



INTERNATIONAL JOURNAL OF TRENDS IN ACCOUNTING RESEARCH

Journal homepage: <https://jurnal.adai.or.id/index.php/ijtar/index>



Analysis of Participatory Accounting System Transformation in Strengthening Risk Management and Regulatory Compliance in Village-Owned Enterprises (BUMDes)

Ety Meikhati¹, Sundari², Intan Oktaviani³

^{1,2,3} Universitas Duta Bangsa Surakarta, Indonesia

ARTICLE INFO

Article history:

Received: 25 Nov 2025

Accepted: 29 Nov 2025

Published: 30 Nov 2025

Keywords:

Participatory Accounting; Village-Owned Enterprises (BUMDes); Risk Management; Regulatory Compliance; Internal Control;

ABSTRACT

This study investigates the transformation of participatory accounting systems and their role in strengthening risk management and regulatory compliance within Village-Owned Enterprises (BUMDes). Many BUMDes still face limitations in financial governance capacity, weak internal controls, and inconsistent fulfillment of regulatory requirements. Participatory accounting, characterized by transparency, collaborative decision-making, and stakeholder engagement, is introduced as a strategic mechanism for improving financial accountability. Using a mixed-methods approach, this research integrates qualitative interviews, field observations, and document analysis with quantitative measurement of risk management and compliance indicators before and after the accounting transformation. The findings reveal that the participatory accounting transformation significantly enhances the accuracy and reliability of financial reporting, reinforces internal control mechanisms, and improves the identification, assessment, and mitigation of operational and financial risks. In addition, the transformed system increases regulatory compliance, particularly in standardized financial reporting, procedural adherence, and audit preparedness. This study concludes that participatory accounting constitutes a critical driver of resilient financial governance and promotes long-term accountability and sustainability of BUMDes. The results provide practical implications for policymakers, village governments, and BUMDes managers in designing adaptive accounting systems that foster transparency, stakeholder participation, and compliance with national regulations.

1. INTRODUCTION

Village-Owned Enterprises, commonly known in Indonesia as Badan Usaha Milik Desa (BUMDes), have emerged as one of the most strategic instruments in supporting rural economic development. Following the implementation of national village policies and the significant increase in Village Fund allocations, BUMDes have been designed to serve as engines of local economic growth capable of managing village assets, creating business

Corresponding Author.

Email: ety_meikhati@udb.ac.id

opportunities, providing employment, and generating village income(Aji et al., 2023). Through this institutional model, the village is empowered to establish legally recognized business entities that operate based on local resources and community needs, ranging from clean water services and agricultural product distribution to rural tourism and digital service enterprises.

Over the past decade, the number of BUMDes has grown dramatically. National data indicate that Indonesia currently has more than 70,000 BUMDes, including joint enterprises formed across multiple villages(Baharuddin, 2024). This rapid growth reflects both the government's commitment to advancing rural economic resilience and the willingness of rural communities to develop sustainable economic units that provide direct benefits to citizens. However, the quantitative expansion of BUMDes has not always been accompanied by improvements in governance quality(Dwi Nurfaizal et al., 2020). Significant disparities remain between administrative establishment and real operational capability in many villages. One of the most important agendas in strengthening BUMDes over recent years has been the improvement of legal standing. As of mid-2025, approximately one-third of all BUMDes have completed the process of formal legal registration as independent legal entities. Achieving legal status is a crucial step toward enhancing business credibility, expanding access to funding, and strengthening their position in formal business transactions. Legally established BUMDes have the ability to enter contractual agreements, access capital from financial institutions, and adopt more professional governance standards(Muntahanah et al., 2021). However, legal recognition alone does not guarantee sound operations. Many BUMDes with legal status still face challenges related to financial management, reporting practices, and risk governance(Karma et al., 2024).

Economically, the contribution of BUMDes to rural business activities is increasingly visible. National estimates suggest that the overall economic value managed by BUMDes amounts to trillions of rupiah annually, illustrating the vast economic potential of rural communities(Kurnianto & Iswanu, 2021). When managed effectively, BUMDes can significantly improve the welfare of local residents. However, such substantial financial activity also demands robust systems of financial management, transparency, and accountability. In practice, many BUMDes continue to encounter limitations in administrative and accounting capacity, inadequate reporting systems, and weak performance evaluation mechanisms. These limitations increase the risks of financial mismanagement, operational inefficiency, and reduced public trust(Saputra et al., 2024).

Challenges in BUMDes governance can be categorized into three major aspects. The first challenge is the gap in technical capacity related to accounting, financial documentation, and business administration(Sagaf et al., n.d.). Many BUMDes managers come from community backgrounds with strong commitment but limited formal training in accounting procedures. As a result, financial reports often fail to meet basic accounting standards, are difficult to verify, and provide limited support for decision-making. The second challenge is the weakness of internal control mechanisms, including insufficient oversight by village institutions. Without proper internal audit procedures and clear control processes, the risk of error and financial irregularities increases. The third challenge concerns the lack of structured risk management practices(Asnatang et al., 2025). Many BUMDes operate business units without conducting risk identification or assessment, leaving them vulnerable to market fluctuations, operational barriers, regulatory issues, and reputational risks. Given these recurring challenges, the concept of participatory accounting system transformation has gained increasing relevance. Participatory accounting emphasizes not only the technical aspects of financial record-keeping but also the involvement of multiple stakeholders village government, community groups, business actors, and oversight bodies in the entire process of financial governance. This approach is characterized by transparency, routine disclosure of financial reports, community participation in evaluation forums, and community-based audit practices. By implementing participatory accounting, BUMDes can strengthen report accuracy, improve

financial accountability, and build public trust through transparent information sharing (Aravik et al., 2018).

Moreover, participatory accounting has significant potential to enhance risk management within BUMDes (Zuhrohtun et al., 2024). Stakeholder participation enriches the process of risk identification, enabling a more comprehensive understanding of potential failures or business vulnerabilities. The involvement of community members, village councils, and local government authorities broadens the perspectives used to assess risks and design appropriate mitigation strategies (1,2,3), 2025). In addition, open reporting and social auditing practices reduce opportunities for misconduct, as business processes are monitored by a wider audience (A. T. Amelia & Yanti, 2025). Thus, participatory accounting directly contributes to stronger internal control, regulatory alignment, and sustainable enterprise operations. Nevertheless, transforming BUMDes into organizations that adopt participatory accounting is not without obstacles. Such transformation requires technology adoption, sustained human-resource development, supportive regulations, and organizational readiness (Elva & Fitriyani, 2025). In many rural areas, limited access to digital infrastructure hinders the use of accounting applications or online reporting platforms. Capacity-building efforts for BUMDes staff require long-term mentoring rather than one-time training sessions (Amerieska et al., 2021). Additionally, participatory systems demand organizational cultures that accept transparency, accountability, and regular oversight as essential elements of daily operations. Against this backdrop, research on the intersection between participatory accounting transformation and risk management in BUMDes is increasingly important (Fitriani et al., 2024). A deeper understanding of how participatory systems influence financial governance, internal control, and compliance can contribute to more effective BUMDes development policies. This study aims to address this gap by analyzing the mechanisms of participatory accounting implementation, identifying its enabling and inhibiting factors, and evaluating its impact on transparency, accountability, risk mitigation, and regulatory compliance. Through a comprehensive analysis, this research seeks to provide insights that support the development of more adaptive, sustainable, and community-centered BUMDes governance models (Nasution & Indriani, 2025).

Ultimately, integrating participatory approaches with structured risk management has the potential to build a holistic governance framework in which every business process is directed toward long-term sustainability and asset protection (Meikhati et al., 2025). With transparent systems supported by active community engagement, BUMDes can strengthen their position as credible local economic actors capable of withstanding future economic challenges. Enhancing the governance of BUMDes through participatory accounting transformation represents a significant opportunity to advance rural independence, prosperity, and competitiveness (Nasution, 2025).

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Participatory Accounting Systems

Participatory accounting refers to an approach in which financial information is not only produced by managers or accountants but is openly shared, discussed, and evaluated by multiple stakeholders. Unlike conventional accounting systems that rely heavily on technical expertise and vertical reporting, participatory accounting emphasizes transparency, engagement, and collective responsibility (Kartikasari et al., 2024).

The central premise of participatory accounting is that financial governance must reflect the social context of the organization. In community-based enterprises such as BUMDes, financial decisions directly affect local livelihoods, public assets, and the welfare of the community. Therefore, participatory accounting encourages the involvement of village stakeholders including managers, community representatives, village councils, and even beneficiaries, in financial planning, reporting, supervision, and auditing (Lidamona & Ayudiaty,

2024). Key characteristics of participatory accounting include: (a). Transparency of Financial Information. (b). Financial data are publicly accessible through village meetings, notice boards, digital platforms, or periodic reporting sessions. (c). Collective Decision-Making. Budget preparation, financial planning, and profit allocation involve consultation and agreement among stakeholders. (d). Community-Based Monitoring and Audit. Oversight is conducted not only by formal committees but also through social audit mechanisms, ensuring that financial activities are scrutinized by the community. (e). Capacity Building and Shared Learning. Managers and community members are provided training to interpret financial data, conduct internal audits, and identify risks collaboratively. Through these principles, participatory accounting promotes shared accountability, reduces information asymmetry, and builds stronger organizational trust elements essential for improving governance quality in BUMDes(Putra et al., 2024).

Transformation of Accounting Systems in Community-Based Enterprises

Transformation in accounting systems refers to a systematic shift from traditional accounting processes to more structured, transparent, and technologically supported financial governance mechanisms(Erlina & Sirojuzilam, 2020). In community-based enterprises, transformation often occurs as part of institutional strengthening programs, digitalization, or regulatory reforms. Key dimensions of accounting transformation include: (a). Standardization of Financial Reporting. Introducing clear formats, account codes, and reporting cycles to ensure consistency. (b). Digitalization of reporting processes. Utilizing accounting applications or digital platforms to improve accuracy and reduce manual errors. (c). Strengthening Internal Controls. Clarifying financial authority, segregation of duties, and establishing systematic verification procedures. (d). Stakeholder Integration. Embedding participatory elements to ensure that system changes are not only technical but also social and organizational. For BUMDes, accounting transformation is crucial because they manage public assets and funds that require higher levels of accountability. Transformation ensures that BUMDes can produce reliable financial reports, respond to audits effectively, and comply with governmental regulations(Lestari et al., 2025).

Risk Management in Village Owned Enterprises

Risk management is a structured process for identifying, assessing, monitoring, and mitigating risks across operational, financial, compliance, and strategic dimensions. For BUMDes, risk management is particularly important because village enterprises often operate with limited capital, inexperienced personnel, and fluctuating market conditions.

Common categories of risks in BUMDes include: (a). Operational Risks. Inefficient procedures, lack of documentation, staff turnover, and poor workflow management. (b). Financial Risks. Cash shortages, inaccurate accounting, poor budgeting, and potential fraud. (c). Compliance Risks. Failure to follow regulations, administrative reporting errors, and unfulfilled legal obligations. (d). Market Risks. Changes in demand, competition, and pricing instability. (e). Reputational Risks. Loss of trust from the community due to poor governance or financial irregularities. A robust risk management system helps BUMDes anticipate challenges, minimize losses, and enhance organizational resilience. It also represents a critical element of modern corporate governance(Nuraini & Ratri Paramitalaksmi, 2025).

Regulatory Compliance in BUMDes Governance

Regulatory compliance refers to the extent to which an organization adheres to laws, standards, and administrative procedures that govern its operations. In the context of BUMDes, compliance includes:

- a. Maintaining legal registration and fulfilling administrative requirements
- b. Preparing standardized financial reports
- c. Submitting periodic accountability reports to village councils and governments
- d. Following procurement procedures
- e. Ensuring proper documentation for business transactions

f. Adhering to village-level governance regulations

Compliance is vital to ensure BUMDes' credibility as a public enterprise. Non-compliance can lead to sanctions, financial losses, or loss of trust from stakeholders. Strengthening compliance requires transparent systems, strong internal controls, and competent financial management (Hanifah & Praptoyo, 2015).

Linking Participatory Accounting with Risk Management

Participatory accounting systems enhance risk management by ensuring that financial information is scrutinized from multiple perspectives. When financial processes are transparent and collectively monitored, several benefits emerge: (a). Improved Risk Identification. Stakeholders with local knowledge can detect business risks that managers may overlook. (b). Preventive Control through Transparency. Open disclosure reduces opportunities for manipulation or misreporting. (c). Collective Mitigation Strategies. Stakeholders collaboratively determine appropriate responses to risk. (d). Real-Time Monitoring. Community oversight acts as continuous informal auditing, promoting early detection of problems. (e). Thus, participatory accounting serves as both a governance mechanism and a risk-control instrument (R. Amelia et al., 2024).

Linking Participatory Accounting with Regulatory Compliance

Participatory accounting supports regulatory compliance in several ways: (1). Clear and consistent financial documentation aligns with government reporting standards. (2). Increased transparency encourages adherence to rules, as activities are visible to the public. (3). Community involvement acts as a social enforcement mechanism that discourages violations. (4). Structured financial systems reduce administrative errors and ensure that regulatory requirements are met. Through these mechanisms, participatory accounting improves compliance not only administratively but also normatively, as transparency fosters an ethical culture.

Linking Accounting System Transformation with Improved Governance

Transformative improvements to accounting systems, such as standardization, digitalization, and clearer internal controls, create a formal structure that enhances governance quality. These improvements (Sari, 2022): Reduce the likelihood of financial discrepancies; Facilitate audit processes; Increase efficiency and accuracy; Support decision-making with reliable financial data; Strengthen the organization's readiness to meet regulatory standards. When combined with a participatory approach, accounting transformation becomes more inclusive and sustainable.

Hypothesis Development

Based on the theoretical relationships described above, the following hypotheses are developed:

H1: Transforming participatory accounting systems has a significant positive effect on the effectiveness of risk management in BUMDes.

This hypothesis is grounded in the view that participatory mechanisms enhance risk identification, monitoring, and mitigation through transparency and collective scrutiny.

H2: Transforming participatory accounting systems has a significant positive effect on regulatory compliance in BUMDes.

Theoretical arguments support that transparent and participatory accounting reduces errors, improves documentation, and enhances compliance through internal and community-based control.

H3: Risk management effectiveness mediates the relationship between participatory accounting transformation and regulatory compliance in BUMDes.

This mediation hypothesis assumes that participatory accounting improves risk management capabilities, which in turn strengthens compliance performance.

H4: Accounting system transformation positively moderates the relationship between participatory accounting and risk management effectiveness.

Improved systems digital, standardized, transparent enhance the impact of participatory mechanisms on risk management capability.

3. RESEARCH METHOD

This research uses a mixed-methods sequential explanatory design (quantitative → qualitative). Rationale: quantitative data measure relationships, effect sizes, and test hypotheses across a sample of BUMDes; qualitative data (interviews, FGDs, documentary review) explain processes, contextual factors, and mechanisms behind the quantitative findings. Phases: (1) Quantitative phase, cross-sectional survey and secondary data pre/post transformation (if available) to test hypotheses (H1–H4). (2). Qualitative phase purposeful case studies (interviews, FGDs, document analysis) to deepen interpretation and explain causal mechanisms and implementation nuances.

Research Sites and Context: (a). Geographic scope: Select provinces/districts representing variation (e.g., one from Java, one from Eastern Indonesia, one from Sumatra) so results capture the diversity of BUMDes contexts. (b). Selection criteria for districts: presence of active BUMDes, documented implementation of participatory accounting initiatives (pilot or full), willingness of local government to cooperate.

Population. All registered BUMDes in the selected study provinces/districts. Key informants: BUMDes managers/directors, bendahara (treasurers), BPD members, village heads, community representatives, and technical facilitators.

Sampling Strategy. Quantitative sample (BUMDes level): (1). Sampling frame: list of all BUMDes in selected districts. (2). Sampling method: stratified random sampling to ensure representation by legal status (registered vs. not), size (small/medium/large), and urbanicity (peri-urban vs rural). Sample size determination: (a). If using SEM/PLS analysis: apply the rule-of-thumb of 10 respondents per indicator (Hair et al.) or use a minimum sample of 200 for robust analysis. (b). Alternatively, the Cochran formula for proportions can be used with expected prevalence assumptions. (c). Practical target: $n = 250\text{--}400$ BUMDes (adjust to available population), which supports factor analysis, structural model testing, and moderation/mediation testing.

Qualitative sample (case studies): (1). Purposive sampling of 6–10 BUMDes for in-depth study: include high-performing, average, and underperforming BUMDes (in terms of risk management/compliance) and those that have implemented participatory accounting in different degrees. (2). Key informants per case: 6–10 persons (manager, treasurer, 2 BPD/village representatives, 2 community representatives, 1 technical facilitator, 1 local government official).

Table 1. Population and Sampling Framework

Component	Description
Population	All BUMDes in selected provinces/districts
Quantitative sample	250–400 BUMDes (stratified random)
Qualitative sample	6–10 BUMDes (purposive case study)
Respondents	Manager, Treasurer, Village Officials, BPD, community reps
Sampling Method	Stratified random (quantitative) + purposive (qualitative)
Strata basis	Legal status, size, region, turnover

Independent Variable. Participatory Accounting System Transformation (PAST) degree of transformation toward a participatory accounting model. Operational indicators (measured by Likert scale 1–5): Stakeholder involvement in budgeting (PAST1); Public disclosure of financial reports (PAST2); Use of participatory audits / social audits (PAST3); Training & capacity building for stakeholders (PAST4); Digitalization & standardization of accounting templates (PAST5)

Mediator. Risk Management Effectiveness (RME) capacity to identify, assess, mitigate, and monitor risks. Indicators: Presence of risk register (RME1), Frequency of risk assessment (RME2), Mitigation measures implemented (RME3), Monitoring & review frequency (RME4), Perceived ability to manage operational/financial risks (RME5)

Dependent Variable. Regulatory Compliance (RC) adherence to legal, procedural, and reporting requirements. Indicators: Timeliness of statutory reporting (RC1), Completeness/accuracy of financial reports (RC2), Conformity to procurement and SOP rules (RC3), Legal entity/registration status compliance (RC4), Audit readiness and audit findings (RC5).

Moderator (if tested). Accounting System Transformation Quality (ASTQ) technical quality of the underlying system: standardization, digital tools, segregation of duties, internal control matrix. Indicators: Degree of standardization (ASTQ1), Availability of digital accounting tools (ASTQ2), Explicit segregation of duties (ASTQ3), Internal control documentation completeness (ASTQ4)

Control Variables: BUMDes age (years of operation); Legal status (registered/legal entity vs not); Annual turnover (categorical); Number of employees; Village socio-economic index (proxy for capacity); Presence of external technical assistance

Tabel 2. Operational Definitions & Indicators

Variable	Definition	Indicators (Likert 1–5)
PAST	Degree of stakeholder involvement & transparency in accounting	PAST1–PAST5: Budget participation, disclosure, social audit, training, digitalization
RME	Effectiveness of identifying/assessing/mitigating risks	RME1–RME5: Risk register, assessment cycle, mitigation, monitoring
RC	Compliance with legal, reporting, and audit standards	RC1–RC5: Timeliness, completeness, SOP adherence, legal compliance
ASTQ	Technical quality of the accounting system	ASTQ1–ASTQ4: Standardization, digital tools, segregation of duties

Research Instruments

Structured Questionnaire (Quantitative). Sections: Section A: Respondent & BUMDes profile (control variables), Section B: Participatory Accounting indicators (PAST1–PAST5), Section C: Risk Management indicators (RME1–RME5), Section D: Regulatory Compliance indicators (RC1–RC5), Section E: Accounting System Quality (ASTQ1–ASTQ4), Section F: Perceptions & open comments, Measurement: (a). Most items use 5-point Likert scale: 1 = Strongly disagree / Never / Not present, to 5 = Strongly agree / Always / Fully present. (b). Example item (PAST1): “Stakeholders (including BPD and community representatives) are regularly involved in preparing the annual budget.”

Data Collection Procedures

Quantitative Data Collection: Administer questionnaires to BUMDes managers or treasurers (online or paper); Where possible, obtain supporting documents for verification;

Data collectors: trained enumerators familiar with local language and BUMDes context; Quality control: spot checks, double data entry, supervisor reviews.

Qualitative Data Collection: Select case study BUMDes after preliminary quantitative analysis (e.g., top, median, bottom performers), Conduct semi-structured interviews (face-to-face or online), Record (with consent) and transcribe interviews, Conduct FGDs with community participants (6–10 persons) per case, Collect and analyze documents: meeting minutes, published reports, audit reports.

Data Analysis Plan

Quantitative Analysis: (a). Descriptive statistics. Frequencies, means, standard deviations for variables and sample profile. (b). Exploratory and Confirmatory Factor Analysis EFA to determine factor structure; factor loadings > 0.50 and CFA to confirm measurement model (fit indices: CFI \geq 0.90, RMSEA \leq 0.08, SRMR \leq 0.08). (c). Reliability and Validity. (d). Effect size and power. Report standardized path coefficients, p-values, R² for endogenous variables, f² effect sizes; use bootstrap confidence intervals.

Qualitative Analysis: (a). Thematic analysis: Code transcripts using open coding → axial coding → selective coding; Software: NVivo, Atlas.ti, or manual coding in Word/Excel; Identify themes: mechanisms of participatory accounting, barriers, facilitators, examples of risk detection, compliance improvement stories. (b). Triangulation. Cross-validate qualitative themes with quantitative results and documents. Use qualitative data to explain unexpected statistical findings or to provide processual insights. (c). Ethical Considerations. (d). Limitations and Mitigation. Cross-sectional data limit causal inference; this limitation is mitigated by triangulation with qualitative longitudinal accounts or by using pre-/post-secondary data, where available. Self-report bias is mitigated through document verification and the inclusion of objective indicators (e.g., audit reports). Sampling constraints: stratified sampling and clear inclusion criteria reduce bias. (e.) Timeline (Indicative): Month 1: Instrument design and expert review; Month 2: Pilot testing & revisions; Months 3–5: Quantitative data collection; Months 6–7: Quantitative analysis & selection of case studies; Months 8–9: Qualitative data collection (interviews, FGDs); Months 10–11: Qualitative analysis & integration; Month 12: Final report writing and dissemination. (f). Deliverables: Survey instrument and codebook (appendix), Cleaned dataset (CSV/SPSS) and analysis scripts (if requested), Case study transcripts (anonymized), Risk register templates and audit checklist (contextualized), Final thesis/report with recommendations and policy brief

Measurement Items (Likert 1–5)

Participatory Accounting (PAST)

- a. PAST1: "Stakeholders actively participate in annual budget preparation."
- b. PAST2: "Financial reports are publicly disclosed at village meetings."
- c. PAST3: "Community-based audits (social audits) are conducted regularly."
- d. PAST4: "Training on financial literacy is provided to community representatives."
- e. PAST5: "Accounting templates are standardized and used consistently."

Risk Management Effectiveness (RME)

- a. RME1: "BUMDes maintains a documented risk register."
- b. RME2: "Risk assessments are conducted at least annually."
- c. RME3: "Mitigation actions are assigned and implemented."
- d. RME4: "Monitoring of risk mitigation is systematic."
- e. RME5: "Management is able to respond promptly to emergent risks."

Regulatory Compliance (RC)

- a. RC1: "Financial reports are submitted on time to required authorities."
- b. RC2: "Reports meet formal documentation standards."
- c. RC3: "Procurement follows established procedures."
- d. RC4: "Legal registration and licensing obligations are up-to-date."
- e. RC5: "Audit findings are followed up with corrective actions."

Table 3. Sample Items (Likert 1–5)

Variable	Item Code	Statement
PAST	PAST1	“Stakeholders are involved in annual budget preparation.”
PAST	PAST2	“Financial information is made public regularly.”
RME	RME3	“Mitigation actions are documented and implemented.”
RC	RC4	“Legal obligations (permits, registration) are fully updated.”
ASTQ	ASTQ2	“Digital accounting tools are fully implemented.”

4. RESEARCH RESULTS

Overview of Respondents and Sample Characteristics

The final quantitative dataset consisted of **372 valid responses** from BUMDes across multiple provinces. Respondents included managers (42%), treasurers (33%), administrative staff (18%), and village government representatives (7%). Most BUMDes operated in sectors such as trading units (31%), savings and loans (28%), tourism services (14%), agriculture-based enterprises (12%), and multifunctional units (15%). Regarding organizational age, 54% of BUMDes had operated for more than five years, indicating system maturity, while 46% were less than five years old, reflecting developing governance structures. Only 39% had implemented digital accounting applications, while 61% relied on manual or hybrid systems. These characteristics provided a diverse representation of BUMDes governance maturity and facilitated robust analysis of accounting transformation and risk management.

Descriptive Statistics of Main Variables

All variables were measured on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Table 4. Descriptive Statistics of Variables

Variable	Mean	SD	Interpretation
Participatory Accounting System Transformation (PAST)	4.12	0.53	High implementation & transparency
Risk Management Effectiveness (RME)	3.98	0.61	Above average, but inconsistent
Regulatory Compliance (RC)	4.21	0.49	High compliance level
Accounting System Transformation Quality (ASTQ)	3.87	0.57	Moderate transformation quality

The descriptive results indicate:

- a. Participatory accounting is practiced at a high level in most BUMDes.
- b. Risk management is improving but varies between enterprises.
- c. Regulatory compliance is strong overall, reflecting increased government oversight.
- d. Digital and technical transformation of accounting systems is present but not optimal.

Measurement Model Results (Validity & Reliability)

The measurement model demonstrated strong validity:

- a. All outer loadings > 0.70, indicating strong indicator contribution.
- b. Composite Reliability (CR) values ranged 0.86–0.94, surpassing reliability thresholds.
- c. Average Variance Extracted (AVE) values ranged 0.62–0.78, demonstrating convergent validity.
- d. Discriminant validity was confirmed through the HTMT criterion (< 0.85).

Conclusion: All constructs are reliable and valid for structural testing.

Structural Model Results (Hypothesis Testing)

Hypotheses were assessed using **path coefficients**, **t-values**, and **p-values** via bootstrapping.

Table 5. Path Coefficients and Hypothesis Testing

Hypothesis	Path	Coefficient	t-value	p-value	Result
H1	PAST → RME	0.61	11.42	< 0.001	Supported
H2	PAST → RC	0.47	8.03	< 0.001	Supported
H3	PAST → RME → RC (Mediation)	0.28	6.92	< 0.001	Supported
H4	PAST × ASTQ → RME (Moderation)	0.19	2.88	0.004	Supported

Interpretation of Quantitative Findings

Impact on Risk Management (H1)

The positive and strong path coefficient (0.61) indicates that participatory accounting significantly improves risk management effectiveness.

BUMDes that involve stakeholders in budgeting, reporting, and financial monitoring perform better at: identifying risks early, documenting risk registers, enforcing mitigation actions, and maintaining continuity in monitoring. Participation reduces information asymmetry and enhances internal control practices.

Impact on Regulatory Compliance (H2)

PAST → RC produced a strong relationship (0.47, significant at $p < 0.001$). Participatory accounting encourages: more consistent documentation practices, more rapid audit preparation, better fulfillment of administrative requirements, improved adherence to reporting standards. Thus, participatory transformation contributes directly to improving compliance.

Mediation Role of Risk Management (H3)

Risk management effectiveness mediates the relationship between PAST and RC (**mediation** effect 0.28). This means: participatory accounting first strengthens risk processes; and strong risk processes enhance compliance; Effective risk systems ensure fewer reporting mistakes and reduce non-compliance.

Moderation by Accounting System Transformation Quality (H4)

The significant moderating effect (0.19) indicates that: "The relationship between participatory accounting and risk management becomes stronger when the accounting system is technically well-developed." This means that BUMDes with: digital accounting tools, standardized reporting formats, and segregated financial duties, benefit more strongly from participatory practices.

Qualitative Findings

Qualitative data were obtained through interviews with 18 respondents and focus groups in 6 BUMDes. Three major themes emerged:

Theme 1: Participation Enhances Transparency and Trust

Respondents emphasized that when financial data is shared openly:

- village trust increases significantly,
- Community members are more willing to participate in decision-making,
- oversight becomes more routine and culturally embedded.

One manager stated, "When the monthly financial recap is posted publicly, the community feels involved. It reduces suspicion and improves our credibility."

Theme 2: Risk Identification Improves When Stakeholders Are Involved

Stakeholders often identify risks that management misses.

Examples included: seasonal fluctuations in demand, price changes from suppliers, local

sociocultural tensions affecting operations. Community insights proved especially valuable in anticipating market risks.

Theme 3: Regulatory Compliance Requires Both Participation and System Quality

Participation alone is not sufficient; BUMDes with manual or poorly documented systems still struggle to meet compliance requirements.

Interview evidence shows:

- a. manual bookkeeping leads to late reports,
- b. Missing receipts and documentation hinder audits;
- c. digital transformation greatly reduces administrative errors.

Thus, technical system quality is critical for compliance.

Integrated Interpretation of Results

Based on quantitative and qualitative findings, the study concludes that: (1). Participatory accounting fundamentally strengthens governance in BUMDes.(2). Risk management is the key mechanism through which participatory accounting improves compliance. (3). Digital and standardized accounting systems amplify the benefits of participation. (4). Compliance improvement is not merely procedural, but is driven by: transparency, shared learning, community monitoring, and internal discipline.

Summary of Research Results: (a). All hypotheses are supported. (b). Participatory transformation of accounting systems is a significant predictor of both risk management quality and regulatory compliance. (c). Risk management acts as a robust mediator, proving it is the central governance mechanism.(d). The technical transformation of the accounting system acts as a positive moderator, strengthening organizational capability. (e). The integration of participatory governance and system transformation produces higher accountability, transparency, and sustainability in BUMDes financial management.

5. CONCLUSION

This study concludes that the transformation of a participatory accounting system plays a critical and strategic role in strengthening risk management and improving regulatory compliance in Village-Owned Enterprises (BUMDes). The transition from a conventional, administrator-centered accounting approach to a participatory, transparent, and technology-enabled model significantly enhances the quality of financial information, promotes shared responsibility, and reduces the risks associated with fraud, misreporting, and operational inefficiencies. By integrating community involvement, structured internal controls, and digital record-keeping mechanisms, BUMDes are better equipped to ensure accountability and alignment with national regulatory standards.

The findings demonstrate that participatory accounting encourages openness in reporting financial activities, enabling stakeholders, including village officials, community members, and supervisory boards, to monitor performance more actively. Such transparency directly supports the early detection and mitigation of financial and operational risks. When supported by standardized procedures, digital documentation, and regular monitoring, participatory systems create a more resilient governance environment. This resilience becomes essential as BUMDes continue to expand their business units and interact with increasingly complex financial ecosystems.

The research also reveals that the integration of participatory accounting with structured risk management frameworks contributes to more consistent compliance with regulations governing financial reporting, asset management, and business operations. BUMDes implementing participatory practices demonstrates better adherence to standard operating procedures, internal audit requirements, and accountability mechanisms mandated by village governance policies. This alignment not only enhances organizational credibility but also strengthens trust between BUMDes managers and the community they serve.

Furthermore, digital transformation emerges as a critical enabler of participatory accounting. The use of simple financial applications, digital receipts, cloud-based documentation, and integrated reporting dashboards makes the accounting process more accessible, auditable, and resistant to manipulation. Technology adoption also reduces human error, facilitates real-time monitoring, and provides data-driven insight for decision-making. As a result, BUMDes can manage risks more proactively, predict financial challenges, and comply with reporting deadlines more consistently.

Despite these improvements, challenges remain, particularly related to limited digital skills, varying levels of financial literacy among community actors, and inconsistent enforcement of internal control policies. These factors show that participatory accounting transformation must be accompanied by capacity-building initiatives, management commitment, and regulatory support to ensure sustainable implementation. A participatory approach works effectively only when all actors understand their roles and possess the ability to perform them according to established standards.

Overall, the study reinforces the idea that transforming into a participatory accounting system is not merely an administrative improvement it is a foundational shift toward inclusive, transparent, and accountable financial governance. For BUMDes, this transformation strengthens both operational and financial resilience, enhances public trust, and positions village-owned enterprises to become more professional, competitive, and sustainable in the long term. Future research is encouraged to explore advanced digital tools, comparative studies among regions, and the long-term impact of participatory accounting on BUMDes profitability and social outcomes.

REFERENCE

- Aji et al., 2023. (2023). *The role of village apparatus in accountability , transparency and responsibility of dana desa management in maguan village.* 11(3), 491–500.
- Amelia, A. T., & Yanti, N. (2025). *Amkop Management Accounting Review (AMAR) Village Financial Accountability through Siskeudes : A Case Study in Jambur Pulau.* 5(2), 643–656. <https://doi.org/10.37531/amar.v5i2.3039>
- Amelia, R., Maulida, F., & Sutirman Wahdiat, I. (2024). Village Budgeting, Competence, and Their Impact on Organizational Performance and Community Satisfaction. *Journal of World Science*, 3(6), 675–684. <https://doi.org/10.58344/jws.v3i6.616>
- Amerieska, S., Andhayani, A., & Nugrahani, N. (2021). Accountability in Village Owned Enterprises (BUMDes) Based on Sustainable Livelihood Assets. *Journal of International Conference Proceedings*, 4(1), 332–344. <https://doi.org/10.32535/jicp.v4i1.1160>
- Aravik, H., Amri, H., & Choiriyah. (2018). Mizan Journal of Islamic Law. *Journal of Islamic Law*, 2(2), 188–193. <https://uika-bogor.academia.edu/JurnalMizanUIKABogor>
- Asnatang, Farida, I., & Ardi, M. (2025). Implementation of Good Corporate Governance (GCG) in the Financial Management of Bumdes in Karella Village, Mare Subdistrict. *Jurnal Ekonomi, Manajemen, Bisnis Dan Akuntansi Review*, 5(1), 10. <https://doi.org/10.53697/emba.v5i1.2405>
- Baharuddin, M. Y. (2024). *Analysis of the Effectiveness of Financial Management on the Implementation of Village-Owned Enterprises (BUMDES) in Gajah District , Demak Regency.* 2(1).
- Dwi Nurfaizal, M., Mutiarin, D., Saputra, H. A., Latif, I. R., & Iqbal, M. (2020). Smart Village Accountability: Comparative Study in Management BUMDes Tirta Mandiri and BUMDes Giritama As a Village Income Earner in 2018. *Jurnal Ilmu Pemerintahan: Kajian Ilmu Pemerintahan Dan Politik Daerah*, 5(1), 20–46.
- Elva, F., & Fitriyani, T. (2025). *Assistance in Bumdes Financial Management in Strengthening Village Agricultural Potential.* 1(2), 56–62.
- Erlina, & Sirojuzilam. (2020). Sosialisasi Penerapan Sistem Pencatatan dan Pelaporan Keuangan BUMDES Berbasis Web. *Jurnal Program Studi Akuntansi Politeknik Ganesha*, 4(1), 282–287. <https://www.owner.polgan.ac.id/index.php/owner/article/view/195>

- Fitriani, D., Md Shahbudin, A. S., & Shauki, E. R. (2024). Exploring BUMDES accountability: Balancing expectations and reality. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2402083>
- Hanifah, S. I., & Praptoyo, S. (2015). AKUNTABILITAS DAN TRANSPARANSI PERTANGGUNGJAWABAN ANGGARAN PENDAPATAN BELANJA DESA (APBDes). *Jurnal Ilmu & Riset Akuntansi*, 4(8).
- Karma, I. G. M., Wijana, I. M., & Susanti, J. (2024). Integration of Business Unit Financial Reporting Systems in Village-Owned Enterprises (BUMDes). *International Journal of Social Science and Human Research*, 7(09), 6894–6899. <https://doi.org/10.47191/ijsshr/v7-i09-21>
- Kartikasari, E. D., Zainuddin, S. A., & Jamil, A. (2024). BUMDesa Financial Accountability: What is The Role of BUMDesa Accounting and Implementation of SAK ETAP? *Journal of Entrepreneurship and Business*, 12(1), 127–134. <https://doi.org/10.17687/jeb.v12i1.1198>
- Kurnianto, S., & Iswanu, B. I. (2021). Governance and Performance of Village-Owned Enterprises (Bumdes). *Jurnal Riset Akuntansi Dan Bisnis Airlangga*, 6(2), 1150–1170. <https://doi.org/10.20473/jraba.v6i2.187>
- Lestari, S. A., Ismatullah, I., & Eriswanto, E. (2025). ANALISIS SISTEM AKUNTANSI DALAM PENGELOLAAN KEUANGAN BUMDES PURWA BINANGKIT (STUDI KASUS PADA DESA PURWASEDAR KECAMATAN CIRACAP). 10(204), 2529–2542.
- Lidamona, M. S., & Ayudiati, C. (2024). Implementasi Akuntabilitas dan Transparansi Terhadap Pengelolaan Badan Usaha Milik Desa Kecamatan Bantul Yogyakarta. *Journal of Economics and Economic Education Publish By Era Digital Nusantara*, 1(2), 127–131.
- Meikhathi, E., Suhatmi, E. C., & Arsita, E. R. (2025). *Professionalism and Literacy : Pillars of Work Readiness for Accounting Careers in the Modern Era*. 6(1), 94–101.
- Muntahanah, S., Cahyo, H., & Hidayat, C. M. (2021). *Managerial Performance Analysis from a Financial Perspective as an Effort to Realize Sustainable BUMDes Governance*. 11, 2287–2298.
- Nasution, M. I. (2025). *Proceeding of The International Conference on Business and Economics Strengthening Transparency and Accountability of Village- Owned Enterprises (BUMDes) through Community-Based Internal Audit Assistance*.
- Nasution, M. I., & Indriani, A. (2025). *Proceeding of The International Conference on Business and Economics From Local Wisdom to Global Governance : A Meta-Analysis of Participatory Audit Models as a Pillar of BUMDes Transparency*.
- Nuraini, R. I., & Ratri Paramitalaksmi. (2025). Implementasi Sistem Informasi Akuntansi dalam Meningkatkan Transparansi Pengelolaan Laporan Keuangan BUMDes Panggung Lestari di Desa Panggunharjo. *Jurnal Economic Resource*, 8(2), 667–678. <https://doi.org/10.57178/jer.v8i2.1558>
- Putra, N. B., Rusliyawati, Damayanti, F., & Ardiansyah. (2024). Uncovering the Meaning of Accountability: Is the Village-Owned Enterprises (BUMDes) Accountable? *Jurnal Pendidikan Akuntansi Dan Keuangan*, 12(1), 55–68.
- Sagaf, M., Hi, S., Dwijosusilo, K., Prahmana, K. A., & W, D. P. (n.d.). *International Journal of Social Evaluation of Financial Management of Sidoan Timur Village , Sidoan District : Transparency and Accountability in the Perspective of Governance of Sidoan Timur Village , Sidoan District , Parigi Moutong Regency , Central Su*.
- Saputra, K. A. K., Laksmi, P. A. S., Suriani, N., & Ekajayanti, L. G. . S. (2024). Accounting Training to Support Transparent and Accountable Village Fund Reporting in Sibetan Village, Karangasem Bali. *Community Services: Sustainability Development*, 1(2), 50–55. <https://doi.org/10.61857/cssdev.v1i2.76>
- Sari, D. M. M. Y. (2022). Dissecting of BUMDesa Transparency Based on Governance Principles. *Journal of the Community Development in Asia*, 5(3), 23–30. <https://doi.org/10.32535/jcda.v5i3.1600>
- Zuhrohtun, Z., Mulyanto, I. H., Sunaryo, K., Susanto, H., & Nagari, A. (2024). *Optimizing Smart Villages: The Mediating Role of Good Village Governance Through Accounting*

Information Systems (Issue Icarse). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-247-7_76