence of technology in villages is used by the community as a medium for distributing information (Nuswantoro et al., 2017). One of the ways is by creating a technological space for the people who have been considered as not getting political channels. With technology, villagers in Lombok created a political channel in the form of “*Speaker Kampung*” (village speaker). The presence of village speaker coincided with the presence of technological developments that took place in the village. However, in contrast to the previous argument, Nuswantoro et al. saw the development of technology in the village with an

optimistic view. For them, the presence of technology in the village became an alternative space for the impasse of political aspirations faced by the village community.

Not only villages in Lombok but several villages in Sragen are also progressing with the development of technology in the village. Especially in Sragen, the existence of technology in the village makes the empowerment that goes to the village goes much better. Technology facilitates communication patterns that take place among the empowerment groups while accelerating the distribution of information. The technology is in the form of a village website that has the function to map the potential in the village (Hartono & Utomo, 2010). Mapping is done by utilizing technology that can easily find out the potential and sectors that can be developed by villages. The dominoes effect is to make it easier for village governments to develop the village potential. This is done through community empowerment based on village potential. Therefore, for Hartono (2010), the implementation of e-government in villages is significantly helpful for village officials, especially in mapping the village potential.

The same case also happened in Batam City. With the introduction of technology, village funds in Batam can be easily controlled (Maulana, 2018). Research conducted by Maulana (2018) concludes that Batam City is one of the cities that develops village financial management technology. The technology developed is called client & server, a technology that functions to control village funds in Batam. This control process takes place from planning to reporting. At first glance, the implementation of technology that takes place in Batam is also in a very optimistic narrative. When viewed closely, technological development is a new phase of community life in the village, including for financial management in the village.

From the various previous studies, it can be concluded that, in general, there are two ideas in viewing the technological developments that take place in the village. On the one hand, the idea of seeing technological developments in the village as an essential thing for the village. With this development, the village with all the entities in it is considered changing for the better. The view of these group tends to see technological developments in the village as natural. Meanwhile, other group views technological developments in the village in a pessimistic manner. In general, they consider technological development in the village as a form of threat to the village.

For this party, technology will adversely affect the lives of rural communities. The tendency of this party is only to see technological developments in the village from the viewpoint of the community; failed to view it from the other viewpoint; forgetting that technology can facilitate community work activities in the village.

The novelty of this research is that it took a narrow-angle to see gaps in the obstacles posed by Siskeudes applied in the village. In addition, this research used the E-Government ap-

proach while looking at the impact of Siskeudes on financial management in the village. This research took a case study in Panaikang Village, Gowa.

RESEARCH METHODS

The research took place in Panaikang Village, Pattallassang Subdistrict, Gowa Regency, South Sulawesi. This village was chosen after considering several aspects, including the population; it has a relatively dense population in Gowa. Until 2018, the population of Panaikang Village has reached 2,406 people who inhabit an area of 5.25 Ha. Also, in the technical aspect, Panaikang Village is one of the villages with a relatively proper administration and financial management system compared to other villages in Pattallassang Subdistrict, Gowa Regency.

The research was conducted using qualitative methods with data collection techniques through direct observation (live in) and interviews. Observations were made on the activities of the government of Panaikang Village by looking directly at the service process in the Siskeudes application. Then, interviews were conducted on Panaikang Village officials, including the village treasurer, chief operator of Siskeudes, and a village finance staff. In addition, this research also used secondary data sources. Secondary data is in the form of official reports from the Gowa Regency Central Bureau of Statistics such as a routine annual report regarding the condition of Panaikang Village, official documents, and releases from the Ministry of Communication and Informatics, the Ministry of Internal Affairs, and the Ministry of Finance.

RESULTS AND DISCUSSION

Siskeudes is an information technology-based financial management system developed by the Financial and Development Supervisory Agency (BPKP) along with the Ministry of Communication and Informatics and the Ministry of Internal Affairs. This system was pioneered for the first time in 2015. Siskeudes was presented to answer various concerns regarding the misappropriation of village funds that were allocated to the village with the amount reaching trillions of rupiah annually.

The program initially started with the West Sulawesi Financial and Development Supervisory Agency, who developed a program to assist financial management in the village. This activity took place in the mid-2015, precisely in May. The program was conducted by the project leader, Glibert A.H Hutapea and a programmer Akhmad Basari (Ministry of Communication and Informatics, 12/21/2018). Then, in June 2015, an application quality assurance was developed for the village. This section is a follow up to the development of a financial management system program in the village.

Siskeudes was launched for the first time on July 13, 2015, under the name SIMDA (Regional Management Information System). This application was launched after passing the testing phase in Mamasa Regency, West Sulawesi Province, involving 168 village officials. From SIMDA, it eventually changed its name to Siskeudes after improvements were made to several sections, such as adding features for planning. In August 2015, the Siskeudes was finally implemented nationally as one of the applications that would support financial management in villages with the principles of transparency, accountability, and participation.

To strengthen the legitimacy of the implementation of the Siskeudes, in November 2015, Financial and Development Supervisory Agency together with the Ministry of Internal Affairs made an MOU containing the implementation of the Siskeudes as a step to oversee village finances. In the same month, a circular from the Directorate General of Village Governments Development, Ministry of Internal Affairs for Governors and Regents/Mayors regarding the free provision of Siskeudes in stages were issued.

In its development, Siskeudes has undergone several changes. This transformation is in line with the policy dynamics and changes in the financial management system that took place in Indonesia. One of them took place in 2017, namely the transformation into Siskeudes 1.05. This transformation is a follow up to the Minister of Finance Regulation No. 225/PMK.07/2017 concerning managing transfers to the village fund area. To date, Siskeudes has entered into the third change, from Siskeudes 1.05 to Siskeudes 2.0 version. The new Siskeudes 2.0 was launched in November 2018 as an effort to adjust the village financial system after the issuance of Minister of Internal Affairs Regulation No.20/2018 on the management of village finance funds (Ministry of Communication and Informatics, 2018).

The Dynamics of Financial Management Regulations in the Village as a Catalyst that Encourages E-Government (Siskeudes)

In many academic debates, the presence of e-government as a new concept in governance is always associated with information technology and public administration or even governance. Both subjects of science are considered to give birth to the concept of e-government (Heeks & Bailur, 2007). This assumption is based on a historical search, which found e-government studies that began to adorn researchers' article starting in the 2000s. In the beginning, studies on e-government relied more on practical ways of working in government organizations with technological media. Then, in its development, e-government is not merely about technology, but along with the changes that took place, e-government grows into a more general concept, including a combination of technology with many aspects such as administration and politics (Heeks & Bailur, 2007).

When entering a more substantial debate about what e-government essentially, it will only come to a narrative about the practice of e-government that takes place in many government agencies. E-government will be offered in the form of case descriptions that often occur in government organizations. Therefore, e-government studies are always placed on theoretically poor research. Nevertheless, the theoretically very poor phenomenon of e-government again leads to our understanding of e-government as a “genetic” concept of information technology (Heeks & Bailur, 2007).

However, that does not mean that accusations about e-government are at a crossroads. Another study shows that although e-government is still theoretically poor, there is an agreement among researchers when putting e-government as a scientific study. In this case, e-government refers to at least two main issues. First, regarding the application of technology in an organization; and secondly, governance that uses technology (Ho, 2002; Jae M. Moon, 2002). Both of these prerequisites are carefully become the starting point for writers to examine e-government practices.

Contention concerning the pros and cons of village information systems also takes place in scientific debates. Accusing each other of endless accusations continue to accompany the information and governance systems that take place in villages in Indonesia. On the one hand, they consider the presence of IT in the village can change the organizational structure such as the village administrative governance (Karippacheril, 2013). This idea focused by looking at the presence of IT that could be adopted in the administration and governance system in the village. In addition, this group sees that IT in practice makes work in the village easier. Administrative and service work on governance in the village can take place quickly (Dewi, 2011; Purnama, 2010). Beyond that, the existence of IT in the village is also beneficial in terms of identifying potentials in the village, which in its domino impact contributes to village income (Badri, 2016; Maulana, 2018; Redjeki, Guntara, Anggoro, Informatics, & Yogyakarta, 2014).

However, many also complained about the development of IT as a new issue that gave birth to various problems in the village (Ngafifi, 2014; Redjeki et al., 2014; Wahyudi & Sukmasari, 2014). This group put excessive suspicion by seeing that the presence of IT, which is not accompanied by strengthening human resources, has become a problem for the village governance (Satriya, 2006). Therefore, this group consider that it is essential to examine the flow of changes in IT that will take place in the village. However, it is more critical to seriously discuss the readiness of human resources as a workforce who will be operating the IT in the village. This stagnation is particularly present in the realm of IT application implementation, which is often beyond government expectations (Mayowan, 2016).

In Indonesia, almost every year, the disbursement of village funds from the central government to the regencies is accompanied by various regulations. Village funds that are disbursed are not exactly given to the village government to be used as widely as possible. In the case of the utilization of village funds, the central government will issue regulations regarding the priority of using village funds. This regulation is usually used as a guideline for determining expenditure allocations for village funds in the current year.

For example, since the disbursement of village funds in 2016, the government issued a Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 21 of 2015 concerning Village Funds Utilization Priorities in 2016. Then, the following year, the government re-issued the Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 22 of 2016 concerning Village Funds Utilization Priorities in 2017. Likewise, the disbursement of village funds in 2018 is coupled with the Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 19 of 2017 to serve as a priority for the village funds utilization; lastly, the Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 16 of 2018 concerning Village Funds Utilization Priorities in 2019.

The village funds that are allocated from the central government to the villages through regencies are accompanied by “entrusted development”. In this situation, villages are required to be able to optimize village funds only on aspects that have been determined by the priority regulations. Not to mention, every year, the government has a development orientation that often differs from the previous year. This condition has a significant impact on the financial management system in the village; and on a particular scale, it has an impact on Siskeudes application.

Regarding the Siskeudes, changes in development orientation and priorities in the use of village funds have consequences for the allocation of village funds. With the change in development orientation, budget allocations and priorities for village funds utilization have also changed, including for allocation and expenditure items for activities in the village. This cycle as a whole will change the village’s financial structure; which on a particular scale, impacts the Siskeudes application. As a consequence, Siskeudes as an application of financial management in the village must adjust to the policy changes that take place in the village; including to respond to changes in development orientation policies and use of village funds in the current year.

On one occasion, Hamsah, as the village treasurer and operator of the Siskeudes in the village, complained about the transformation of Siskeudes. The application had changed three times in less than a year. Changes are driven by adjustments to the village funds utilization priority. Although the transformation does not change the substance of the Village Regional Revenue

and Expenditure Budget (APBDes); however, technically, it must still be adjusted by updating to the new system, and that once again makes it difficult for the operators. In addition, complaints made by Hamsah were affected by format changes, activities adjustments, the format of the proposed activity, and the receipt number of activity. In general, adjustments made are technical following changes that take place from above.

Not to mention, the policy changes originating from the Ministry of Finance and the Ministry of Internal Affairs. As in practice so far, supervision of village funds is not only carried out by the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration but by cross-ministries, such as the Ministry of Finance and the Ministry of Internal Affairs which also has a significant role in overseeing village funds in Indonesia. The form of supervision provided is also different from the form of supervision by the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration. Normatively, the form of supervision provided is realized by issuing a regulation. Ministry of Finance through Minister of Finance Regulation No. 225/PMK/2018 emphasized aspects of using village funds to be transferred to villages. Meanwhile, the Ministry of Internal Affairs focuses more on managing village funds in Indonesia with regulations in the form of Minister of Internal Affairs Regulation No. 20/2018 concerning village fund management as stated in the Table 2 which specifically discusses various policies on village funds in Indonesia.

The policy change on village financial management that is issued annually by more than one ministry adds to the list of complexities faced by village officials. In its implementation in the field, village officials find it difficult to adjust any policies issued by the government, both in the form of government regulations as well as ministerial regulations. This difficulty was raised by Hamsah (village treasurer/Siskeudes operator, 05/02/2019), related to the dynamics of regulatory changes regarding village financial management and the use of village funds that change every year which has a technical impact on the realization of the use of village funds as shown in Table 2.

Up to 2018, Siskeudes has undergone various improvements and changes. This change was triggered since the new policy issued by the government. As has happened so far in Indonesia, the Siskeudes must be updated to version 1.5 in 2017 as a consequence of the Minister of Finance Regulation No. 225/PMK/2017; and in 2018 became Siskeudes 2.0 as a response to the adjustment of village financial management after the Minister of Internal Affairs Regulation No. 20/2018 in Figure 2.

Table 2. Regulations Concerning Priority in Village Funds Utilization

Year of Village Fund	Regulation	Development Priority
2016	Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 21 of 2015 concerning Village Funds Priorities in 2018.	To finance the implementation of programs and activities in the area of village development and village community empowerment; to carry out priority programs and activities that are cross-sectoral; and to improve quality of life, welfare and poverty alleviation, and to improve public services at the village level.
2017	Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 22 of 2016 concerning Village Funds Priorities in 2017.	To finance the implementation of programs and activities in the area of village development and empowerment of rural communities and expand access to information on the use of village funds.
2018	Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 19 of 2017 concerning Village Funds Priorities in 2018.	To finance the implementation of programs and activities in the area of village development and village community empowerment; to finance the implementation of cross-sectoral programs and activities including superior products of villages or rural areas, Village-Owned Enterprises or Collective Village-Owned Enterprises, reservoirs, and village sports facilities in accordance with village government authority.
2019	Minister of Villages, Development of Disadvantaged Regions, and Transmigration Regulation Number 16 of 2018 concerning Village Funds Priorities in 2019.	To finance the implementation of programs and activities in the area of village development and village community empowerment. The priority in using village funds is to improve the quality of life, welfare and poverty alleviation, and to improve public services at the village level.

Source: Processed from Secondary Data, 2019

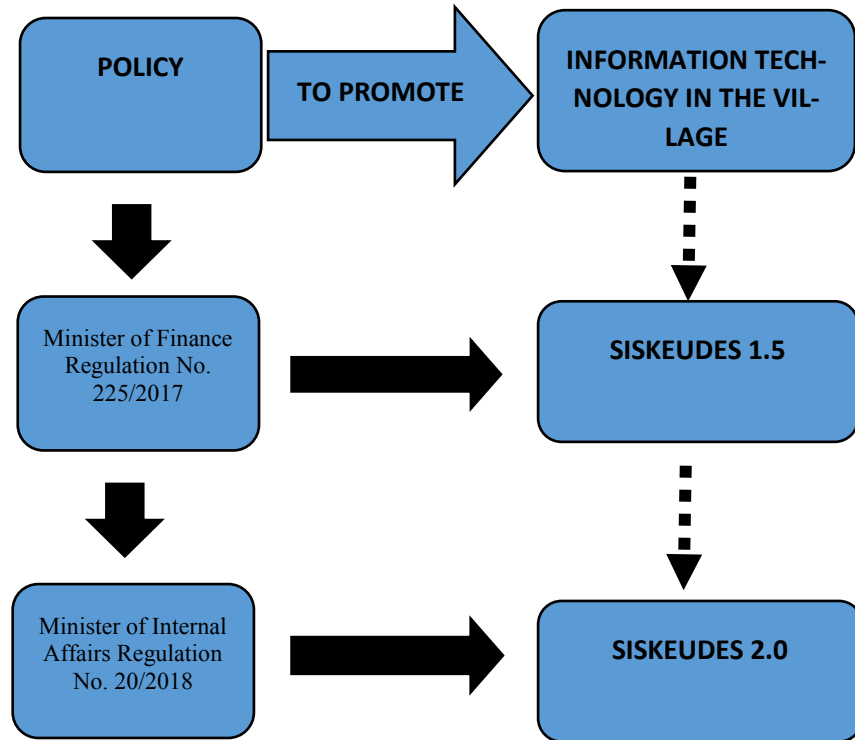


Figure 2. Siskeudes Transformation Scheme
(Processed from various sources)

Changes in policy do not stop at adjusting Siskeudes' efforts. Moreover, changes in Siskeudes also impacted further on the adjustment of the ability of Siskeudes operators. In the field, every time a change occurs in the Siskeudes, most operators experience difficulties. As an illustration, Hamsah as the operator in the village told about the change in the way Siskeudes works. In 2016, he still used the old version with the name SIMDA. However, since 2017, SIMDA has changed its name to Siskeudes. Since then, Hamsah did not understand how to use the Siskeudes application. Moreover, Siskeudes continues to be renewed every year.

The policy issued by the government accelerate the flow of information technology in the villages, including the implementation of Siskeudes. There is a reciprocal relationship that is closely interrelated between the presence of information technology in the village with a set of existing regulations. The results of this study found that the practice of technology in the village could not be separated from the intervention in the form of government policy. Technology acceleration in the village can take place quickly when the policy interventions that are given take place quickly as well, and vice versa. This is evident in the case of Siskeudes. The Siskeudes application as a product of the implementation of the Village Law No.6/2014 specifically in article 82 and article 86 which provide space for the implementation of information systems and tech-

nology in the village. Also, the transition from Siskeudes 1.5 to Siskeudes 2.0 is the impact of government policy interventions in the form of the Regulation of Minister of Finance No. 225/2017 and Minister of Internal Affairs No. 20/2018.

Technology (Siskeudes) and Limited Human Resources in the Village

The presence of information technology can simplify human work to be easier (Badri, 2016). Technology applied to organizations can shorten work time; from working very slowly before using the technology to becomes faster after adopting the technology. Also, it eased the work of organizations, both in private organizations and for government organizations such as village fund management (Maulana, 2018). Unsurprisingly, so far, many opinions have developed regarding the progress of a government and private organization marked by the extent to which the application of information technology is applied as a working system for these organizations (Hempell & Zwick, 2006).

However, this does not apply to government organizations in the village. The application of information technology in the form of Siskeudes in villages has not been able to push government organizations towards more efficient and effective ways. The flawed process that takes place in the village becomes one of the sources of problems faced by the village in implementing the Siskeudes. Villages with very limited competence and human resource capacity must deal with the rapid growth of information technology (Satriya, 2006).

The situation is dilemmatic; on the one hand, the changes in the Siskeudes application are renewed annually; in terms of the operational system and in other technical matters, such as the addition of some Siskeudes features. On the other hand, technological developments that took place in the village were not accompanied by efforts to improve the quality of human resources in the village staff. For Satriya, this problem was also driven by the slow revitalization of technology and human resources in the village (Satriya, 2006). As a result, there is lagging in terms of application mastery; Siskeudes further surpass HR in the village. For example, in 2016, less than a year since its existence, the Siskeudes has experienced changes three times in the form of additional features.

Unfortunately, this rapid development was not accompanied by serious efforts in preparing Siskeudes operators with adequate technological knowledge. Any changes occurred in Siskeudes are only accompanied by a training; even so, it only held once a year.

Ideally, the Siskeudes operator in the village should be controlled by two to three people, outside the village treasurer. However, let alone creating a Siskeudes operator; finding operators outside of the treasurer is still very difficult for the village government. From 2015 to 2016, the

village treasurer always held a position as a Siskeudes operator. This dual position was performed because the availability of HR capable of operating the Siskeudes in the village was almost non-existent. Most of the available human resources only have a high school education background with a mastery of technology, such as computers which are very minimal. The education level of Panaikang Village staff can be seen in Table 3.

Table 3. Panaikang Village Staff Education Level

No	Education Level	Total
1	S-1	4 people
2	D3	1 person
3	SMA	8 people

Source: Processed Interview Results

The condition of human resources with relatively low levels of education also widens the gap between the development of information technology in the village, such as Siskeudes and computer operational capabilities. One of the village staff confessed that he felt very awkward when dealing with technological devices such as laptops.

Although, since 2016, efforts to encourage HR in the village are being intensively carried out by the Government of Gowa Regency through various Siskeudes training series. However, the result only stopped at a moment's training. Not infrequently, after completing training and returning to the village, many village officials still have not been able to operate the Siskeudes. Then, this is compounded with a minimum understanding regarding the structure of the Village Regional Revenue and Expenditure Budget. An operator must have the skills to operate Siskeudes as well as an understanding of the Village Regional Revenue and Expenditure Budget. Since raw materials that will be processed by Siskeudes come from the Village Regional Revenue and Expenditure Budget, it is therefore essential for a prospective operator to be able to fully understand the contents of the Village Regional Revenue and Expenditure Budget. For example, in 2018, Siskeudes operators experienced difficulties when aligning with the Siskeudes team and regency finance. Village Siskeudes operators are unable to explain the financial allocations contained in Siskeudes despite that all financial data submitted to Siskeudes is a big picture of village finances that are manifested through the Village Regional Revenue and Expenditure Budget.

CONCLUSION

Siskeudes changed the work tools in the village government organizations towards information technology-based governance, or in another term, as E-Government. This transformation was triggered by the dynamics of policies regarding village financial management. The policy is a catalyst that accelerates the implementation of E-Government in the village. The study found that changes in Siskeudes application so far have been the impact of efforts to adjust various policies, starting from the Law to the Ministerial Regulation on the governance of village funds in Indonesia.

However, the magnitude of the current wave of technology is faced with limited competence in human resources in the village. This process further creates a disparity between the development of technology-based governance (E-Government) and human resources in villages with a minimum level of education. Technology developed in the village does not reflect the characteristics of the available human resources; on the contrary, technology in the village tends to dictate the human resources available in the village. The village government (village staff/ Siskeudes operators) have no other choice but to adjust to the development of existing technology. Otherwise, the village government will be left behind and further impact on more severe administrative sanctions such as the postponement of village funds.

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BIBLIOGRAPHY

- Aini, R.N., Rosdiana, H. (2018). Transformation of Licensing Services as Efforts to Increase Regional Income. *Jurnal Ilmu Sosial*, 17 (2): 145-169 (doi: 10.14710/jis.17.2.2018.145-169), [Online]
- Atieno, L. (2014). Implementation of Digital Village Projects in Developing Countries - Case of Kenya. *British Journal of Applied Science & Technology*, 4(5): 793–807. (doi: 10.9734/bjast/2014/6663), [Online]
- Badri, M. (2016). Pembangunan Pedesaan Berbasis Teknologi Informasi dan Komunikasi (Studi pada Gerakan Desa Membangun). *Jurnal RISALAH*, 27(2): 62–73. (doi: 10.24014/jdr.v27i2.2514), [Online]
- Diansari, R. E. (2016). Tentang Desa dalam Pengelolaan Alokasi Dana Desa (Studi pada Desa Pateken Kecamatan Wonobojo Kabupaten Temanggung Jawa Tengah Tahun 2016), *Akmenika: Jurnal Akuntansi dan Manajemen*. 950–960. Retrieved from manajemen.upy.ac.id/manajemen/wp-content/uploads/2016/12/BAB-III-Rani-eka-950-960Rev.pdf [Accessed on November 15, 2019]
- Dewi, A. S. (2011). The Role of Local e - Government in Bureaucratic Reform in Terong , Bantul District, Yogyakarta Province, Indonesia, *Internetworking Indonesia Journal*. 3(2): 49–56. Retrieved from <https://pdfs.semanticscholar.org/fff5/22efda6dc61fa1b2d9b37c66b4217ade149e.pdf> [Accessed on November 15, 2019]
- Gowa Central Statistics Agency. 2019. Kecamatan Pattallassang dalam Angka 2018. Retrieved from <https://gowakab.bps.go.id/publikasi.html> [Accessed on February 15, 2019]
- Hartono, Dwiwarso Utomo, E. M. (2010). Electronic Government Pemberdayaan Pemerintahan dan Potensi Desa Berbasis Web. *Jurnal Teknologi Informasi*, 6(April), 9–21. Retrieved from seminar1.te.ugm.ac.id/pdf/07071_ELECTRONIC%20GOVERNMENT%20PEMBERDAYAAN%20PEMERINTAHAN%20DAN%20POTENSI%20%20DESA%20BERBASIS%20WEB.pdf [Accessed on November 15, 2019]
- Heeks, R., & Bailur, S. (2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government Information Quarterly*, 24(2): 243–265. (doi: 10.1016/j.giq.2006.06.005), [Online]
- Ho, A. T. (2002). Reinventing Local Governments and the E-Government Initiative A Paradigm Shift of Public Service. *Public Administration Review*, 62(4): 434–444. (doi: 10.1111/0033-3352.00197), [Online]
- Jae M. Moon. (2002). The Evolution of E-Government among Municipalities: Rhetoric or Reality?. *Public Administration Review*, 62(4): 424–433. (doi: 10.1111/0033-3352.00196), [Online]
- Kumar, R., & Best, M. L. (2006). Impact and sustainability of E-government services in developing countries: Lessons learned from Tamil Nadu, India. *Information Society*, 22(1): 1–12. (doi: 10.1080/01972240500388149), [Online]

- Karippacheril, T. G. (2013). GET Note: Public Service Delivery in the Era of Digital Governance, (May), 1–15. Retrieved from <https://openknowledge.worldbank.org/handle/10986/25492> [Accessed on January 24, 2019].
- Liu, Y., Li, H., Kostakos, V., Goncalves, J., Hosio, S., & Hu, F. (2014). An empirical investigation of mobile government adoption in rural China: A case study in Zhejiang province. *Government Information Quarterly*, 31(3): 432–442. (doi: 10.1016/j.giq.2014.02.008), [Online]
- Mayowan, Y. (2016). Penerapan Teknologi Informasi dan Komunikasi di Desa (Studi Kasus di Kabupaten Lamongan). *Profit Jurnal Administrasi Bisnis*, 10(1): 14–23. (doi: 10.9876/10.9876/VOL1ISSN1978-743X), [Online]
- Maulana, A. (2018). Aplikasi Teknologi Informasi dalam Pengelolaan Dana Desa, *Digital Zone: Jurnal Teknologi Informasi dan Komunikasi x(x)*, 140–149. Retrieved from journal.unilak.ac.id/index.php/dz/article/download/1969/1279 [Accessed on January 24, 2019].
- Ministry of Communication and Informatics. 2018. Go Aplikasi Sskeudes Untuk Transparansi. Retrieved from https://kominfo.go.id/content/detail/15734/aplikasi-Siskeudes-untuk-transparansikeuangan-desa/0/artikel_gpr [Accessed on January 24, 2019].
- Ngafifi, M. (2014). Advances in Technology and Patterns of Human Life in Socio-Cultural Perspective. *Kemajuan Teknologi dan Pola Hidup Manusia*, 2(1): 33–47. (doi: 10.21831/JPPFA.V2I1.2616), [Online]
- Nuswantoro, R., Birowo, M. A., Ph, D., & Saraswatiand, I. (2017). Digital Democracy in Rural Indonesia, 00072, 1–5. Retrieved from https://www.shs-conferences.org/articles/shsconf/abs/2017/01/shsconf_icode2017_00072/shsconf_icode2017_00072.html [Accessed on January 24, 2019].
- Purnama, B. E. (2010). Pembangunan Sistem Informasi Pendataan Rakyat Miskin Untuk Program Beras Miskin (Raskin) Pada Desa Mantren Kecamatan Kebonagung Kabupaten Pacitan, *Jurnal Speed*. 2(4). Retrieved from <http://ijns.org/journal/index.php/speed/article/view/885> [Accessed on January 24, 2019].
- Rahmi Fitri, Arifin Noor Asyikin, A. S. B. N. (2017). Pengembangan Sistem Informasi Desa Untuk Menuju Tatakelola Desa yang Baik (GOOD GOVERNANCE) Berbasis TIK. *Jurnal Positif*, 3(2) : 99-105. Retrieved from <https://ejournal.poliban.ac.id/index.php/Positif/article/download/429/394> [Accessed on January 24, 2019].
- Redjeki, S., Guntara, M., Anggoro, P., Informatika, J. T., & Yogyakarta, S. A. (2014). Perancangan Sistem Identifikasi dan Pemetaan Potensi Kemiskinan untuk Optimalisasi Program Kemiskinan. *ISSN Print*, 6(2), 2085–1588. Retrieved from <http://ejournal.unsri.ac.id/index.php/jsi/index> [Accessed on January 24, 2019].
- Syaifullah, M. (2017). Understanding of Village Apparatus on Implementation Accounting Villages. *International Journal of Science and Research*, 6(8): 1168–1175. (doi:10.21275/ART20176211), [Online]

- Satriya, E. (2006). *Pentingnya Revitalisasi E-Government* Prosiding Konferensi Nasional Teknologi Informasi & Komunikasi untuk Indonesia 3-4 Mei 2006, Aula Barat & Timur Institut Teknologi Bandung.
- Thomas Hempell a & Thomas Zwick. (2006). New Technology, Work Organisation, and Innovation. *Economics of Innovation and New Technology*, 9(768307933): 37–41. (doi: 10.1080/10438590500512927), [Online]
- Wahyudi, H. S., & Sukmasari, M. P. (2014). Teknologi dan Kehidupan Masyarakat. *Jurnal Analisa Sosiologi*, 3(1): 13–24. Retrieved from <https://jurnal.uns.ac.id/jas/article/viewFile/17444/13932> [Accessed on January 24, 2019].
- Widya, M. A. A., & Sensuse, D. I. (2017). Mobile Computing Model to Improve E-Government Service in Village Level (Case Study: Sumbermulyo Village Jogoroto District Jombang Regency East Java Province). *IEESE International Journal of Science and Technology*, 6 (2): 6–14. Retrieved from search.proquest.com/openview/32841c119ac2389dab0113977b245e83/1pqorigsite=gscholar&cbl=2029699 [Accessed on January 24, 2019].