



Implementation of Regional Government Information Systems in the Administration Process

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Abstract

This study examines the implementation of a local government information system in the financial administration processes at the Regional Financial and Asset Management Agency (BPKAD) in Tidore Islands City. This information system is expected to enhance efficiency, transparency, and accountability in regional financial administration. Using a qualitative approach, the study explores BPKAD employees' experiences and perceptions regarding system effectiveness, implementation challenges, and its alignment with local policies and needs. The findings indicate that while the information system contributes to more effective financial management, challenges persist in infrastructure, human resources, and policy support. The study provides recommendations for system improvements, staff training, and policy adjustments to enhance financial management effectiveness at the local government level.

Introduction

The application of information technology in local government financial management is increasingly important to realize better transparency and accountability (Mardiasmo, 2018). This technology not only improves efficiency in financial management, but also helps to create a system that is more responsive to community needs and government rules. The Regional Financial and Asset Management Agency (BPKAD) has a strategic role in regional financial administration, including the management of budgets, revenues, and expenditures, which are the foundation of good financial governance (Kasmawati et al., 2024; Rahman et al., 2023; Kartini et al., 2023).

In Tidore Islands City, the implementation of a local government information system is expected to improve the quality of financial management by speeding up administrative processes, reducing manual workload, and minimizing the potential for human error in financial recording. This system is designed to provide faster and more accurate access to information, so that it can support better decision making at the local government level (Putra & Kurniawan, 2020). However, although the information system has been implemented, its effectiveness still needs to be evaluated comprehensively. A review of these implementations is needed to understand the extent to which information technology can contribute to improving efficiency and transparency, and to identify key constraints that may hinder its success. Factors such as infrastructure, human resource competencies, and policy support are important aspects that need to be further analysed (Shet et al., 2021; Sinulingga et al., 2019; Awaludin et al., 2024).

Previous research shows that the implementation of local government information systems can improve efficiency, accountability and transparency, but in Tidore Islands City there is a gap between expectations and real challenges in implementation. Local factors, such as human

resource capacity and adequate infrastructure, have a major influence on the success of information system implementation. Without the right infrastructure and adequate human resource skills, the implementation of information systems can experience obstacles that hamper their effectiveness. This gap is more evident in Tidore Islands City, which faces geographical challenges and limited local resources, so implementation strategies tailored to the specific conditions of the region are needed to achieve optimal information system objectives.

In addition, existing research gaps indicate that while there are many studies that address the implementation of information systems in the government sector, most studies focus on higher levels of government or areas with more developed infrastructure (Denzin & Lincoln, 2018; Walsham & Sahay, 2006). Meanwhile, Tidore Islands City, as an area with certain infrastructure and human resource capacity challenges, provides a different and interesting context for further study. This research is expected to make a new contribution by exploring how the implementation of information systems in regions with these conditions can be optimized. Thus, this research has novelty in exploring the factors that influence the successful implementation of local government information systems in areas with limited infrastructure and resources. This research becomes very relevant to provide strategic recommendations in strengthening regional financial management through information technology.

The main problem in this research is that the implementation of local government information systems in BPKAD Tidore Islands City has not been optimized. Some of the obstacles faced include limited skilled human resources, inadequate technological infrastructure, and policies that do not fully support the use of this information system (Suyanto et al., 2021). So as to produce this research question as follows: How is the implementation of the regional government information system at BPKAD Tidore Islands City, the challenges faced in the administration system, and strategic steps that can be taken to optimize the function of the regional financial information system?

This research aims to identify, review and analyze the implementation of local government information systems in BPKAD Tidore Islands City, the challenges faced in the administration system, and strategic steps that can be taken to optimize the function of the regional financial information system.

Methods

This research uses a qualitative approach with a case study method to obtain an in-depth understanding of the implementation of information systems in BPKAD Tidore Islands City. Data were obtained through interviews, observations, and document reviews related to the use of information systems in the administration process (Yin, 2018). Informants in this study include BPKAD employees who are directly involved in managing information systems and related management parties.

Results and Discussion

The implementation of local government information systems has the main objective of improving administrative processes and increasing the efficiency of financial management at the local level. These systems are designed to automate various administrative processes, including budget management, financial administration, and reporting, which in turn support better governance and more efficient use of public resources (Winarno, 2019). In a related literature review, Riyadi & Nugraha (2020) emphasized that the application of information systems in regional financial management not only improves administrative processes, but also increases transparency and accountability. The system allows easier and faster access to

financial information by stakeholders, thereby improving public scrutiny and government accountability in the use of regional budgets (Allen et al., 2004; Hendriks, 2012).

Furthermore, research shows that transparency resulting from financial information systems helps reduce opportunities for corruption, collusion, and nepotism in regional financial management (Riduan, 2024). This information technology-supported system also facilitates the financial audit process, thus enabling local governments to meet higher accountability standards (Susanto et al., 2023). In addition, with real-time data processing capabilities, information systems allow policy makers to respond to changes in financial conditions more quickly and effectively (Faisal, 2018). This suggests that the application of technology in local financial management can strengthen the capacity for sustainable fiscal management.

However, despite the potential benefits of information systems in local financial management, many local governments still face obstacles in the implementation process. One of the main obstacles faced is technology adaptation, especially in areas that have limited information technology infrastructure (Ismail, 2019; Guy & Arnold, 1995; Kholiavko et al., 2021). According to Kurniawan, remote areas often lack access to stable internet networks and adequate hardware, which are critical to running information systems optimally. This hinders the regions' ability to implement modern and integrated financial information systems (Hasan et al., 2020; Luo et al., 2024).

In addition to infrastructure issues, another significant challenge in implementing information systems is the development of human resource (HR) competencies. Many local government employees do not have sufficient skills and knowledge to operate complex information systems (Kurniawan, 2021). The low level of digital literacy among state civil servants in some regions causes resistance to technological change, which results in less effective system implementation (Rahayu, 2020). To overcome this challenge, Kurniawan (2021) underlines the importance of investing in training and capacity building of human resources so that they can optimally utilize information systems. Ongoing training programs need to be provided to ensure that local government employees are not only able to operate the system, but can also analyze the financial data generated by the system (Fedorowicz et al., 2010; Ingraham et al., 2003).

Overall, the literature shows that although the implementation of local government information systems has great potential to improve efficiency, transparency and accountability in local financial management, there are a number of challenges that must be overcome. These challenges are mainly related to uneven technological infrastructure and limited human resource competencies in various regions (Wurara et al., 2020). Therefore, the successful implementation of regional financial information systems depends on infrastructure readiness and the development of competent human resources.

The implementation of local government information systems aims to improve administrative processes and increase the efficiency of financial management at the local level. According to Riyadi & Nugraha (2020), information systems in local financial management can increase transparency and accountability. However, many local governments experience obstacles in implementation, especially related to technology adaptation and human resource competency development (Alfani & Nasution, 2022).

Analysis and Discussion

Based on the results of data analysis, several findings were found that describe the condition of the local government information system at BPKAD Tidore Islands City. First, although the implementation of information systems has brought positive changes in the financial administration process, its effectiveness is still hampered by several factors, especially the

limitations of existing infrastructure and the inadequate capacity of Human Resources (HR) (Hyman & Li, 2018). Second, the lack of policies that are responsive to the dynamics of technological change is a significant obstacle in maximizing the potential of information systems. Existing policies have not fully supported the digital transformation needed to improve efficiency and accuracy in administration (Brunetti et al., 2020; Yang et al., 2024).

In addition, the information system implementation process also often experiences technical problems and lack of training for the employees involved, which negatively affects the quality of regional financial management (Rahayu, 2020). These factors indicate the need for improvements in infrastructure, policies, and human resource capacity development so that information systems can run more optimally and have a positive impact on more transparent and efficient financial management.

Implementation of regional government information systems has been carried out at BPKAD Tidore Islands City

The implementation of the regional government information system (SIPD) in BPKAD Tidore Islands City has been carried out with the aim of supporting transparency, efficiency and accountability in regional financial management. Based on the results of the data analysis obtained, it can be explained as follows:

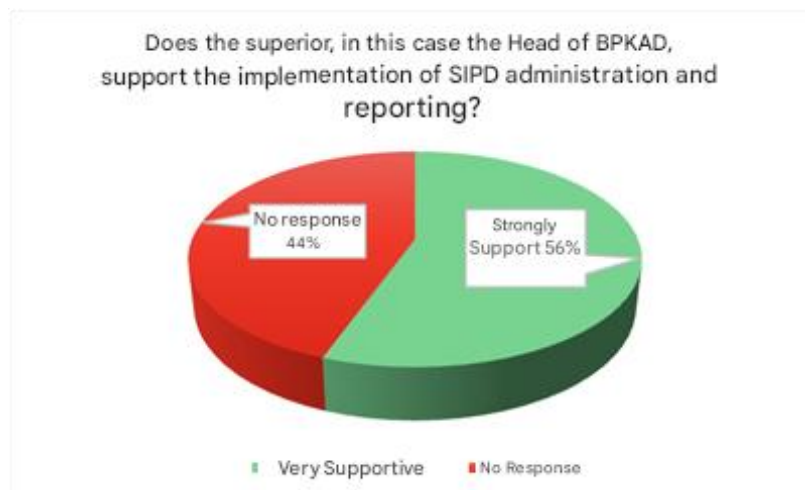


Figure 1. Ven Diagram of the Administration and Reporting Process from SIPD

Source: Respondent Survey, 2024

By paying attention to Figure 1, it can be explained that the number of respondents who answered regarding the support of the Head of BPKAD for the implementation of SIPD for administration and reporting has been implemented in BPKAD Tidore Islands City, 56% stated that they were very supportive, this illustrates that the majority of respondents recognized the strong support of the Head of BPKAD for the implementation of SIPD for the administration and reporting process. This shows that leadership has given serious attention to the implementation of SIPD, which is an important factor in driving the success of the system. This support can take the form of clear policies, resource allocation, or encouragement of staff to optimize the use of SIPD.

Furthermore, 44% did not respond, the proportion of respondents who did not respond was quite significant, reflecting the potential for communication barriers or gaps in receiving messages from leaders to staff. This could be an indication that although there is support from the Head of BPKAD, not all staff or stakeholders understand or feel the direct impact of this support. In addition, existing policies have not fully supported the implementation of

information systems. However, there needs to be further analysis of the specific policies needed to address these shortcomings. And the need to create adaptive policies that keep up with technological developments and local needs, as well as create support from the central government. For example, policies related to employee training, IT infrastructure, or regulations that support the use of information technology in local financial management.

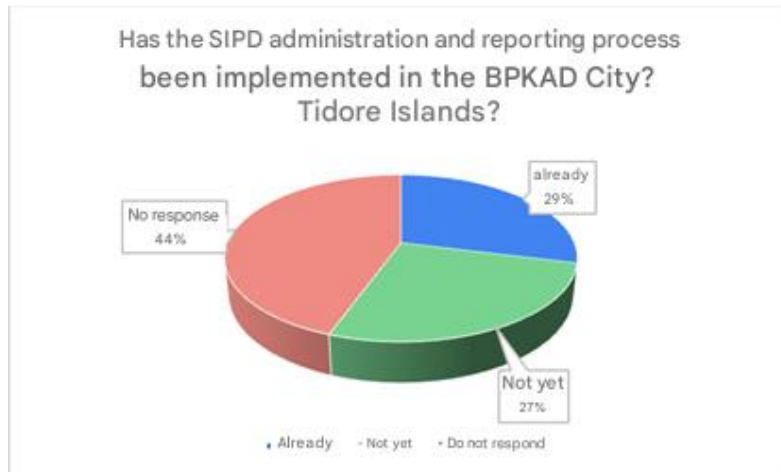


Figure 2. Ven Diagram of the Administration and Reporting Process from SIPD

Source: Respondent Survey, 2024

By paying attention to Figure 2, it can be explained that the number of respondents who answered that SIPD related to the Administration and reporting process had been implemented at BPKAD Tidore Islands City was 44% who did not respond. The proportion of respondents who did not respond is quite significant, reflecting a lack of participation or awareness related to SIPD in the administration and reporting process. This may indicate internal communication problems, lack of socialization, or lack of understanding of the importance of this system. Respondents who answered that they have responded 29%, indicating that the implementation of SIPD has only been partial and is still not fully accepted or understood by all parties. This could also be a reflection that the system has begun to be implemented but has not been optimal in encouraging full engagement and those who have not responded are 27%. due to ignorance, lack of trust in the system, or technical constraints such as infrastructure and training.

This data suggests that the implementation of SIPD in BPKAD Tidore Islands City still faces significant participation challenges. Increased socialization, training, and provision of technical support should be prioritized to ensure that all respondents are able to provide better responses and the system is fully operational.

The system is designed to integrate various processes, from budget planning to financial reporting. However, there are some aspects that need to be considered: 1) Suitability to local needs: Implemented SIPDs are often adapted from central regulations, so they need to be tailored to local contexts and specific needs; 2) Human resource capacity: Adequate training is essential to ensure employees can optimally utilize system features; 3) Technology infrastructure: The availability of a stable internet network and adequate hardware are important factors that influence the success of implementation.

Overall, the implementation of SIPD in BPKAD Tidore Islands City has shown progress, but technical and adaptation challenges still require further attention.

These Challenges Affect the Effectiveness of the Administration System at BPKAD

The challenges faced in the administration process, such as limited human resources, gaps in technological infrastructure, and regulatory constraints, have a direct impact on the effectiveness of the administration system: 1) Delays in administrative processes: If the system is not running optimally, the financial recording and reporting process may be hampered, affecting the quality of data presented; 2) Errors in data input: Lack of understanding of SIPD procedures increases the risk of data input errors, which impacts the accuracy of financial information; 3) Limitations on oversight: Ineffective systems reduce the ability of relevant parties to conduct real-time budget monitoring and control.

To address this challenge, structured measures are needed to improve BPKAD's technical and operational capacity.

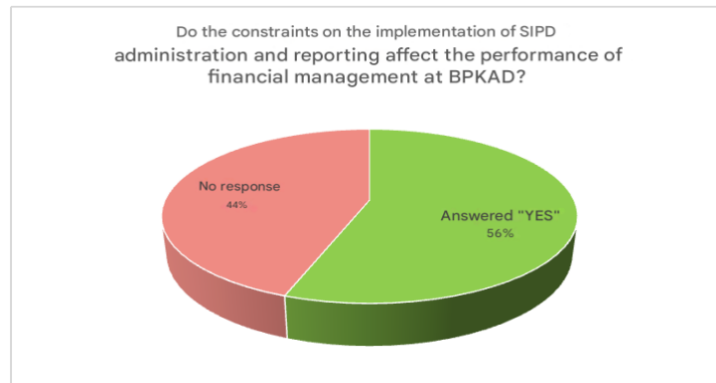


Figure 3. Ven diagram of constraints obtained

Strategic Steps that Can Be Taken to Optimize the Function of the Regional Financial Information System

There are several strategic steps that can be taken to improve the effectiveness of regional financial information systems: 1) Strengthening training and mentoring: Organize ongoing training for BPKAD staff to improve their competence in using SIPD effectively; 2) Technology infrastructure upgrades: Investment in a more stable internet network, adequate hardware, and technical support to ensure the operational sustainability of the system; 3) System evaluation and adaptation: Conduct periodic evaluations of SIPD to ensure the system meets the needs of the region, including adding relevant features; 4) Cross-sector collaboration: Integrate SIPD with other information systems in local government to create a more holistic and efficient data flow. Monitoring and auditing: Ensure regular monitoring of system implementation to identify constraints and correct them in a timely manner.

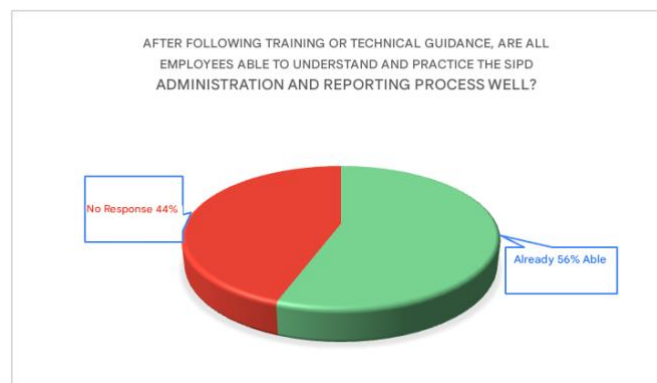


Figure 4. Ven Diagram of One of the Strategies

Source: Respondent Survey, 2024

Conclusion

This study concludes that the implementation of local government information systems in BPKAD of Tidore Islands City provides benefits in improving the efficiency of administration, but its effectiveness still needs to be improved through increasing human resource capacity, infrastructure, and policy support. With recommendations for training development and technology infrastructure improvement, it is expected that this information system can further. These steps, if implemented consistently, can improve the performance of SIPD and support better regional financial management in BPKAD of Tidore Islands City supporting transparency and accountability of regional financial management in the future.

Support from the Head of BPKAD for the implementation of SIPD is important for the success of the system. However, the high number of non-respondents suggests the need for better communication strategies and a more inclusive approach to ensure that this support is felt and understood by all staff in BPKAD Kota Tidore Islands. These efforts may also help to increase participation and acceptance of the system in the future. And it is worth highlighting the importance of policy adjustments to respond to identified challenges in system implementation. This includes policies that focus on improving the capacity of human resources and the infrastructure needed to support the success of information systems in BPKAD.

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