

Research Article

An Evaluation of the Accounting Information System of BUMDes Maju Rahayu

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Abstract. Village-Owned Enterprises (BUMDes) function as important economic institutions that contribute to enhancing the welfare and independence of rural communities. BUMDes Maju Rahayu, as one of the rapidly developing BUMDes, requires a reliable and effective accounting information system to support transparent and accountable financial management. This study aims to evaluate the implementation of the accounting information system at BUMDes Maju Rahayu using a qualitative approach with a case study method. Data collection was conducted through in-depth interviews with BUMDes managers and direct observation of financial recording and reporting processes. The findings reveal that the existing accounting system still faces several challenges, including incomplete documentation, limited internal control, and dependence on manual bookkeeping. These issues hinder the accuracy and timeliness of financial information. The study recommends capacity-building for human resources, adoption of technology-based accounting systems, and strengthening of internal control procedures to improve financial management quality and organizational performance in BUMDes operations.

Keywords: Accounting Information System; BUMDes; Evaluation; Qualitative Analysis; Village.

1. Introduction

Village economic development is a primary focus of the Indonesian government in its efforts to improve community welfare and reduce the development gap between urban and rural areas. Law Number 6 of 2014 concerning Villages grants villages significant authority to independently manage their potential and resources (Undang-Undang Republik Indonesia Nomor 6 Tahun 2014). One of the instruments granted to villages is the establishment of Village-Owned Enterprises (BUMDes) as a driving force for the village economy. BUMDes are legal entities established by the village and/or together with the village community to utilize village assets, services, and economic potential for the welfare of the village community. The existence of BUMDes is expected to provide a forum for village communities to develop productive businesses and increase village original income. Data from the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration shows that by 2023, there will be more than 50,000 BUMDes spread across Indonesia with total assets reaching 15 trillion rupiah (Kementerian Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi Republik Indonesia, 2023).

The rapid development of Village-Owned Enterprises (BUMDes) has necessitated a robust and accountable financial management system. An accounting information system (AIS) is a crucial element in BUMDes operations, serving as a tool for recording, processing, and reporting financial information to various stakeholders. According to Romney and Steinbart (2018), an accounting information system is a system that collects, records, stores, and processes data to generate information for decision-makers. Maju Rahayu, located in Bergas Village, Semarang Regency, Central Java, is one of the BUMDes that has experienced significant growth in the past five years. This BUMDes manages various business units, including savings and loans, a grocery store, village market management, and agricultural processing. In 2023, the total assets of Maju Rahayu

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BUMDes reached 2.5 billion rupiah, with an annual turnover of approximately 800 million rupiah, involving 150 community members as customers and 25 direct workers.

Along with its rapid business growth, BUMDes Maju Rahayu faces various challenges in managing its accounting information system. Initial observations indicate that financial records are still maintained manually using a simple cash book. Financial reporting is often delayed, and data inaccuracies are common between different business units. Furthermore, a weak internal control system poses a risk of asset loss and recording errors, which can be detrimental to the BUMDes. BUMDes Maju Rahayu is not unique to the BUMDes. Research conducted by Sari and Wijayanti (2021) on 50 BUMDes in Central Java showed that 78% still use manual recording systems, and 65% experience difficulties in preparing financial reports in accordance with accounting standards. Data from the Semarang Regency Community and Village Empowerment Office shows that of the 187 BUMDes, only 32% have adequate accounting systems.

The quality of the accounting information system has a direct impact on the performance and survival of BUMDes. A good accounting information system can improve transparency, accountability, and the effectiveness of decision-making. Conversely, a weak accounting information system can lead to operational inefficiencies, reporting errors, and loss of trust from various stakeholders. Therefore, an evaluation of the BUMDes accounting information system is essential to identify weaknesses and provide recommendations for improvement. This study aims to evaluate the accounting information system at BUMDes Maju Rahayu using an evaluation framework that covers input, process, and output aspects. The evaluation was conducted on the main components of the accounting information system, including human resources, information technology, accounting procedures, and internal controls. The results of this study are expected to contribute to the development of BUMDes accounting information systems and serve as a reference for other BUMDes experiencing similar problems.

2. Literature Review

Accounting Information System

An accounting information system is a combination of human and capital resources within an organization responsible for providing financial information and information obtained from the collection and processing of transaction data (Bodnar and Hopwood, 2019). The primary objective of an accounting information system is to collect and store data about organizational activities, process that data into useful information for decision-making, and provide adequate controls to safeguard organizational assets. According to Hall (2017), the main components of an accounting information system consist of five elements: the people who operate the system, the procedures and instructions used to collect, process, and store data, data about the organization and its business activities, the software used to process the data, and the information technology infrastructure, which includes computers, communication devices, and networks. These five components must work in an integrated manner to produce relevant, accurate, timely, and reliable information. The quality of an accounting information system can be measured using several criteria. DeLone and McLean (2003) developed an information system evaluation model consisting of six dimensions: system quality, information quality, service quality, system usage, user satisfaction, and net benefits. This model has been widely used in accounting information system evaluation research because it provides a complete framework for measuring the success of system implementation.

Village-Owned Enterprises

A Village-Owned Enterprise (BUMDes) is a business entity whose capital is wholly or primarily owned by the village through direct participation derived from village assets separated to manage assets, services, and other businesses for the greatest possible welfare of the village community (Government Regulation Number 11 of 2021). BUMDes is established based on the needs and potential of the village as an effort to improve community welfare by considering the characteristics, potential, and needs of the village. BUMDes financial management is regulated in Village Ministerial Regulation Number 3 of 2021 concerning Village-Owned Enterprises. This regulation explains that BUMDes is required to prepare financial reports consisting of a statement of financial position, a profit and loss statement, a cash flow statement, a statement of changes in equity, and notes to the financial statements. BUMDes financial reports must be prepared based on the

Financial Accounting Standards for Micro, Small, and Medium Entities (SAK EMKM) issued by the Indonesian Institute of Accountants.

Extensive research has been conducted on accounting information systems in village-owned enterprises (BUMDes). Widiastuti and Purnama (2020) conducted a study of BUMDes in Gunungkidul Regency and found that the implementation of accounting information systems still faces challenges in terms of human resource competency and the availability of information technology infrastructure. Similar findings were also found by Pratiwi and Suharto (2019), who showed that the majority of BUMDes in East Java still use manual recording systems with low levels of accuracy.

Accounting Information System Evaluation

Accounting information system evaluation is a systematic process to assess the effectiveness and efficiency of a system in achieving organizational goals. Weber (2018) states that accounting information system evaluation should include an assessment of technical, operational, and managerial aspects. Technical aspects include the quality of the hardware and software used. Operational aspects include the procedures and policies implemented in the system. Meanwhile, managerial aspects relate to management support and the system's alignment with organizational strategy. A frequently used evaluation model is the input-process-output (IPO) approach developed by O'Brien and Marakas (2016). This model evaluates a system based on three components: input, which includes data and resources entered into the system; process, which includes the activities of processing data into information; and output, which is the information generated by the system. The IPO approach provides a clear picture of overall system performance and facilitates the identification of areas for improvement.

3. Methodology

This study uses a qualitative approach with a case study design to evaluate the accounting information system of BUMDes Maju Rahayu. Case studies were chosen because they allow researchers to conduct in-depth investigations of real-life phenomena using multiple sources of evidence (Yin, 2018). A qualitative approach was used to gain a deep understanding of the implementation of the accounting information system at BUMDes Maju Rahayu. The research location is BUMDes Maju Rahayu, located in Bergas Village, Semarang Regency, Central Java. The location was selected based on the consideration that BUMDes Maju Rahayu is one of the BUMDes that actively operates with various business units and has a fairly large transaction volume. The research period was conducted for three months, from March to May 2024.

The research subjects consisted of BUMDes Maju Rahayu managers who were directly involved in the management of the accounting information system. Eight informants were interviewed, consisting of the BUMDes director, financial manager, accounting staff, business unit managers, and village officials in charge of the BUMDes. Informants were selected using purposive sampling with the criteria of having knowledge and experience in managing the BUMDes accounting information system. Data collection techniques used three methods: in-depth interviews, observation, and documentation. In-depth interviews were conducted to obtain information about the implementation of the accounting information system, obstacles encountered, and user expectations of the system. Observations were conducted to directly observe the accounting practices carried out and the condition of the information system used. Documentation was conducted to collect secondary data in the form of financial reports, accounting procedures, and other supporting documents.

Data analysis was conducted using thematic analysis techniques developed by Braun and Clarke (2006). The analysis process began with transcription of interview data, followed by coding to identify emerging themes. Data validity was maintained through source triangulation, comparing information from various informants, and method triangulation, combining data from interviews, observations, and documentation.

Table 1. Series of research activities from start to finish.

Research Stage	Activity	Time	Output
Preparation	Licensing and preparation of instruments	2 weeks	Permission letter and interview guide
Data collection	Interviews, observations, documentation	8 weeks	Primary and secondary data
Data analysis	Coding and theme identification	4 weeks	Research findings
Reporting	Preparation of research reports	2 weeks	Research report

4. Results And Discussion

Profile of Maju Rahayu Village-Owned Enterprise

BUMDes Maju Rahayu was established in 2018 based on Bergas Village Regulation Number 5 of 2018. This BUMDes has an initial capital of 100 million rupiah sourced from Village Funds and community self-help. Until 2024, BUMDes Maju Rahayu manages four business units: a savings and loan unit with a total disbursed loan of 800 million rupiah, a trading unit with an annual turnover of 300 million rupiah, a tool rental service unit with revenue of 150 million rupiah, and a waste management unit with revenue of 50 million rupiah. The organizational structure of BUMDes Maju Rahayu consists of an advisor held by the village head, a supervisor consisting of three community representatives, and an operational executor led by a director. The operational implementation team consists of 12 people who manage various business units. Specifically for financial management, BUMDes has one financial manager and two financial administration staff.

Current State of Accounting Information Systems

Interviews and observations indicate that the Maju Rahayu Village-Owned Enterprise (BUMDes) accounting information system still uses a manual approach, with the aid of Microsoft Excel for recording daily transactions. Each business unit has its own cash book managed by its respective unit manager. Consolidation of financial reports is carried out monthly by the finance manager by collecting records from all business units. The recording process begins with documenting transactions using notes or receipts, then recording them in the daily cash book. Data from the daily cash book is then input into an Excel file containing general journal, general ledger, and simple financial report formats. The finance manager recaps data from all business units at the end of each month to prepare consolidated financial reports.

Table 2. explains the analysis of the current condition of the accounting or management system.

Aspect	Present condition	Problems
Recording	Manual with Excel	High risk of errors, data duplication
Reporting	Monthly	Often late, not real-time
Control	Minimal separation of duties	Risk of fraud and errors
Technology	Excel and cash book	Not integrated
HR	3 people	Lack of competence in accounting

Evaluation of Accounting Information System Components

Human Resources

An evaluation of human resources revealed that BUMDes Maju Rahayu has limited accounting competency. The financial manager has a high school diploma and three years of work experience in finance but no accounting certification. Two other financial administration staff members have similar educational backgrounds and limited experience managing accounting systems. Interviews revealed that the three financial managers struggled to understand basic accounting principles, such as debit and credit concepts, adjusting entries, and preparing standardized financial statements. They also had

never participated in accounting training specifically for BUMDes provided by the local government or other training institutions.

Information Technology

The information technology system used by BUMDes Maju Rahayu is still very rudimentary. Transactions are recorded using Microsoft Excel, using a template created by the financial manager. The Excel template lacks data validation, resulting in frequent input errors, such as incorrect amounts or accounts. BUMDes lacks an adequate data backup system. Excel files are stored locally on a computer without any backup to the cloud or external storage. This poses a risk of data loss in the event of a computer or system failure. Furthermore, there is no password or encryption system to protect financial data from unauthorized access.

Accounting Procedures

The accounting procedures of Maju Rahayu Village-Owned Enterprise (BUMDes) are not well documented. There are no written standard operating procedures (SOPs) governing the recording, processing, and reporting of financial transactions. Each business unit implements different recording procedures according to the understanding of each unit manager. The accounting cycle begins with transaction identification, recording in the cash book, inputting into Excel, and preparing monthly reports. However, there is no adjusting journal entry procedure, so the resulting financial reports do not reflect the actual financial condition. The book-closing process is carried out at the end of each year but does not comply with applicable accounting standards.

Internal Control

The internal control system of the Maju Rahayu Village-Owned Enterprise (BUMDes) remains weak in several aspects. Segregation of duties has not been properly implemented due to limited human resources. The financial manager concurrently handles recording, cash management, and reporting. This creates the risk of fraud and errors that are difficult to detect. Transaction authorization is only for transactions over 5 million rupiah, which require director approval. For transactions below that amount, the unit manager has full authority without any verification mechanism. The documentation system is also not well-organized, as not all transactions are supported by complete documentation.

Impact of Weaknesses in Accounting Information Systems

Weaknesses in the Maju Rahayu Village-Owned Enterprise (BUMDes) accounting information system impact several operational aspects. Financial reports are frequently delayed due to time-consuming manual processes. From January to March 2024, monthly financial reports were an average of 15 days behind schedule. Financial data accuracy is also a concern due to frequent recording errors and balance discrepancies between business units. An internal audit conducted in February 2024 found a cash discrepancy of 2.3 million rupiah caused by recording errors and poorly documented transactions. Another impact is difficulty in strategic decision-making due to non-real-time and inaccurate financial information. BUMDes management has difficulty evaluating the performance of each business unit and planning future business development.

Recommendations for Improvement

Based on the evaluation results, the researchers recommend several corrective measures to enhance the quality of the Maju Rahayu Village-Owned Enterprise (BUMDes) accounting information system. First, increase human resource capacity through basic accounting training and the use of accounting information systems. Training can be provided in collaboration with universities or training institutions competent in accounting. Second, implement a technology-based accounting information system using accounting applications suitable for SMEs. Some applications that can be considered are open-source accounting applications or paid applications with affordable costs. The new system must include transaction recording features, automatic financial report preparation, and a data backup system. Third, develop standard operating procedures (SOPs) for all accounting activities, from transaction recording to financial report preparation. SOPs must be developed with reference to the Indonesian Financial Accounting Standards (SAK) for EMKM (Emergency and Small and Medium Enterprises) and adapted to the operational characteristics of the BUMDes. Fourth, improve the internal control system through a clear separation of duties, a stricter authorization system, and a mechanism for regular review of financial reports.

5. Conclusion

An evaluation of the Maju Rahayu Village-Owned Enterprise (BUMDes) accounting information system shows that the current system still has many weaknesses in human resources, information technology, accounting procedures, and internal control. The manual recording system using Microsoft Excel poses a risk of errors, delays in reporting, and difficulties in decision-making. The main weaknesses lie in limited human resource competency, the absence of clear SOPs, and a weak internal control system. The impact of these accounting information system weaknesses is delays in preparing financial reports, data inaccuracies, and management difficulties in evaluating business unit performance. This can hinder the development of the BUMDes and reduce stakeholder trust in the transparency and accountability of financial management. To address these problems, BUMDes Maju Rahayu needs to implement gradual improvements, starting with increasing human resource capacity through training, implementing a technology-based accounting information system, developing clear SOPs, and improving the internal control system. These improvements will improve the quality of financial information, ultimately supporting better decision-making and improving the overall performance of the BUMDes.

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