

# Analysis of Employee Knowledge on the Effectiveness of the Accounting Information System at KPRI Amal Bakti Ministry of Religious Affairs Jember

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## ABSTRACT

This study aims to analyze the influence of employee knowledge on the effectiveness of the accounting information system (SIA) at KPRI Amal Bakti, a cooperative under the Ministry of Religious Affairs in Jember Regency. In an increasingly complex organizational environment, the successful implementation of an effective SIA is essential for accurate, timely, and reliable financial data processing and reporting. Employee knowledge plays a crucial role in ensuring the smooth operation and efficiency of such systems, encompassing technical, procedural, and strategic aspects. The research adopts a qualitative descriptive approach, using data collection techniques such as direct observation, in-depth interviews, and documentation. Informants were selected through purposive sampling, specifically employees who are actively involved in operating the SIA. The system implemented at KPRI Amal Bakti is SIABKA, a computerized accounting application designed to assist in recording financial transactions and generating financial reports in accordance with International Financial Reporting Standards (IFRS). The findings reveal that employees demonstrate a solid understanding of the system, supported by regular training programs. The SIA has proven effective in improving operational efficiency, reducing manual errors, and supporting managerial decision-making. Although some technical challenges exist, such as limited server capacity, the overall implementation of the SIA contributes significantly to enhancing transparency, accountability, and internal control within the organization.

**Keywords:** *Employee Knowledge, Accounting Information System, Effectiveness, SIABKA, Cooperative*

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## 1. INTRODUCTION

The rapid development of globalization and modernization has significantly influenced the dynamics of business and organizational management in Indonesia. Advances in science and technology have transformed the way organizations operate, particularly in the field of economics and commerce. Companies and cooperatives alike are increasingly pressured to improve efficiency, accountability, and effectiveness in managing their resources to survive in a highly competitive environment. Among these resources, information plays a vital role as the backbone of planning, coordination, supervision, and control. The presence of an effective accounting information system (AIS) becomes indispensable, as it ensures the accurate and timely processing of financial data for internal and external users.

The effectiveness of an AIS is generally measured by how well it supports the organization in achieving its financial reporting goals, ensuring compliance with standards, and facilitating managerial decision-making. Effectiveness reflects the degree to which the

system meets its intended objectives. If an AIS provides accurate, relevant, and reliable information that can be used for decision-making, it can be considered effective. In the context of cooperatives such as KPRI Amal Bakti, the proper implementation of an AIS not only supports the day-to-day operations but also ensures transparency and accountability in managing members' funds. Therefore, understanding the determinants of AIS effectiveness is a critical area of research, particularly in organizations that serve as financial service providers for their members.

One of the most significant determinants of AIS effectiveness is the knowledge of employees who operate the system. Employees are the primary users of the AIS, and their understanding directly affects how well the system is utilized. Knowledge encompasses technical expertise, familiarity with procedures, and awareness of the strategic importance of information systems. Without adequate knowledge, even the most sophisticated AIS may not yield its intended benefits. Conversely, well-trained and knowledgeable employees can optimize system utilization, minimize errors, and ensure the accuracy and timeliness of financial reports. Hence, employee knowledge serves as a cornerstone in the successful implementation of AIS.

The relationship between employee knowledge and AIS effectiveness has been widely discussed in previous studies. For instance, Komala (2012) emphasizes that accounting managers, as key executives, must possess a strong understanding of AIS to coordinate planning and control effectively. Their knowledge allows them to evaluate system performance and develop procedures that align with organizational goals. Similarly, Ruth (2018) highlights that personal technical abilities, coupled with education and training, significantly influence the effectiveness of AIS usage. Employees with strong technical skills are better able to operate systems, process financial data, and generate quality information. These studies indicate that knowledge is not a passive factor but an active determinant of system performance.

Furthermore, personal technical ability is closely tied to the effectiveness of AIS utilization. Technical ability refers to the capability of employees to use the system efficiently in completing their tasks, from inputting data to generating reports. Higher technical skills reduce the likelihood of errors, improve data accuracy, and enhance overall system reliability. According to Ruth (2018), personal technical ability, combined with training and education, provides the foundation for effective system use. In cooperatives such as KPRI Amal Bakti, where accuracy in financial records is essential for maintaining member trust, technical competence becomes even more critical.

The theoretical perspective of system effectiveness also incorporates concepts from organizational behavior and information system success models. According to DeLone and McLean's IS Success Model, user satisfaction and system quality are vital indicators of system success. In this context, employee knowledge directly affects both dimensions. Employees who understand the system are more likely to use it effectively, perceive it as valuable, and express higher satisfaction with its outputs. Conversely, a lack of knowledge can lead to frustration, misuse of the system, and unreliable outputs, undermining organizational performance.

Another theoretical underpinning comes from the concept of internal control. Effective AIS implementation requires strong internal controls, which rely on employees' knowledge of procedures and compliance mechanisms. Internal control ensures data accuracy, prevents fraud, and protects organizational assets. Employees must understand the system's authorization processes, segregation of duties, and audit trails to maintain compliance with internal and external requirements. As Mardiasmo (2016) notes, internal control is effective only if employees comprehend and apply its principles within the system environment. Therefore, knowledge and awareness of internal control principles further reinforce AIS effectiveness.

The cooperative environment, specifically KPRI Amal Bakti under the Ministry of Religious Affairs in Jember Regency, provides a relevant context for analyzing this relationship. As a financial cooperative, KPRI Amal Bakti relies heavily on AIS to manage savings, loans, and other financial services for its members. The system used, SIABKA, is designed to align with International Financial Reporting Standards (IFRS), thereby ensuring comparability, transparency, and accountability. However, the system's success depends not only on its design but also on how employees operate it. Employee knowledge in this case is not merely an asset but a determinant of the cooperative's ability to maintain member trust and fulfill its organizational mission.

Several previous studies also highlight the role of training and education in enhancing employee knowledge. Adillah et al. (2023) found that systematic procedures supported by computer-based payroll systems improved AIS effectiveness in plantation companies. Similarly, Ainulia et al. (2023) reported that computerized hospital accounting systems improved cash receipt processes, although technical errors still posed challenges. These studies indicate that continuous training, system upgrades, and technical support are essential to sustain employee knowledge and ensure the effectiveness of AIS. Without these efforts, organizations risk underutilizing the system and compromising their financial accountability.

In summary, the background and theoretical foundation of this study emphasize that AIS effectiveness is inseparable from employee knowledge. The literature suggests that knowledge influences technical skills, internal control compliance, user satisfaction, and overall system success. For cooperatives such as KPRI Amal Bakti, the stakes are particularly high because the system directly affects member trust and organizational credibility. Therefore, this research seeks to explore how employee knowledge influences the effectiveness of AIS in KPRI Amal Bakti, providing insights not only for the cooperative itself but also for broader applications in similar organizational contexts. The findings are expected to contribute to both academic discussions on AIS and practical recommendations for improving financial management in cooperatives.

## 2. METHODS

This study employs a qualitative descriptive approach aimed at providing an in-depth understanding of how employee knowledge influences the effectiveness of the Accounting Information System (AIS) at KPRI Amal Bakti, Ministry of Religious Affairs, Jember Regency. A qualitative approach is considered appropriate because it allows the researcher to explore social phenomena in their natural setting and to capture the perspectives of employees who are directly involved in operating the system. The sampling technique used in this research is purposive sampling. Informants were selected based on specific criteria, namely employees who have direct involvement and understanding of the AIS. This ensures that the data collected is relevant and representative of the research objectives. The data collection techniques consist of three primary methods: (1) observation, to directly examine how employees use the AIS in their daily work; (2) in-depth interviews, to obtain comprehensive insights from informants regarding their knowledge, experiences, and challenges in using the system; and (3) documentation, to collect supporting evidence such as organizational records, reports, and system-related documents. For data analysis, the study follows the interactive model proposed by Miles and Huberman, which includes data reduction, data display, and conclusion drawing. To ensure the validity and reliability of the findings, the researcher applies triangulation by cross-checking information obtained from multiple sources and methods.

### 3. RESULTS AND DISCUSSION

#### Research Findings

##### 1. Employees Possess Adequate Knowledge of AIS

Employees at KPRI Amal Bakti generally demonstrate a good understanding of the Accounting Information System (SIABKA). Their knowledge covers basic functions such as transaction recording, financial report generation, and budget monitoring. Regular training programs provided by the cooperative help strengthen this knowledge base.

Interviews revealed that employees are comfortable operating the AIS for routine tasks, although they occasionally rely on IT staff or senior accountants for more complex technical processes. The presence of structured training modules, which are practice-oriented, has enabled employees to internalize system operations effectively. This finding highlights the importance of continuous learning to sustain the level of employee competence.

##### 2. Training Enhances System Utilization

The study found that periodic training sessions significantly improve employees' ability to use the AIS effectively. Training materials are designed to be hands-on, allowing employees to directly practice with the system during sessions.

Employees reported that training is crucial, especially when system updates or new procedures are introduced. Without training, users may face difficulties adapting to changes, which could reduce system effectiveness. Therefore, continuous training not only enhances technical skills but also builds confidence among employees in using the system optimally.

##### 3. AIS Improves Efficiency and Accuracy

The use of SIABKA has greatly improved the efficiency and accuracy of financial processes within the cooperative. Compared to manual systems, the computerized application reduces processing time and minimizes the risk of human error.

Observation during fieldwork confirmed that financial data is processed faster and with fewer discrepancies. Employees acknowledged that the system provides real-time access to data, enabling timely decision-making. This has resulted in more transparent and accountable financial reporting, which is critical for maintaining member trust.

##### 4. Infrastructure and Server Limitations Exist

Despite its overall effectiveness, the system still faces technical challenges, particularly regarding server capacity. Heavy usage sometimes causes delays in processing, which hampers smooth operations.

Employees emphasized that while the system is reliable most of the time, improvements in infrastructure are needed to ensure uninterrupted service. Expanding server capacity and upgrading hardware would strengthen the system's performance, particularly during peak operational periods. This finding underscores the role of technological infrastructure in supporting AIS sustainability.

##### 5. Strong Internal Control Mechanisms Support System Effectiveness

The cooperative enforces strict internal control procedures within the AIS. Access rights are distributed according to job roles, and the system incorporates multi-level authorization and audit trails.

Such measures prevent misuse of the system and ensure accountability. For example, only authorized personnel can approve critical transactions, while the system automatically records all activities for audit purposes. These practices reflect a sound governance structure that aligns with financial reporting standards and enhances trust among cooperative members.

## Discussion

### 1. Employee Knowledge as a Key Determinant of AIS Effectiveness

The findings confirm that employees' knowledge directly influences the effectiveness of the Accounting Information System (AIS). Employees who understand system functions are able to operate the AIS effectively, minimize errors, and generate reliable financial information.

This aligns with Komala (2012), who argues that knowledge of accounting managers and staff is crucial for planning and control functions. In KPRI Amal Bakti, employee familiarity with SIABKA's modules – such as transaction entry and financial reporting – ensures the cooperative's financial data is processed accurately. The results indicate that knowledge is not just an individual competency but an organizational asset that determines AIS performance.

### 2. The Role of Training in Sustaining System Competence

Training was found to be an essential factor in maintaining employees' ability to utilize the AIS effectively. Without ongoing training, knowledge can become outdated, particularly when the system undergoes updates or procedural changes.

This supports Ruth's (2018) findings that technical ability, education, and training are significant in enhancing AIS effectiveness. In KPRI Amal Bakti, practice-based training has empowered employees to adapt to system upgrades and troubleshoot problems. Thus, training is not only a support activity but a strategic investment in sustaining AIS effectiveness.

### 3. AIS Enhances Operational Efficiency and Accountability

The study revealed that SIABKA improves efficiency in data processing and accuracy in financial reporting, reducing reliance on manual systems. This contributes to greater transparency and accountability within the cooperative.

According to the DeLone and McLean IS Success Model, system quality and user satisfaction are important indicators of system success. The efficiency and reliability of SIABKA increase user satisfaction, while accurate outputs improve trust among members. This shows that the system is achieving its intended objectives by enhancing both performance and accountability.

### 4. Infrastructure Limitations as a Barrier to System Optimization

Although the system has proven effective, technical challenges such as limited server capacity pose risks to uninterrupted operations. This reflects the importance of technological infrastructure in supporting AIS performance.

Mardiasmo (2016) emphasizes that technical capacity is critical for system sustainability. In the case of KPRI Amal Bakti, server overload occasionally hinders smooth system operations, which could affect employee productivity. This suggests that infrastructure investment is necessary to fully optimize the potential of SIABKA and avoid disruptions that undermine system effectiveness.

### 5. Internal Control Strengthens System Reliability

The cooperative's strict internal control practices – such as role-based access, multi-level authorization, and audit trails – significantly reinforce AIS effectiveness. These mechanisms ensure compliance with financial regulations and protect organizational assets.

This finding supports the view that AIS effectiveness depends not only on technical features but also on governance structures. As DeLone and McLean's model highlights, information quality and system security are determinants of success. In KPRI Amal Bakti, robust internal control provides assurance that financial transactions are valid, authorized, and traceable, thereby enhancing transparency and reducing risks of misuse.

#### 4. CONCLUSION

This study concludes that employee knowledge plays a central role in determining the effectiveness of the Accounting Information System (AIS) at KPRI Amal Bakti, Ministry of Religious Affairs, Jember Regency. Employees who possess adequate technical and procedural knowledge are able to operate the system effectively, ensuring accurate financial reporting and efficient operations. Regular training further strengthens this competence, enabling staff to adapt to system updates and minimize errors. As a result, the AIS not only enhances organizational efficiency but also promotes transparency and accountability, which are crucial in maintaining member trust.

However, the study also identifies several challenges that need attention. Limitations in technological infrastructure, particularly server capacity, may hinder optimal system performance during peak usage. To address this, continuous investment in infrastructure and periodic training programs is essential. Additionally, strong internal controls embedded in the system provide a safeguard against misuse and reinforce financial governance. Overall, the findings highlight that human knowledge, supported by proper infrastructure and governance, is the foundation of AIS effectiveness in cooperatives.

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