Testing the Internal Control of Simda Application in Effort to Improve Public Accountability

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Abstract: Openness and ease of access to information are now one of the ways to encourage sustainable community development and it needs adequate internal control in the management of information. The purpose of this study was to assess the implementation of SIMDA's internal control in increasing public accountability using a qualitative descriptive approach with data collection through in-depth interviews and SIMDA observations at the Office of Population Control, Family Planning, Women's Empowerment and Child Protection (Dinas PPKBPPPA) Sragen Regency. The benefit of this research is to enrich the literature for further research and provide recommendations for improvement of the internal control system in the PPKBPPPA Office of Sragen Regency. Data analysis techniques used in this research are data reduction, data presentation, and conclusion drawing. The results of the study indicate that the information system implemented already has adequate internal control. The conclusions obtained from this study include the unavailability of a system operation manual, no routine maintenance schedule regarding the software or hardware used in operating the system, and the absence of data validation before the information input process. The impact of this is that information is not real time and reduces the effectiveness and efficiency of SIMDA.

1 INTRODUCTION

Information is an important and valuable asset that ideally can be useful for the organization (Maliki, 2005). The increasing need for information forces various parties to obtain reliable and timely information and is able to assist the decision-making process (Voets & Sondakh, 2016). Decision making must be done with quality information. The quality of this information is influenced by the processing of information from the time it is sent until it is received. One of the advantages of being in the era of globalization is that the digitization of information is increasingly happening. Digitalization of information is a process to convert information into digital form in order to facilitate the process of producing, managing and distributing that information (Djaenudi, 2018). Digitalization of information occurs also because of technological developments that continue to occur and seem unstoppable.

Technological developments are often used as a benchmark for the level of progress of a country (Welianto, 2021). In Indonesia, technological developments occur rapidly, especially in industrial and government centers. The data in Figure 1 explains that the development of technology in Indonesia in 2019 was largely influenced by the use of internet and social media devices. This data explains that the Indonesian people have been able to open up to the development of technology and digitalization of information.
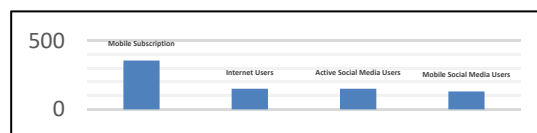
Figure 1: Utilization of technology on Indonesia.

Concretely, the use of information digitalization and technological developments requires accuracy in

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its use, both in terms of the tools used and in terms of users. The proper use of digitizing information will create an informed society, encourage progress in the business world by increasing the efficiency of information management and related costs, as well as assisting the improvement of technology-based creative industries. These benefits can ultimately encourage many entities to optimize the use of information systems as a medium for managing their information. The information system is a tool that can be used by various parties, for example the management in assisting and supporting various operational activities and management of an entity (Chazar, 2015). Furthermore, the output of information system processing can assist various parties in making decisions, for example in determining alternative actions that can be decided and carried out so that organizational goals can be achieved.

In addition to the private sector, the government also implements an integrated information system as a form of central government control over regional autonomy policies (Listiawan & Zaidir, 2020). The existing information system is used as a means of managing information from the lowest levels of government to the central government. Regional autonomy itself is practiced as an effort to empower development, innovation, and independence of each region as well as to reduce dependence on the central government (Christia & Ispriyarso, 2019). The information system built by the government is also used to assess regional performance through financial performance. A region can be said to have practiced regional autonomy well through the ability to manage and optimize regional financial performance in financing the administration of its own regional government (Mudhofar & Tahar, 2016). Peraturan Pemerintah (PP) Nomor 58 Tahun 2005 explained that regional finances are all regional rights and obligations in the context of administering regional government which can be valued in money, including all forms of wealth related to the rights and obligations of the region. Every year, the regional government will issue a Regional Government Financial Report (LKPD) which will be assessed by the Supreme Audit Agency of Republic of Indonesia (BPK RI) so that it is necessary to carry out regional financial management supported by mastery of the accounting system (Maydiyanti et al., 2020).

Undang-Undang Nomor 33 Tahun 2004 tentang Perimbangan Keuangan antara Pemerintah Pusat dan Pemerintahan Daerah has also explained that the central government expects the implementation of a regional financial information system to increase accountability related to the implementation of decentralization. Financial and Development Supervisory Agency (BPKP) then realize it through a computerized technology-based information system called Sistem Informasi Manajemen Daerah (SIMDA) Keuangan as an information system built to carry out the process of preparing the Regional Revenue and Expenditure Budget (APBD) based on performance (Dewi & Mariska, 2018). Government action in developing and implementing information technology as a means to facilitate access, integration and utilization of information quickly and accurately, is one way to develop sustainable community life through openness and ease of access to information (Listiawan & Zaidir, 2020). Information systems and information disclosure by the government are one of the supports for good governance because they will support accountability and information disclosure by the government (Andhayani, 2020). The use of SIMDA to improve the government's public accountability has an impact on increasing opinion on the Regional Government Financial Reports (LKPD). The Unqualified Opinion (WTP) on LKPD has increased and the Unqualified Opinion (TW) has decreased in 2018. This indicates that the LKPD is well structured and the possibility of budget fraud is lower due to the ease of access to information by the government. central and community which means that control over local government is carried out effectively.

Some entities face a number of challenges when managing their information systems (Irianto, 2014). The challenges in question are system errors and hacks. Entities must be able to secure and control information systems to minimize theft, destruction, and data loss. Regarding system errors, quoted from *idntimes.com* (2019) The case that had occurred involving the private sector was a change in the balance of Bank Mandiri customers. The Ombudsman revealed that this system error problem must be addressed immediately by repairing and increasing the reliability of the information technology used by Bank Mandiri. In addition to system errors, many government information systems and private institutions must be faced with hacking by hackers. This hacker attack is probably due to the weakness of the internal control system in managing information systems, causing a lot of data and information to be stolen and traded on the dark web (CNNIndonesia, 2019). One of the hacker cases that happened to the government was the leak of 2.3 million data on the 2014 Election Permanent Voters List (DPT) belonging to the General Elections Commission (KPU) *(cnbcindonesia.com,* 2020). The

Indonesian government has taken action through the Indonesian National Police (POLRI) to eradicate various hacking actions carried out by hackers in order to protect confidential information (Subarkah, 2020).

Various entities apply methods that are considered the most effective to be carried out, which are expected to facilitate achieving the goals set by optimally managing information systems, for example by increasing control over information systems. One way to assess the effectiveness of the implementation of controls on information systems is through testing environmental security controls and physical security controls on the information systems that are implemented. Internal control in the use of information systems can assist in providing information for decision making and to facilitate the flow of information in operational activities (Angriani, 2020). The information that is the output of a data processing, whether done manually or systematically, is expected to have an impact on the parties who need it (Prayitno, 2013).

Previous research by Oktavia *et al* (2016) through a case study in the Palangkaraya City government stated that the use of SIMDA can create good transparency and accountability supported by quality information that is in accordance with government accounting standards. Hertanto *et al.* (2017) added that the implementation of SIMDA is still not fully effective at the Blitar Regency level due to the lack of flexibility of SIMDA so that if a problem occurs, it must wait for improvements from BPKP as the developer and the Blitar Regency Regional Work Unit (SKPD) has not been integrated online. Research conducted at BAPPEDA of North Sulawesi stated that good internal control of the SIMDA application is needed to produce reliable output. In this study, the internal controls mentioned are related to applications such as input control, batch control, and so on (Polii & Pontoh, 2018).

Internal controls at the user or human resource level also need to be considered, such as research in the Southeast Maluku district government (Harbelubun *et al.*, 2017) who still need to improve the quality of human resources in their operations. Alfian (2016) n his research stated that in the SKPD of Kulon Progo Regency, the operation of SIMDA is still not optimal because there is no certainty regarding the default software used. In a study at the Manado City government, it was stated the need to improve access, security and physical control in the operation of SIMDA (Pilat *et al.*, 2016). Through good internal control, it will reduce the number of possible frauds (Fahrurrozi *et al.*, 2019).

Based on the previously mentioned background, this study intends to evaluate internal control in the implementation of information systems to improve public accountability carried out by Dinas Pengendalian Penduduk Keluarga Berencana Pemberdayaan Perempuan dan Perlindungan Anak (Dinas PPKB PPPA) Kabupaten Sragen. The reason for choosing the object of this research is because the PPKB PPPA service is a public organization that has been using and developing information systems since 2003, so it is important to evaluate the internal controls implemented to encourage accountability to the public. This study takes the object of research at Dinas PPKB PPPA Kabupaten Sragen as one of the Regional Work Units (SKPD) that utilizes the SIMDA application and has never conducted a similar study before. Sragen Regency and the PPKB PPPA Office of Sragen Regency also received an award as a *Kabupaten Layak Anak* (KLA) 2019 for the Primary category. One of the factors in obtaining this award is due to the speed of handling information complaints, openness, and easy access to public information to the Dinas PPKB PPPA Kabupaten Sragen.

Appropriate internal control in information system management to be able to produce quality information. The purpose of this research is to assess the implementation of SIMDA internal control in the PPKB PPPA Office of Sragen Regency in an effort to increase public accountability. This research is expected to provide benefits for Dinas PPKB PPPA Kabupaten Sragen, through providing evaluations and recommendations to improve internal management and control through four internal control tests in the form of environmental security control, physical security control, logical security control, and IS operating control SIMDA at Dinas PPKB PPPA Kabupaten Sragen. Through this recommendation, it is also hoped that the Dinas PPKB PPPA Kabupaten Sragen can again achieve the title as a (KLA) with a higher accreditation status. For academics, this research is expected to be useful in adding to the literature review to assist further research.

2 LITERATURE REVIEW

2.1 Information and Information Systems

Davis (1991) defines information as data that has been processed which can then be used for making various decisions in the future. Information is the result of processing data that is processed so that it is

more meaningful and has a higher value and describes a real event to assist in decision making. The important thing attached to information is that information has economic value that is often not realized (Severin & Tankard, 2011). Machmud (2013) defines that information is data that has been processed and has significant value for its users. Information needs to be protected because the principle of information itself is confidentiality, integrity, and availability (Matondang *et al.*, 2018). An information system is a combination of human resources, hardware, software, networks, and databases that unite to transform and disseminate information within the organization (O' Brien & Marakas, 2012). Leitch and Davis (1992), defines an information system as a system in the organization to help process every transaction, support operational and strategic managerial activities, and present reports needed by outside parties.

The same opinion, according to Hall (2019) Information system is defined as a set of formal procedures which consist of data collection, processing into information, and users. Characteristics of a quality information system according to Halandy and Ghabban (2009) namely correctness, efficiency, integrity, usability, maintainability, flexibility, and testability. The quality of information from the accounting information system will provide a reliable presentation of financial statements so that it affects management's ability to make decisions and act in its operations (Hall, 2019).

2.2 Internal Control

O' Brien and Marakas (2012) defines control as an activity that is able to evaluate and make adjustments according to the needs of input data, processes, and certainty of the resulting output. Warren and Reeve (2008) argues that internal control requires a framework designed to certain standards with the aim of designing, analyzing and evaluating what it operates. Arens and Elder (2014) states that internal control must include established policies and procedures so that management can gain confidence in an activity being carried out. The internal control system is also designed to provide a certain level of assurance that the organization has achieved its objectives (Arens *et al.*, 2012).

According to Thoyibatun (2012), effective internal control will provide benefits to the organization. An effective internal control system can also minimize the tendency of accounting fraud and unethical behavior (Savitri *et al.*, 2015). Viewed

within the scope of government, internal control is needed to carry out government obligations in serving the community, including budget implementation, securing resources, accounting and reporting purposes (Yaya & Suprobo, 2019). Widyatama *et al*. (2017) and Asare (2009) added that good internal control in governance processes will contribute to improving governance and accountability through control and risk management.

One way to guarantee information security is through physical security control and environmental control (Dwi *et al*, 2017). Physical security control will help maintain the confidentiality, integrity, and availability of data in information systems while protecting against physical threats to organizational resources (Irmayani, 2019). Environmental control will protect information from data loss due to environmental problems. Physical and environmental control is carried out by assessing the availability of a safe environment because of the control and security supporting equipment (Syafrizal, 2007). Internal control in the management of information systems also needs to be supported by the implementation of logical security controls and IS Operating Controls (Ana-maria *et al*., 2010). The International Security Sector Advisory Team (ISSAT) stated that logical security control is an action in monitoring and controlling access to information systems. Furthermore, in research conducted by Hanindito (2017), stated that IS operating control is an effort to control data management which includes accuracy, accuracy, back up and recovery procedures. Internal control framework developed in this research are based on these five previous researches, by testing the environmental security control, physical security control, IS operating control, and logical security control.

2.3 SIMDA

SIMDA is a technology-based system designed by the Financial and Development Supervisory Agency (BPKP) to assist local governments in the planning, preparation and accountability of Regional Revenue and Expenditure Budgets (APBD) to support the creation of government accountability (Oktavia *et al*., 2016). The development of SIMDA is one of the embodiments of Peraturan Pemerintah No. 60 Tahun 2008 related to the Government Internal Control System (SPIP). Reported from the BPKP website, (BPKP, 2020) SIMDA is designed with the objectives of: (1) assisting local governments to develop and use financial information systems; (2) providing an

integrated database of conditions in the region from the aspect of finance, regional assets, regional performance, regional staffing/apparatus and public services that can be used for performance appraisal of regional government agencies; (3) produce comprehensive, precise and accurate information to local government management; (4) prepare local officials to achieve a better level of mastery and utilization of information technology; and (6) strengthening the basis of local government in implementing regional autonomy.

The types of SIMDA include SIMDA, SIMDA BMD (for local goods management purposes), SIMDA Salary, SIMDA Revenue, SIMDA Planning, SIMDA Dashboard, and SIMDA CMS (Cash Management System) where each SIMDA is used for the needs of each agency (BPKP, 2020). In particular, the implementation of SIMDA has the aim of producing output in the form of financial reports and financial information in a timely, complete, accurate, and reliable manner in accordance with the standards applicable in the institution as well as to realize good governance.

2.4 Accountability

Accountability has been recognized as a key variable in helping predict and control the behavior of organizational systems in various aspects, one of which is the financial system (Frink & Klimoski, 1998). Frink and Klimoski (2004) states that accountability is the practice of accountability and coordination between several interested parties in an organization with a jointly developed system. The Government of Indonesia declares accountability in Undang-Undang nomor 14 Tahun 2008 is a form of clarity of organizational functions, implementation and responsibilities in supporting healthy organizational management. Mardiasmo (2002), states that accountability is an obligation that needs to be fulfilled as a form of accountability, presenting, reporting and disclosing organizational phenomena to related parties who have rights and authority within the organization.

3 METHODS

3.1 Types of Research and Data Collection Techniques

This research was conducted with a qualitative descriptive type of research to provide a descriptive description of the practice of internal control through

testing environmental security control, physical security control, logical security control, and IS operating control SIMDA Dinas PPKB PPPA Kabupaten Sragen, Jawa Tengah. This study uses two data collection techniques in this study; direct observation (observation) to the Dinas PPKB PPPA office environment and in-depth interviews conducted semi-structured, by developing a framework of questions that had been prepared in advance. Interviews were conducted with the SIMDA administrator and the budget treasurer of the Dinas PPKB PPPA Kabupaten Sragen. Interviews were conducted online and at no site. Through the interviews carried out, more detailed information related to the research being carried out was able to be obtained. The results of the interviews were documented through notes and voice recordings. The type of data obtained for research is primary data, because it is obtained directly from the source, namely the administrator as the party operating SIMDA.

3.2 Data Analysis Technique

The data analysis techniques of this research include data reduction techniques, data presentation, and drawing conclusions. The analysis technique begins by reducing or summarizing the data that has been obtained from the interview process with the resource person. In addition to summarizing the data, the data reduction process also includes sorting and removing unnecessary data related to research. The selected data is then presented in the form of data classification related to the internal control of SIMDA Dinas PPKB PPPA Kabupaten Sragen. At the conclusion drawing stage, the researcher focuses on the selected data after the data reduction and presentation process, so that a deeper study can be carried out regarding the internal control practiced at of SIMDA Dinas PPKB PPPA Kabupaten Sragen by testing environmental security control, physical security control, logical security control , and IS operating control. After these three stages of analysis were carried out, the researcher verified the information by re-examining the documentation during the interviews, comparing the results of the interviews with the observations, and confirming the results of the interviews with the informants.

4 RESULTS AND DISCUSSION

4.1 Overview of Research Objects

The Deputy for Supervision of Regional Financial Administration has developed SIMDA since 2003 as an effort to harmonize the financial information system in each Regional Government. SIMDA is a technology-based system designed by the Financial and Development Supervisory Agency (BPKP) to assist local governments in the planning, preparation and accountability of Regional Revenue and Expenditure Budgets (APBD) to support the creation of government accountability.

"SIMDA's function is to help and the SIMDA we have is sufficient to meet the needs of the office. Before being sent to the service, the system has also been tested at the central government."

Kabupaten Sragen is one of the regions that uses SIMDA for integrated regional financial management which includes budgeting, administration, accounting, and reporting. Dinas PPKB PPPA Kabupaten Sragen located on Jl. Ade Irma Suryani Nasution No. 1 Sragen Tengah, Kabupaten Sragen, Jawa Tengah. Dinas PPKB PPPA Kabupaten Sragen provide information related to women's and children's organizations, women's empowerment and child protection service institutions, online complaints of women and children which will be forwarded to the Indonesian Child Protection Commission (KPAI) and support several programs such as: child-friendly districts, family resilience, gender mainstreaming movements, and women's protection.

Implementation of SIMDA at Dinas PPKB PPPA Kabupaten Sragen started in 2016 with one administrator on duty. The administrator is tasked with inputting official budget information into the system. SIMDA, which is operated at the Dinas PPKB PPPA is only used to input budget from the initial budget design stage to budget accountability as a form of centralized information system integration.

"The admin's job is to input the amount of the budget into the system, input the initial budget design and then the budget will be added later. The district budget team will determine the ceiling (sharing of funds) for each agency. Later the agency will compile the ceiling obtained into activities according to the service's needs through the Budget Activity Plan (RKA). This RKA will be inputted into SIMDA later. After the input, it will be seen by the DPRD for approval or rejection. If approved, immediately create a Budget Implementation Document (DPA). If it is rejected, it must be revised again."

4.2 Evaluation of SIMDA's Internal Control Practices through Environmental Security Control Tests

Dinas PPKB PPPA Kabupaten Sragen has practiced internal control system design through environmental security control. The form of environmental security control that is carried out is by issuing several policies related to the implementation of SIMDA. The first policy is related to providing training to the administrator on duty. Dinas PPKB PPPA Kabupaten Sragen require SIMDA administrators to attend training provided by the government Kabupaten Sragen. Administrators are also given briefing on information in the system before finally operating SIMDA in the system Dinas PPKB PPPA Kabupaten Sragen.

"Every year the system will be updated, so there is always administrator training. Later the training will be carried out with the district."

This form of policy is carried out Dinas PPKB PPPA Kabupaten Sragen to minimize the risk of errors in system operation. Dinas PPKB PPPA Kabupaten Sragen also set policies regarding administrators in the operation of SIMDA. Dinas PPKB PPPA Kabupaten Sragen employs one administrator to be responsible for the operation of SIMDA. This administrator is an administrator who has received training from the government Kabupaten Sragen. Dinas PPKB PPPA Kabupaten Sragen also assigned the treasurer of the service as supervisor of SIMDA administrators in the operation of SIMDA to minimize data input errors.

"Because there is only one administrator, the treasurer will help if the admin has problems. So because there is a treasurer, someone will help to handle the system."

Although training for administrators and the availability of treasurers as supervisors has been carried out, the environmental security control practices carried out are still not optimal due to the absence of a system operating manual. The absence of a manual for this system allows administrators to find it difficult to make repairs if there are obstacles such as system errors.

"There is no physical manual. The guidance is only given orally during training. Later, the local government will teach you how, then take a photo and send it to a group together."

The policy regarding the availability of this manual should be a part that complements the information system being implemented, especially if there is no direct supervision from the application

developer. The resource person also added that Dinas PPKB PPPA Kabupaten Sragen does not have a policy regarding the maintenance of computers or operating systems (SIMDA). Policies related to system insurance are also not owned by the agency.

"The system will often change with changes in the budget, then routine maintenance is not carried out for computers. The computer will only be repaired when it is damaged. Computers and systems are also not covered by insurance."

With no policy on routine maintenance and insurance availability, the risk of system failure due to damage to the computer or the system itself is high. Coupled with the unavailability of manual manuals, system performance will be less effective, because in the event of errors and errors, both administrators and employees at the Dinas PPKB PPPA Kabupaten Sragen cannot immediately make repairs and have to wait for help from the government Kabupaten Sragen as well as regional representative BPKP. These results are in line with research Hertanto *et al.* (2017) which states that the implementation of SIMDA is still not fully effective at the Blitar Regency level because if a problem occurs, it must wait for improvement from BPKP.

4.3 Evaluation of SIMDA Internal Control Practices through Physical Security Control Tests

As a form of follow-up to existing policies, Dinas PPKB PPPA Kabupaten Sragen also take the form of physical security control control. Regarding the security of the office, Dinas PPKB PPPA Kabupaten hiring office keeper to help dinas PPKB PPPA to minimize forms of physical crime such as theft and destruction of hardware (computers). Theft and destruction of hardware used to run SIMDA will have an impact on data theft and error output. By providing an office key that is only owned by the guard, it also minimizes unauthorized parties from entering the official office outside of working hours without the office guard's permission.

"The "*dinas*" *has guards. Because we don't want to risk theft, so the office locks also bring the guards."*

As an additional form of physical security control, the key to the SIMDA computer room is also authorized by the treasurer and will always be locked after office operating hours are over. The computer room that supports SIMDA operations is one of the important factors that must be done to protect the security of physical access. By providing the computer room key which is only owned by the treasurer and the section head, at least it can be seen

that the operation of the computer room and SIMDA is only carried out during working hours. dinas PPKB PPPA Kabupaten Sragen.

"The computer room is also locked, especially when it's time to go home. The guard brings the office key, but the treasurer holds the key to the room. So later the room will be opened only during working hours, when there is an operator (administrator)."

The availability of guards and double locks in the office and office computer room is also a form of preventive measure against physical theft due to the unavailability of CCTV in the office environment.

"There is no CCTV here. There are only guards at night. In the morning there are still many official officials so there are no guards."

The availability of guards only at night is also due to limited human resources and the formation of a relatively new service, due to the merging of two services within the Sragen Regency government. The practice of physical security control as a form of control over restrictions on access to SIMDA Dinas PPKB PPPA Kabupaten Sragen This is also done by limiting the operation of SIMDA which can only be done with computers belonging to the service and the service intranet network. This access restriction is to minimize abuse of authority by administrators in the form of unauthorized SIMDA access elsewhere without the knowledge of the treasurer as supervisor.

"The system cannot be downloaded on any laptop, so only from an office computer. Because the system is integrated, access is limited to the office intranet. It can't be arbitrary."

Physical security control through access restrictions that have been implemented has been classified as good, although there are still some negative findings. Utilization of technology-based information systems is quite complicated, one of which is due to the availability of devices that are connected to each other via cables and electrical connections. This has not been assessed optimally by Dinas PPKB PPPA Kabupaten Sragen because the service has not provided fire fighting equipment in the form of a hydrant.

"The office does not have a hydrant because we have also anticipated that smoking is not allowed in the office environment. If caught, you will be fined IDR 50,000."

The informant said that the unavailability of hydrants was due to the understanding that fires might only arise from sparks. In fact, the risk of fire due to electrical short circuit is also very possible. The unavailability of this hydrant will be detrimental to the service in the event of a fire causing damage to the intranet network and office computers, because

system performance will be hampered and it is necessary to reset the preparation for SIMDA operation.

4.4 Evaluation of SIMDA's Internal Control Practices through Logical Security Control Tests

Internal control testing is then carried out through the application of logical security controls. SIMDA Dinas PPKB PPPA Kabupaten Sragen telah menerapkan bentuk pengendalian logis melalui keamanan *username* dan *password* administrator SIMDA. SIMDA Dinas PPKB PPPA Kabupaten Sragen have a special username and password to be able to access the SIMDA.

"To enter the system, we need a username and password prepared by the district PEP (Planning, Evaluation, and Reporting). It's a patent policy. Then when you go down to the service, each administrator has a different username and password."

The availability of different usernames and passwords for SIMDA in each service is one form of logical control in limiting access to SIMDA of the relevant service. After restrictions with a specific username and password, another form of logical security control is implemented by SIMDA Dinas PPKB PPPA Kabupaten Sragen is through the availability of a period of time where the system will be signed out automatically if the administrator does not use the system within a certain period of time.

"Usually, after we log into the system, we work. If the system is not running, it is left idle, especially until the computer is turned off, when the computer is turned on again, it will return to the home position. This means that the system has been signed out so you have to enter your username and password again."

The availability of this logical safeguard allows that the risk of unauthorized data theft or free access to the system is reduced. This also further proves that only administrators who know the username and password can access SIMDA. Another form of logical security control practice is the availability of auto save and data recovery features from within the system. The risk of power outages or device errors due to the lack of a maintenance schedule has been able to be overcome with the availability of data recovery and auto save features for information being processed in SIMDA.

"What has been inputted will be automatically saved and in the event of a power failure, the data will not be lost. But usually after input, we make it a habit to print as well just in case."

Weaknesses of the recovery and auto save features implemented in SIMDA Dinas PPKB PPPA is the difficulty of making repairs when an input error occurs due to human error. Minor errors such as errors in entering data in the form of numbers cannot be corrected directly and must wait for the data that should be inputted to finish being inputted. This of course raises time and work inefficiencies because errors that are already known cannot be corrected immediately and may affect future work.

The availability of usernames and passwords is also still not able to optimally support the implementation of good physical security control because the availability of usernames and passwords is provided by the PEP of Kabupaten Sragen. The availability of this username and password means that it is not only known by SIMDA administrators, but also external parties who do not have a direct relationship with SIMDA Dinas PPKB PPPA Kabupaten Sragen. Password availability is also not supported by certain characteristic policies and passwords are not updated regularly.

"Our passwords are never updated. Only every time we change the budget year we change the username and password. So it's not a monthly change like that."

4.5 Evaluation of SIMDA's Internal Control Practices through Is Operating Control Tests

Controls related to IS operating control have been able to be implemented by SIMDA Dinas PPKB PPPA Kabupaten Sragen. SIMDA operations are used to provide real time and timely data. With control in the form of automatic data processing, SIMDA has been able to provide financial data Dinas PPKB PPPA Kabupaten Sragen more accurately and on time. Automatic data processing in SIMDA has also provided a better level of data security compared to manual processing.

"Using SIMDA, everything is automated, so it's faster because there is already a format from the center, we just input and match."

Financial data that has been inputted into SIMDA is also stored for a temporary period. This minimizes the theft of financial data from Dinas PPKB PPPA Kabupaten Sragen. Data is permanently only stored in a central system with a level of security that is stricter than the security it has Dinas PPKB PPPA Kabupaten Sragen.

"The Data at the office is temporary because we are integrated with the center, so permanent data belongs to the center. It's also possible that the system

doesn't support saving all files if we save them permanently."

The negative finding obtained from IS operating control is the lack of supervision from the local government and BPKP as the developer of the system. Due to this lack of oversight, the system will only be updated when a new version appears in the new fiscal year.

4.6 Discussion

Positive findings related to the implementation of internal control through testing of environmental security control, physical security control, logical security control, and IS operating control occurred because of SIMDA Dinas PPKB PPPA Kabupaten Sragen integrated with the system in the central government. By integrating the system with the central system, it is possible that environmental policies and SIMDA practices are influenced by central government policies. The integration of SIMDA also makes it possible that each SKPD, including Dinas PPKB PPPA Kabupaten Sragen make best efforts to reduce errors such as by entrusting the agency treasurer to be the supervisor of the SIMDA administrator. In order to maintain the security of SIMDA and available information, Dinas PPKB PPPA Kabupaten Sragen also restricts access to the system. This action supports the concept of internal control stated by O' Brien and Marakas (2012) that control is an activity to evaluate and make adjustments according to the needs of input data, processes, and certainty of the resulting output. Control that is carried out is a form of responsibility Dinas PPKB PPPA Kabupaten Sragen to local and central governments in maintaining the confidentiality, integrity, and availability of information managed through SIMDA, such as the concept presented Matondang (2018) that information needs to be protected.

Although Dinas PPKB PPPA has realized the importance of implementing SIMDA in managing its information, to implementing a series of internal controls, but there are still some negative findings. This negative finding is due to the limited resources available. The first finding is related to Human Resources (HR). Although SIMDA access has been limited through username and password and restrictions in the form of system access media, limited human resources have resulted in only one SIMDA administrator. Because of this limitation, cross-checking can only be done between administrators and treasurers. Limited knowledge and skills related to technology also limit the

administrator's movement because if an error or system malfunction occurs, the administrator must directly contact the local government of Kabupaten Sragen and will hamper SIMDA performance.

The second limitation of resources is related to resources in the form of funds. Dinas PPKB PPPA operates with an injection of funds from the government of Kabupaten Sragen. Every effort to improve internal control related to SIMDA requires approval of the expenditure of funds by the Sragen Regency government. Efforts such as the provision of CCTV, provision of hydrants, and periodic computer maintenance require budget approval by the local government. This has resulted in some of the internal control testing posts are still not optimal. An additional budget is needed to allocate adequate resources in the practice of internal control operations of SIMDA of Dinas PPKB PPPA Kabupaten Sragen. Supported by adequate resources, controls related to physical access will be improved and it will be possible to add human resources with adequate quality to be responsible for SIMDA of Dinas PPKB PPPA Kabupaten Sragen.

If the adequacy of resources cannot be realized in a short time, efforts that can be continuously developed Dinas PPKB PPPA Kabupaten Sragen so that internal control related to the operation of SIMDA can continue to be maximized is through the creation of a positive work culture. All related parties must be able to create a work culture that is thorough and full of prudence, so that any information processing and management can be carried out with a minimum of errors. For example, it is recommended that the computer used for SIMDA operation is only used as a SIMDA processing tool and not used for personal purposes so that the possibility of damage is lower. The implementation of adequate internal control states that information management practices through SIMDA can be conveyed optimally and reliably enough to be accounted for in front of related parties. The information generated at SIMDA becomes a means in an effort to increase government accountability in the Dinas PPKB PPPA Kabupaten Sragen towards society in Kabupaten Sragen, taking into account the theory developed by Mardiasmo (2002), that accountability is the practice of accountability and coordination between several interested parties in an organization with a jointly developed system.

5 CONCLUSIONS

SIMDA is a technology-based system to assist local governments in the planning, preparation and accountability of the Regional Revenue and Expenditure Budget (APBD) to support the creation of government accountability. The same system is also used by Dinas PPKB PPPA Kabupaten Sragen. On its implementation, Dinas PPKB PPPA Kabupaten Sragen has implemented internal control through environmental security control, physical security control, logical security control and IS operating control properly. The implementation of this control can improve public accountability through several reports that are produced, such as reports on activity plans and budgets Dinas PPKB PPPA Kabupaten Sragen. The results of this study are in line with research Oktavia *et al.* (2016) which states that the use of SIMDA can create good transparency and accountability supported by the quality of information in accordance with government accounting standards.

Nevertheless, there are still some negative findings that are still found in its implementation due to the limited quality and quantity of human resources and funding sources in the Dinas PPKB PPPA Kabupaten Sragen. The results of this study are in line with research Harbelubun *et al*. (2017) who also said that the limited quality of human resources in the government of Kabupaten Maluku Tenggara limit the level of internal control that can be put into practice. This limitation must be corrected so that the implementation of SIMDA in the future period becomes more effective with a lower risk occurrence rate and is able to increase the accountability of the service in front of the community of Kabupaten Sragen.

This research has implications for improving the practice of internal control as a stimulus to encourage public accountability in organizations that use information systems. The results of this study are expected to be a theoretical study for academics in developing existing theories in carrying out research in the future. The limitations in this study are related to the time and opportunity to meet directly with resource persons due to the Covid-19 pandemic. The limited time to be able to meet in person meant that most of the interviews were conducted online. Scheduling to arrange meetings with resource persons is also an obstacle faced in this study. Further research is expected to be able to confirm beforehand before conducting interviews, both online and plunge into the object of research to the resource person and accompanied by the preparation of a list of questions related to the topic to be raised. Interviews are also expected to be conducted at a time and a supportive environment according to mutual agreement so that information collection can be maximized. Future research is also expected to be able to make direct observations on the object of research so that the data and information obtained are more objective. Furthermore, future research is also expected to be able to conduct research on the relevance of physical security control and human resource competence in the effectiveness of SIMDA implementation to minimize fraud, especially in systems that only have a single administrator.

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