
Analysis of Regional Accounting and Asset Management Information Systems at Local Government

Sangrila Gladys Miracle Blegur¹

¹Politeknik Negeri Kupang, Kupang, Indonesia

Correspondence: Sangrila Gladys Miracle Blegur (loitku09@gmail.com)

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ABSTRACT

This study aims to analyze the implementation of the accounting information system (AIS) in the management of regional assets at the Regional Revenue and Asset Agency (BPAD) of East Nusa Tenggara Province. The research focuses on evaluating the effectiveness of AIS components, including human resources, procedures, data quality, and infrastructure in supporting asset management activities. A qualitative approach was employed using interviews, observations, and document analysis to obtain a comprehensive understanding of the system in practice. The findings indicate that the AIS has generally supported administrative processes and financial reporting by enabling systematic recording and documentation of regional assets. However, the system has not yet achieved optimal effectiveness. The main challenges are related to limited technical competence among employees and inconsistencies in asset data, such as incomplete records and input errors. These issues are largely influenced by the reliance on Microsoft Excel as a temporary system, which lacks integration and automated control features. On the other hand, procedural and infrastructure aspects are relatively well established, as indicated by the availability of standard operating procedures and adequate facilities. The study concludes that improving human resource capacity, strengthening data validation processes, and developing an integrated AIS are essential to enhance the effectiveness, transparency, and accountability of regional asset management.

1 | Introduction

Advances in information systems have enabled organizations to process, record, and present financial information more efficiently, accurately, and transparently (Parviainen et al., 2017). In government institutions, the implementation of accounting information systems plays an essential role in supporting decision-making processes, strengthening internal control, and improving accountability in financial and asset management. An accounting information system integrates people, procedures, and technology to generate financial information that is relevant and reliable for both internal and external stakeholders (Zohry & Al-Dhubaibi, 2024). In the context of public sector organizations, the availability of accurate and timely financial information is increasingly important due to the growing demand for transparency and accountability in regional financial management (Ortega-Rodríguez et al., 2020). Regional governments are required to manage public resources effectively while ensuring compliance

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with applicable regulations. One strategic component in regional financial management is the management of regional assets, commonly referred to as regional property or *Barang Milik Daerah* (BMD). Regional assets consist of movable and immovable property acquired through regional government budgets and other legitimate sources. Effective asset management contributes not only to administrative order but also to regional economic development and the optimization of local own-source revenue (*Pendapatan Asli Daerah*).

The management of regional assets in Indonesia is regulated under the Regulation of the Minister of Home Affairs Number 19 of 2016 concerning Guidelines for Regional Property Management. The regulation emphasizes that regional asset management includes planning, procurement, utilization, administration, maintenance, supervision, and control of regional assets. Proper implementation of these processes requires a reliable accounting information system capable of supporting accurate asset recording, monitoring, and reporting (Mosweu & Ngoepe, 2019). Therefore, accounting information systems become a critical instrument in ensuring the effectiveness and efficiency of regional asset management practices.

Despite the regulatory framework and technological advancements, many regional government institutions still face challenges in implementing effective accounting information systems for asset management (Mian, 2019). One of the major issues involves the limited capacity of human resources in operating accounting applications and processing asset data accurately. In many local government institutions, asset recording processes are still conducted manually or semi-computerized using basic applications such as Microsoft Excel: West Java (Anto et al., 2021; El Falah et al., 2025), North Maluku (Ambarita et al., 2016), Southeast Sulawesi (Anto et al., 2021), Riau (Andika & Ramadhani, 2021), Aceh (Rafiqah & Idwan, 2025). These challenges are also evident in the Regional Revenue and Asset Agency of East Nusa Tenggara Province (*Badan Pendapatan dan Aset Daerah Provinsi Nusa Tenggara Timur*). Based on institutional data, the agency manages a substantial number of regional assets consisting of land, buildings, machinery, roads, irrigation networks, and other fixed assets. However, several problems related to asset management remain unresolved, particularly in relation to the accounting information system used for recording and managing asset data. The use of Microsoft Excel as the primary tool for asset administration has created operational difficulties due to manual data entry processes and the limited technical competence of some employees.

Preliminary observations and interviews conducted with asset management officers indicated that data entry errors frequently occur because employees have not fully mastered the operation of the system. Asset data must be entered manually based on physical documents and administrative records, making the process highly dependent on employee accuracy and attention to detail. As a result, the reliability and effectiveness of the accounting information system in supporting regional asset management become questionable. In addition, limited supervision, inadequate training, and suboptimal internal control further contribute to inefficiencies in asset administration and reporting.

Previous studies have highlighted the importance of accounting information systems in improving organizational performance and public sector accountability (Huy & Phuc, 2020). However, empirical research focusing specifically on the relationship between accounting information systems and regional asset management in local government institutions remains limited, particularly in the context of eastern Indonesia. Most prior studies have concentrated on financial reporting quality (Mediaty et al., 2025), internal control systems (Boufounou et al., 2024), or public financial management in gender (Polzer et al., 2023), while studies examining asset management practices from an accounting information system perspective are still relatively scarce. Therefore, this study seeks to address this gap by analyzing the role of accounting information systems in supporting regional asset management within the Regional Revenue and Asset Agency of East Nusa Tenggara Province.

This research is expected to provide both theoretical and practical contributions. Theoretically, the study contributes to the development of public sector accounting literature, particularly regarding the implementation of accounting information systems in regional asset management. Practically, the

findings are expected to provide recommendations for improving accounting information systems, strengthening employee competence, and enhancing the effectiveness of regional asset management practices in government institutions. Ultimately, improving the quality of accounting information systems is expected to support more transparent, accountable, and efficient public sector governance.

2 | Method

2.1 | Research Design

This study employed a qualitative descriptive approach to analyze the implementation of accounting information systems in regional asset management at the Regional Revenue and Asset Agency of East Nusa Tenggara Province (Badan Pendapatan dan Aset Daerah Provinsi Nusa Tenggara Timur). A qualitative approach was selected because the study aimed to understand phenomena related to the use of accounting information systems, employee competencies, and asset management practices in their natural setting. Through this approach, the research explored perceptions, experiences, and operational challenges encountered by employees involved in regional asset management activities. The research was conducted at the Regional Revenue and Asset Agency of East Nusa Tenggara Province, located at Jl. El Tari No. 52, Sasando Building, 3rd Floor, Kupang City, Indonesia. The object of the study focused on analyzing the role of accounting information systems in supporting regional asset management practices within the institution.

2.2 | Data Sources

This study used qualitative data in the form of descriptive information obtained from observations, interviews, and institutional documents related to regional asset management. Qualitative data were utilized to provide an in-depth understanding of how accounting information systems were implemented and managed within the organization. The study employed both primary and secondary data sources. Primary data were obtained directly from employees and officials involved in regional asset management activities through interviews and field observations. These data provided firsthand information regarding the implementation of accounting information systems, operational constraints, and asset management procedures. Secondary data were obtained from institutional documents, including balance sheets, fixed asset reports, regional asset reports, regulations, and other supporting administrative records provided by the Regional Revenue and Asset Agency of East Nusa Tenggara Province.

2.3 | Data Collection Techniques

Data collection in this study was conducted using interviews, documentation, and literature study techniques. Interviews were carried out through direct question-and-answer sessions with employees and officials responsible for regional asset management activities. This technique enabled the researcher to obtain detailed information regarding the implementation of accounting information systems and challenges encountered in managing regional assets. Documentation techniques were used to collect supporting data in the form of financial reports, balance sheets, fixed asset reports, and other institutional records related to regional asset management. These documents were utilized to strengthen and validate findings obtained through interviews and observations. In addition, a literature study was conducted by reviewing books, journals, regulations. The literature review provided theoretical foundations and conceptual references to support the analysis and interpretation of the research findings. This approach is consistent with the model adopted by Padu & Maria (2026) in their analysis of the operational budget at Balai Karantina Kesehatan Kelas I kupang.

2.4 | Data Analysis Techniques

Data analysis in this study followed the qualitative data analysis procedures consisting of data collection, data reduction, data presentation, and conclusion drawing (Padu & Maria, 2026). The first

stage involved data collection through interviews, observations, and documentation. During this stage, the researcher gathered extensive information related to accounting information systems and regional asset management practices within the institution. The second stage was data reduction, which involved selecting, focusing, simplifying, and organizing the collected data according to the research objectives. Data reduction was conducted continuously throughout the research process to identify important findings and eliminate irrelevant information. The third stage was data presentation, where the reduced data were systematically organized and presented in narrative form to facilitate understanding and interpretation. Presenting the data in an organized manner enabled the researcher to identify relationships, patterns, and themes emerging from the findings. The final stage involved drawing conclusions and verification. Conclusions were formulated based on the patterns and relationships identified during the analysis process. Verification was conducted continuously to ensure the validity and consistency of the findings.

3 | Results and Discussion

3.1 | Organizational Resources of the Regional Revenue and Asset Agency

The implementation of regional asset management at the Badan Pendapatan dan Aset Daerah Provinsi Nusa Tenggara Timur is supported by human resources, infrastructure, and technical facilities that enable organizational activities to operate effectively and efficiently. Based on BPAD internal data in 2024, the institution employed 247 personnel consisting of structural officials, administrative staff, and supporting employees. **Table 1** shows the number of employees by position in the office.

TABLE 1 | Number of Employees Based on Position

No	Position	Male	Female	Total
1	Echelon II	1	-	1
2	Echelon III	25	1	26
3	Echelon IV	51	27	78
4	Staff	83	59	142
Total		160	87	247

Source: BPAD Province of NTT (2024)

The largest proportion of employees was positioned at the staff level, indicating that operational activities were highly dependent on administrative and technical personnel. In terms of educational background, most employees possessed undergraduate qualifications, while several employees had completed postgraduate education. The institution also conducted competency development through tiered administrative training programs, although only a limited number of employees had participated in advanced managerial training. **Table 2** shows the education level of employees.

TABLE 2 | Number of Employees Based on Educational Level

No.	Educational	Male	Female	Total
1	Doctoral Degree (S3)	0	0	0
2	Master's Degree (S2)	15	8	23
3	Bachelor's Degree (S1)	86	49	135
4	Diploma (D3)	7	11	18
5	Senior High School	46	23	69
6	Junior High School	2	-	2
7	Elementary School	1	-	1
Total		156	91	247

Source: BPAD Province of NTT (2024)

In addition to human resources, BPAD Province of NTT was supported by adequate technical infrastructure, including office buildings, workspaces, computers, laptops, printers, archive rooms, internet networks, and data storage facilities. The availability of these facilities demonstrates institutional readiness in supporting accounting information systems and regional asset administration processes. Furthermore, organizational performance data indicated that BPAD Province of NTT consistently achieved targets related to the administration of regional assets, particularly in the area of asset administration management, although several aspects of asset utilization and transfer still showed fluctuating achievement levels.

3.2 | Accounting Information System in Regional Asset Management

The findings revealed that the accounting information system implemented at BPAD Province of NTT currently utilized Microsoft Excel as a temporary tool for recording and managing regional assets. Previously, the institution had implemented the Regional Management Information System (SIMDA); however, the system was discontinued in 2024 due to the ongoing development of a new asset management application. During the transition period, Microsoft Excel was employed to maintain continuity in asset administration activities, particularly in recording asset classifications through the Kartu Inventaris Barang (KIB) system.

Interview results with the Head of Asset Recording Subdivision indicated that Microsoft Excel was considered practical and flexible in supporting daily administrative activities.

Yes, currently at BPAD of East Nusa Tenggara Province (NTT), we use Microsoft Excel as a temporary tool for recording and managing assets. Previously, we used the SIMDA application; however, it has no longer been in use since 2024 because we are in the process of developing a new application that is still under design. Therefore, for the time being, we rely on Microsoft Excel to support our activities. Microsoft Excel is used to record and input data related to KIB (Inventory Card), including asset types, item codes, locations, and acquisition values. It functions as part of the accounting information system, helping to facilitate and streamline operational activities.

Lambertus Buda
Head of Asset Recording Subdivision, 2026

Asset data such as asset type, inventory code, location, acquisition year, and acquisition value were manually entered into the system. Although the system supported administrative documentation, the findings demonstrated that the process remained highly dependent on employee accuracy and technical capability. Consequently, several weaknesses were identified, particularly in relation to data duplication and human error during data entry processes. The study also identified that the accounting information system had generally fulfilled its administrative function in supporting regional asset management. Asset information could be generated systematically and used as a basis for preparing asset reports and financial statements. Nevertheless, the absence of an integrated system limited data synchronization, monitoring, and automatic validation processes, thereby increasing the risk of recording inaccuracies.

3.3 | Components of the Accounting Information System

3.3.1 | Human Resources

Human resources represented one of the most critical components in the implementation of the accounting information system. The findings showed that employees were responsible for recording, inputting, and managing asset data through Microsoft Excel. However, observational results identified several operational constraints, particularly duplicate asset registration numbers and inaccurate data input. These problems indicated that some employees had not fully mastered the technical operation of Microsoft Excel and accounting-based asset administration procedures. The study further revealed that out of 30 employees directly involved in regional asset management, 10 employees experienced difficulties in operating Microsoft Excel effectively. These difficulties included incorrect formula

usage, duplication of data, and inaccuracies in reporting procedures. Such conditions were influenced by differences in educational backgrounds, limited technological competence, and insufficient technical training. As a result, the effectiveness of the accounting information system was constrained by the competency level of system users.

3.3.2 | Procedures

The findings demonstrated that accounting information system procedures at BPAD Province of NTT had been implemented in accordance with established Standard Operating Procedures (SOPs). The procedures consisted of several stages, including physical asset verification, asset recording, documentation, distribution to organizational units, periodic monitoring, data adjustment, and report preparation.

The following are the accounting information system procedures that we implement in managing regional assets.

- a. *Before recording regional assets, the responsible staff first conduct a physical inspection of the assets to determine their existence, condition, and quantity.*
- b. *The recording and data entry of regional assets are carried out using a computerized accounting information system, namely Microsoft Excel, so that asset data can be documented and managed systematically.*
- c. *Each acquired asset is recorded based on valid supporting documents such as the handover report (BAST), purchase receipts, or other acquisition documents.*
- d. *Asset data that has been recorded is then archived in both physical and electronic document forms to facilitate future inspection and tracking of assets.*
- e. *After recording and archiving, regional assets are distributed to the respective work units that require them according to their functions and intended use.*
- f. *Assets that have been utilized by work units are periodically inspected to ensure that their condition remains serviceable and consistent with the data recorded in the system.*
- g. *If discrepancies are found between the asset data in the system and the physical condition in the field, data adjustments are made by the responsible staff.*
- h. *All recorded and updated asset data are subsequently used as the basis for preparing regional asset reports and financial statements.*

Lambertus Buda

Head of Asset Recording Subdivision, 2026

These procedures reflected a structured workflow that supported administrative accountability and asset control. Interview results confirmed that all operational activities were carried out based on institutional SOPs. Therefore, despite technical limitations in the software used, the procedural component of the accounting information system could be considered adequately implemented.

3.3.3 | Software

The software component of the accounting information system relied primarily on Microsoft Excel. The application was utilized for recording, classifying, summarizing, and storing asset information in the form of KIB reports. The findings indicated that Microsoft Excel was considered flexible and easy to use for administrative purposes. However, the application lacked integration capabilities and automatic control mechanisms typically available in specialized accounting information systems. The dependence on manual input increased the likelihood of human error and reduced the efficiency of data validation processes. Consequently, although Microsoft Excel supported administrative activities, the software component was not yet fully optimal for managing large-scale regional asset data.

3.3.4 | Data

Asset data recorded within the accounting information system included asset names, inventory codes, acquisition values, locations, ownership status, and acquisition years.

Regional asset data include all information related to asset types, locations, conditions, acquisition values, acquisition years, and purchase prices. With this information, we can identify and understand the assets currently in use.

Lambertus Buda
Head of Asset Recording Subdivision, 2026

The findings showed that asset information had generally been documented systematically through KIB reports. Nevertheless, several reports still contained incomplete information and unfilled data columns, indicating inconsistencies in data completeness and accuracy. These findings suggest that although data availability supported asset reporting processes, data quality remained an important issue that required improvement through better supervision and stricter validation procedures.

3.3.5 | Infrastructure

The study found that BPAD Province of NTT possessed relatively adequate infrastructure to support accounting information system implementation. Facilities such as office buildings, workspaces, computers, laptops, internet networks, printers, scanners, archive rooms, and data servers were available and actively utilized in daily operational activities. The existence of these facilities indicated that infrastructure was not the primary obstacle in the implementation of the accounting information system. Overall, the infrastructure component provided sufficient support for asset recording and reporting activities, although future system modernization would require more integrated technological infrastructure.

3.4 | Analysis of the Accounting Information System

The accounting information system implemented at BPAD Province of NTT had generally supported regional asset administration and reporting activities. The system enabled employees to record and organize asset data systematically while facilitating the preparation of regional asset reports.

The regional asset management system at BPAD of East Nusa Tenggara Province refers to the Regulation of the Minister of Home Affairs (Permendagri) No. 19 of 2016, in which the stages of managing regional property include: (1) planning of needs and budgeting, (2) procurement, (3) safeguarding, (4) utilization, (5) security, (6) valuation, (7) disposal, (8) transfer, (9) administration, and (10) guidance, supervision, and control. In practice, the management process for all regional assets (Barang Milik Daerah/BMD) follows the implementation system outlined in Permendagri No. 19 of 2016, which consists of eleven (11) indicators. However, at BPAD of East Nusa Tenggara Province, only four key indicators are applied, namely: planning and budgeting, procurement, utilization, and disposal.

Lambertus Buda
Head of Asset Recording Subdivision, 2026

Among the five components of the accounting information system, the procedural, software, and infrastructure components could be categorized as relatively adequate. In contrast, the human resource and data components had not yet achieved optimal performance due to insufficient technical competencies, data inaccuracies, and incomplete asset records. These findings indicate that improvements in employee training, technological adaptation, and system integration are essential to enhance the quality of regional asset management.

3.5 | Regional Asset Management System

The findings revealed that regional asset management at BPAD Province of NTT referred to the provisions stipulated in Permendagri No. 19 Tahun 2016 concerning regional property management. The regulation outlines several stages of asset management, including planning and budgeting, procurement, utilization, safeguarding, valuation, transfer, deletion, administration, supervision, and

control. However, in practice, BPAD Province of NTT primarily implemented four major stages, namely planning and budgeting, procurement, utilization, and asset deletion. These stages formed the operational basis for regional asset management activities conducted within the institution.

3.5.1 | Planning and Budgeting

The planning and budgeting process was conducted annually through the preparation of the Regional Property Requirements Plan (RKBMD). Asset requirements were identified and proposed by each organizational unit before being incorporated into the annual regional budget plan.

In the process of managing regional property (BMD), the first step is to classify items that will be designated as regional assets. These assets are then planned and budgeted for procurement needs, which are recorded in the annual Regional Property Needs Plan (RKBMD). After being recorded, they are further incorporated into the annual Work Plan and Budget document of the Regional Work Units (SKPD), in accordance with standards established by the local government. The next stage involves the deliberation process for the preparation of the Regional Revenue and Expenditure Budget (APBD), which includes a list of goods expenditures that will later become regional assets under the management of BPAD of East Nusa Tenggara Province.

Levernia Knaufmone
Head of Asset Budgeting Subdivision, 2026

The findings indicated that planning activities had been implemented systematically and periodically, thereby ensuring that asset procurement aligned with organizational needs and budget priorities.

3.5.2 | Procurement

Asset procurement activities were implemented transparently and accountably in accordance with applicable regulations. BPAD Province of NTT established procurement committees annually to oversee procurement procedures and verify administrative documents.

In the procurement of regional property, the process is carried out transparently and accountably. The head of the Regional Work Unit (SKPD) is responsible for both administrative aspects and the quality of the goods, and is required to report the implementation to the regional head through the authorized asset user under their supervision. This process is also supported by complete procurement documentation. It should be noted that the procurement of goods and services has been conducted in accordance with the applicable regulations of the Minister of Home Affairs (Permendagri). Each year, BPAD of East Nusa Tenggara Province establishes a procurement and inspection committee responsible for preparing and examining the purchased goods. This activity is routinely carried out to ensure the proper implementation of operational procedures.

Levernia Knaufmone
Head of Asset Budgeting Subdivision, 2026

The findings also showed that procurement activities experienced dynamic changes through additional and reduced asset mutations across several categories of regional property. These practices reflected the existence of internal control mechanisms and demonstrated institutional commitment to accountable asset procurement processes.

3.5.3 Asset Utilization

The utilization process involved assigning asset usage status through formal approval from regional authorities. Organizational units were required to prepare semester and annual asset utilization reports as forms of accountability.

The process of utilizing regional property (BMD) at BPAD of East Nusa Tenggara Province begins with the regional head determining the annual status of asset utilization. In the asset utilization activities at BPAD, Regional Work Units (SKPD) are allowed to propose plans for regional property needs. Furthermore, SKPD are responsible for preparing and submitting periodic reports, including the Semester User Goods Report (LBPS) and the Annual User Goods Report (LBPT), which are then submitted to the asset manager for oversight and administration purposes.

Levernia Knaufmone
Head of Asset Budgeting Subdivision, 2026

The findings indicated that the utilization process had been implemented in accordance with established procedures and administrative requirements.

3.5.4 Asset Deletion

Asset deletion was conducted when assets were damaged, lost, obsolete, transferred, or economically inefficient to maintain. The process involved administrative verification and approval procedures in accordance with regulatory provisions.

The process of disposing of regional property (BMD) is, in principle, applicable to all assets that are no longer under the control of the user or the authorized asset holder, for example due to transfer of ownership, destruction, or other valid reasons. The disposal of immovable property is carried out based on the following considerations: (a) severe damage caused by natural disasters, and (b) damage that renders the asset unusable. Meanwhile, the disposal of movable property is based on: (a) technical considerations, such as assets that are damaged and no longer economical to repair, obsolete due to modernization, or have exceeded their useful life; (b) economic considerations, such as optimizing excess assets whose operational and maintenance costs exceed their benefits; and (c) losses due to disappearance, shortages, or damages caused by errors or negligence in storage or management, including factors beyond such negligence. In the disposal process, the Regional Head establishes a Disposal Committee consisting of relevant technical agencies. The committee is responsible for examining damaged assets, ownership documents, administrative records, usage, financing, maintenance, and other relevant data. Specifically, the disposal of heavily damaged movable assets, such as office equipment, household equipment, and special field vehicles, is determined by the asset manager after obtaining approval from the Regional Head. Overall, BPAD of East Nusa Tenggara Province has implemented the disposal process in accordance with Permendagri No. 19 of 2016 concerning the management of regional property.

Lambertus Buda
Head of Asset Recording Subdivision, 2026

The findings demonstrated that asset deletion activities contributed to maintaining the accuracy and reliability of regional asset records. The study found that the implementation of regional asset management at BPAD Province of NTT was generally consistent with the provisions outlined in Permendagri No. 19 Tahun 2016. Planning and budgeting activities were conducted through annual RKBMD preparation, procurement activities adhered to transparency and accountability principles, asset utilization followed formal approval procedures, and asset deletion was implemented based on valid administrative considerations. These findings indicate that the institutional practices of BPAD Province of NTT were substantially aligned with national regulatory standards for regional asset management. Nevertheless, the effectiveness of implementation remained influenced by the quality of human resources and the limitations of the existing accounting information system. In particular, the limited number of personnel with advanced managerial competencies constrained the organization's ability to optimize strategic decision-making processes. Additionally, technological constraints within the accounting information system hindered the integration and real-time updating of asset data.

3.6 | Discussion

The findings of this study highlight that the implementation of the accounting information system (AIS) in regional asset management at the Regional Revenue and Asset Agency (BPAD) of East Nusa Tenggara Province has generally supported administrative and reporting functions, yet remains constrained by several structural and technical limitations. From an organizational resource perspective, the availability of human resources, infrastructure, and supporting facilities indicates that the institution possesses adequate foundational capacity to implement an effective AIS (Al-Okaily, 2024). The dominance of staff-level employees suggests that operational activities rely heavily on technical and administrative personnel, which is consistent with public sector organizations where asset administration requires detailed and continuous data processing. However, the limited number of employees with advanced managerial training implies that strategic and technological adaptation may not yet be fully optimized. According to Chatha et al. (2024) It can limit the optimal adoption of technology, thereby reducing the overall efficiency and performance of organizational operations.

In terms of system implementation, the use of Microsoft Excel as a temporary accounting information system reflects a pragmatic response during the transition from the previously utilized system (SIMDA) to a newly developed application. This finding aligns with Riaz et al. (2023) suggesting that organizations often rely on flexible and accessible tools during periods of system transition. While Microsoft Excel provides ease of use and flexibility, its limitations in integration, automation, and internal control mechanisms reduce its effectiveness in managing large-scale and complex asset data (Davis et al., 2017). Consequently, the system remains highly dependent on human accuracy, increasing the risk of data duplication, input errors, and inconsistencies.

The analysis of AIS components further reveals that human resources and data quality are the most critical weaknesses in the current system (He et al., 2021). The presence of employees who experience difficulties in operating Microsoft Excel indicates a gap in technical competence, which directly affects system effectiveness. This finding supports the theory that human resources are a key determinant of AIS success, particularly in public sector organizations where system utilization is often influenced by varying educational backgrounds and levels of technological literacy. In addition, inconsistencies in asset data, including incomplete records and unfilled data fields, suggest that data governance and validation mechanisms have not been fully enforced. On the other hand, the procedural component demonstrates a relatively strong performance. The existence of structured and standardized procedures based on Standard Operating Procedures (SOPs) indicates that the organization has established a clear workflow for asset management activities. These procedures reflect principles of accountability, transparency, and control, which are essential in public sector asset management (Ratnasari et al., 2023). Similarly, the infrastructure component is not identified as a major constraint, as the availability of adequate technological and physical facilities supports operational activities effectively.

Furthermore, the study reveals that although BPAD refers to the regulatory framework outlined in Permendagri No. 19 of 2016, the practical implementation focuses primarily on four key stages: planning and budgeting, procurement, utilization, and asset deletion. This partial implementation suggests that not all aspects of the regulatory framework have been fully operationalized. While the implemented stages have been conducted in a structured and accountable manner, the absence of other stages such as safeguarding, valuation, and supervision may limit the comprehensiveness of asset management practices. The findings indicate that the AIS at BPAD of East Nusa Tenggara Province functions adequately at an administrative level but has not yet achieved optimal effectiveness due to limitations in human resource competence, data quality, and system integration. Therefore, improving employee technical skills through targeted training programs, enhancing data validation procedures, and accelerating the development of an integrated asset management system are essential steps to strengthen the effectiveness and reliability of regional asset management in the future (Situmorang et al., 2024).

4 | Conclusion

This study shows that the implementation of the accounting information system (AIS) in managing regional assets at the Regional Revenue and Asset Agency (BPAD) of East Nusa Tenggara Province has generally been helpful in supporting administrative processes and financial reporting. Through this system, asset data can be recorded and organized more systematically, which in turn supports transparency and accountability in public sector management.

However, the system has not yet functioned at its full potential. One of the main challenges lies in the human aspect. Some employees still face difficulties in operating Microsoft Excel, which is currently used as the main tool for managing asset data. As a result, issues such as data entry errors, duplication, and inconsistencies are still found. In addition, there are indications that some asset data are incomplete or not properly updated, suggesting that data control and validation processes need to be strengthened.

On a more positive note, the procedures and infrastructure supporting the system are relatively well established. The presence of clear Standard Operating Procedures (SOPs) helps guide employees in carrying out their tasks in a structured and consistent manner. Adequate facilities and infrastructure also play an important role in ensuring that daily operations run smoothly. Nevertheless, relying on Microsoft Excel as a temporary system presents limitations, particularly in terms of integration, automation, and internal control. The study also finds that although BPAD has referred to Permendagri No. 19 of 2016, not all aspects of the regulation have been fully implemented. In practice, asset management activities are still focused on several main stages, such as planning, procurement, utilization, and deletion. This indicates that there is still room to improve and expand the implementation so that it becomes more comprehensive.

Based on these findings, several improvements are needed. Increasing employees' technical skills through regular training is essential so they can better utilize the system. Strengthening data verification processes is also important to ensure that the information produced is accurate and reliable. In addition, developing a more integrated and automated system should be a priority to replace the current manual approach. Improving the quality of the accounting information system is an important step toward better governance. With a more reliable system and more capable human resources, regional asset management can become more effective, transparent, and accountable in the future.

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