

Driving SDGs Through Better Financial Reporting: The Role of Accounting Information Technology and Internal Control in Village-Owned Enterprises

Veni Soraya Dewi^{1*}, Farida Farida¹, and Achmad Setyo Adi Nugroho¹

¹Universitas Muhammadiyah Magelang, Magelang, Indonesia

Abstract. This study aims to analyze the influence of accounting information technology and internal control systems on the financial reporting quality of BUMDes, as well as their implications for achieving the SDGs. Research on financial reporting quality has primarily focused on local government agencies and companies, rather than on BUMDes as hybrid village entities. The study population was all BUMDes in Magelang Regency, with a sample of 72 people involved in the preparation and reporting of BUMDes financial reports. The sampling technique used purposive sampling and data analysis was conducted using multiple linear regression. The results show that Accounting Information Technology and Internal Control Systems have a positive effect on the financial reporting quality of BUMDes. Improved financial report quality encourages transparency and accountability in BUMDes management, which contributes to strengthening village institutions and the economy.

1 Introduction

The Sustainable Development Goals (SDGs) are a global agenda comprising 17 objectives that emphasize inclusive, sustainable development, and a balance between economic, social, and environmental aspects. In Indonesia, this agenda is translated down to the village level through the Village SDGs, which places economic development, governance, and village institutions as a crucial part of accelerating the achievement of sustainable development goals. Village-Owned Enterprises (BUMDes) are business entities whose capital is wholly or primarily sourced from the village through direct participation from village assets separated to manage assets, services, and other businesses for the welfare of the community. According to Permendesda Number 4 of 2015, articles 2 and 3 explain that "The establishment of BUMDes is an effort to accommodate all activities in the economic and/or public service sectors managed by the village and/or cooperation between villages." Therefore, the existence of BUMDes has a strategic role in realizing the SDGs.

In village development, BUMDes has a role, among other things, as a local economic instrument that can link the goals of economic growth and poverty reduction [1][2],

* Corresponding author: veni@unimma.ac.id

strengthening institutions and development partnerships at the village level [3][4]. However, in Indonesia, BUMDes is seen as a pillar of village economic activity which has social and commercial functions at the same time [5], therefore, BUMDes' contribution to rural development is not always strong. Its effectiveness is greatly influenced by the quality of governance, organizational capacity, and the ability to manage village resources [6]. In other words, the existence of BUMDes alone is not enough, but it is necessary to manage BUMDes accountably and professionally [5].

Financial reporting quality is an important foundation for transparency, control, performance evaluation, and stakeholder trust [7]. In BUMDes, the quality of financial reports is not only an administrative function, but also a prerequisite for business sustainability, social legitimacy, and the organization's ability to support the Village SDGs goals [8]. To ensure the quality of financial reports, Accounting Information Technology and Internal Control Systems are crucial factors influencing them. Accounting Information Technology plays a key role in producing reliable, timely, secure, and useful accounting information for decision-making, supported by quality system design, security, and its alignment with organizational processes [9]. This is relevant for BUMDes because many still face manual record-keeping, weak data integration, and low standardization of reporting processes. In addition to technology, internal control systems are also a key determinant of financial reporting quality.

Internal controls are designed to provide assurance regarding the reliability of financial information, operational effectiveness, and regulatory compliance [10]. For BUMDes, internal control is increasingly important because these entities often manage public funds, village assets, and multi-stakeholder relationships. However, they are not always supported by adequate authorization procedures, separation of functions, documentation, and monitoring.

Research on financial reporting quality has primarily focused on local government agencies and companies, rather than on BUMDes as hybrid village entities. Therefore, there remains a research gap to explain how Accounting Information Technology and Internal Control Systems influence BUMDes Financial Report Quality, a prerequisite for accountability and village institutional contributions to the SDGs [11].

2 Method

The population in this study was all 354 BUMDes in Magelang Regency, making it quite representative, with varying levels of development. However, according to data from the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration (Kemendes PDTT) in 2023, the majority of BUMDes were still in the basic (125 BUMDes) and growing (191 BUMDes) categories, indicating a gap between the number of institutions and the quality of financial management. The sample consisted of BUMDes employees, including the chairperson, treasurer, unit head, and other employees involved in financial reporting with a minimum of one year of service. They were believed to understand and master the issues and have direct involvement with the research problem. In this case, the sample was selected using a purposive sampling method. Data collection was carried out using questionnaires distributed to respondents who met the criteria. Only completed questionnaires were used for data analysis. Data analysis used quantitative methods, namely multiple linear regression analysis.

3 Results and discussion

3.1 Results

The sample for this study consisted of 72 respondents from BUMDes located across 21 subdistricts in Magelang Regency. **Table 1** shows the questionnaire distribution data, with 66.7% of the questionnaires being processed. Of the 72 respondents, most were aged 36-50 years (87.5%) and male. The respondents' educational levels were high school/vocational high school (61.1%) and bachelor's/master's/doctoral (38.9%), indicating a relatively high level of education, with all respondents having worked for more than one year.

Table 1. Questionnaire return rate

Description	Number of questionnaires
Questionnaires sent	115
Questions not returned and not meeting the criteria	(43)
Number of questionnaires processed	72 (66.7%)

Data source: processed primary data, 2025

The Model Validity Test uses Pearson Correlation, with the results of all indicators representing the Accounting Information Technology (AIT), Internal Control System (ICS), and Financial Report Quality (FRQ) statements used being valid as shown in **Table 2**. Meanwhile, the reliability test for all variables shows Cronbach's alpha > 0.70 so that it can be declared reliable.

Table 2. Validity Test Results

Indicator	calculated r-value	r table	Significance (p-value)	Alpha 5%	Description
AIT1	0.641	0.235	.000	0.05	Valid
AIT2	0.699	0.235	.000	0.05	Valid
AIT3	0.641	0.235	.000	0.05	Valid
AIT4	0.485	0.235	.000	0.05	Valid
AIT5	0.750	0.235	.000	0.05	Valid
ICS1	0.776	0.235	.000	0.05	Valid
ICS2	0.657	0.235	.000	0.05	Valid
ICS3	0.672	0.235	.000	0.05	Valid
ICS4	0.417	0.235	.000	0.05	Valid
ICS5	0.569	0.235	.000	0.05	Valid
ICS6	0.798	0.235	.000	0.05	Valid
FRQ1	0.713	0.235	.000	0.05	Valid
FRQ2	0.700	0.235	.000	0.05	Valid
FRQ3	0.389	0.235	.000	0.05	Valid
FRQ4	0.521	0.235	.000	0.05	Valid
FRQ5	0.504	0.235	.000	0.05	Valid
FRQ6	0.848	0.235	.000	0.05	Valid
FRQ7	0.609	0.235	.000	0.05	Valid
FRQ8	0.594	0.235	.000	0.05	Valid

Data source: processed primary data, 2025

The F-test was used to determine the effectiveness of the research model. Based on the results of the multiple linear regression analysis, the calculated F-value was greater than the F-value in the table ($10.439 > 2.51$) and the significance level was 0.000. Therefore, this research model was deemed suitable for use and further testing.

The influence of the independent and dependent variables was determined using the t-test. The results of the multiple linear regression analysis are presented in **Table 3**.

Table 3. t test results

Variable	calculated t-value	t table	Sig.	Description
AIT	4.991	1.668	.000	There is a positive influence
ICS	2.657	1.668	.010	There is a positive influence

Data source: processed primary data, 2025

3.2 Discussion

Based on **Table 3**, the results show that the application of Accounting Information Technology and the Internal Control System of BUMDes in 21 sub-districts in Magelang Regency can improve the quality of financial reports. Both the Accounting Information Technology and the Internal Control System have a calculated t-value > t-table with a significance level of <0.05.

The Accounting Information Technology implemented in the Magelang Regency BUMDes is Microsoft Excel, tailored to the BUMDes' record-keeping needs and resource capabilities. Implementing this application makes the recording process more efficient and accurate. Microsoft Excel provides various features, such as formulas and functions, which facilitate calculations and present sales reports in a neat and structured manner. Implementing this Accounting Information Technology minimizes human error and accelerates report generation, resulting in more time-efficient and more reliable BUMDes financial reports [9]. Quality systems and information/data, competent users, appropriate usage objectives, impact on the users themselves and the organization are the reasons that the implementation of Accounting Information Technology can improve the quality of financial reports [12], no exception for BUMDes. This shows that the application of accounting technology can integrate the processes of recording, processing, and reporting financial data in a systematic, accurate, and real-time.

Accounting Information Technology in BUMDes is part of the digital transformation of small organizations. In this context, when BUMDes uses accounting applications, structured spreadsheets, accounting codes, or simple dashboards according to their conditions and needs, BUMDes is not only improving reporting but also building innovation capacity and institutional digital infrastructure. This aligns with SDG-9, particularly regarding the innovation and modernization of organizational processes that impact business sustainability [13].

The implementation of the Internal Control System at BUMDes in Magelang Regency is quite good. This can be seen from the questionnaire results, which show that BUMDes managers carry out their management functions well and consistently, starting from planning, controlling, monitoring, and risk assessment in accordance with applicable regulations in each BUMDes. Furthermore, the process of conveying information and communication to members is also smooth. Thus, BUMDes implements clear recording procedures, transaction verification, and separation of functions, ensuring the quality of financial reports [8] through preventing fraud [14].

The Internal Control System at BUMDes is implemented in order to create strong institutions that support SDGs-16 where there is transparency, accountability, and good governance [8]. Indirectly, if the management is good, it will increase public trust and will open up opportunities for collaboration with stakeholders, namely village governments, assistants, banks and other partners [15]. Thus, this supports SDGs-17 in terms of collaboration.

Overall, in relation to the SDGs, the existence of BUMDes itself is linked to SDGs 1 and 8, namely reducing poverty, creating decent jobs, and supporting village economic growth. BUMDes are essentially a village economic instrument. Better financial reporting means managers can manage cash flow, increase business unit profitability, implement cost efficiencies, manage receivables, and assess expansion feasibility. This will lead to more rational business decisions and reduce the risk of mismanagement.

4 Conclusion

This study concludes that Accounting Information Technology and Internal Control Systems have a positive role in improving the Financial Reporting Quality of BUMDes in Magelang Regency. Their implementation supports more accurate, transparent, reliable, and accountable financial reporting, which in turn strengthens BUMDes governance. This improvement also contributes to the achievement of village-level SDGs, especially SDGs 1, 8, 9, 16, and 17. Therefore, strengthening the use of accounting technology and internal control systems is essential to enhance the sustainability and strategic role of BUMDes in village economic development, while also providing a practical basis for training, mentoring, and policy support from local governments.

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