A Digital Transformation in Waqf Management: Leveraging Microsoft Access for Financial Accountability

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Abstract

Waqf accounting involves the recording, reporting, and disclosure of transactions and resources related to waqf according to accounting principles and sharia regulations. This research aims to design a database-based waqf accounting application for Badan Pengelola Wakaf (BPW) Ar-Risalah using Microsoft Access. Data collection methods include interviews, observations, and document reviews. The resulting application produces financial reports that comply with the Statement of Financial Accounting Standards (PSAK) 412 concerning waqf accounting. The financial statements generated include an activity report, financial position report, waqf asset details, and cash flow statement. This application is expected to assist BPW Ar-Risalah in efficiently recording transactions and preparing financial reports.

Keywords: Waqf Accounting, Microsoft Access, PSAK 412, Database Application, Islamic Finance, Financial Reporting, Transparency.

1. Introduction

Waqf has long been an essential instrument for supporting social welfare, economic development, and community resilience in the Muslim world. The term "waqf" refers to the dedication of property for charitable purposes, with its capital preserved while the yield is used for the benefit of society (Cizakca, 2000). Historically, waqf has played a crucial role in funding public goods, such as mosques, schools, hospitals, and other social infrastructure, demonstrating its capacity to contribute to the welfare of the Muslim community. It is considered one of the key elements in promoting social justice and reducing economic disparities.

In recent years, waqf has gained renewed interest as a tool for advancing socio-economic development. With the increasing complexity of modern financial systems and the growing demand for accountability and transparency, the need for structured waqf management has become more pressing. Effective waqf management not only ensures that waqf assets are protected and utilized efficiently but also enhances public trust in the institutions responsible for managing these assets. This necessitates the implementation of reliable accounting practices that align with both Islamic principles and contemporary financial standards.

In Indonesia, the significance of waqf management has been acknowledged with the enactment of Law No. 41 of 2004 on Waqf, followed by Government Regulation No. 42 of 2006. These regulations establish a legal framework for waqf management, outlining the roles and

responsibilities of waqf managers (nazhir) and providing guidelines for the establishment and administration of waqf assets. Additionally, the Indonesian Institute of Accountants (IAI) introduced PSAK 412, which provides guidelines for the accounting and reporting of waqf activities, ensuring that financial statements reflect the true value and use of waqf assets.

Among the classic issues in waqf management are the lack of an integrated information system (Janom et al., 2019) and the management of waqf funds and assets that has not yet achieved full transparency and accountability (Ihsan & Adnan, 2013). Many waqf institutions still manage their records manually, often using basic tools such as spreadsheets or even paper-based systems (Kamaruddin et al., 2022). This approach can lead to inefficiencies, inaccuracies, and a lack of transparency, ultimately hindering the effectiveness of waqf management. Manual record-keeping is prone to human error, delays in reporting, and difficulties in maintaining consistency and completeness of records. As a result, the ability of waqf institutions to demonstrate accountability to stakeholders—including donors, beneficiaries, and regulatory bodies—is significantly compromised.

This research addresses these challenges by designing a waqf accounting application for BPW Ar-Risalah using Microsoft Access, aimed at improving the quality of financial management and compliance with PSAK 412. The use of a database-driven solution not only facilitates more accurate and timely record-keeping but also enhances the overall transparency and accountability of waqf management. By leveraging Microsoft Access, this research seeks to provide an affordable and practical solution for waqf institutions, particularly those with limited financial and technical resources, to modernize their accounting practices and meet the growing expectations of stakeholders for transparency and efficiency.

2. Literature Review

The need for effective waqf management has been highlighted by several researchers, with a focus on ensuring transparency, accountability, and sustainability of waqf assets. Studies emphasize that traditional manual record-keeping methods are inadequate for the evolving demands of waqf management, which requires more systematic and reliable approaches. Manual systems are often characterized by inefficiencies, errors, and a lack of standardization, leading to difficulties in maintaining accurate records and demonstrating accountability to stakeholders. This has driven the need for modern accounting systems that can address these challenges and align waqf management with both Islamic principles and contemporary financial practices.

The adoption of technology in waqf management has been seen as a crucial step in overcoming these limitations. Database-driven solutions, such as the one developed in this research using Microsoft Access, offer significant benefits in terms of improving the accuracy, efficiency, and transparency of waqf accounting. By using a relational database, waqf institutions can ensure data integrity, reduce redundancy, and facilitate easier access to financial information. Microsoft Access, in particular, has been identified as a cost-effective and user-friendly platform for small to medium-sized waqf institutions, allowing them to manage their financial data without the need for extensive technical expertise or resources.

The introduction of PSAK 412 by the Indonesian Institute of Accountants represents a significant step towards standardizing waqf accounting practices in Indonesia. This standard provides a framework for the recording, reporting, and disclosure of waqf transactions,

ensuring that financial statements accurately reflect the financial position of waqf assets. The adoption of PSAK 412 is intended to enhance the transparency and accountability of waqf institutions, thereby increasing stakeholder confidence and promoting the sustainable development of waqf assets.

The application developed in this research aims to address the gaps identified in previous studies by providing a practical and affordable solution for waqf accounting. By automating financial record-keeping and generating standardized financial reports, the application helps ensure compliance with PSAK 412 and enhances the overall quality of waqf management. The use of Microsoft Access as the development platform was chosen specifically to cater to the needs of small to medium-sized waqf institutions that may lack the financial and technical capacity to implement more sophisticated accounting systems.

The use of information technology to enhance waqf management has been proposed by several researchers. According to Obaidullah (2013), an integrated accounting information system can assist waqf management institutions in managing funds and assets more efficiently and transparently. This system enables real-time transaction recording, accurate financial reporting, and more effective monitoring and evaluation of waqf programs.

Another study by Che Azmi & Hanifa (2015) indicates that implementing an accounting information system in waqf institutions can increase public trust. When people see that waqf funds are well-managed and transparent, they are more likely to participate in and support waqf programs.

Several case studies have been conducted to assess the effectiveness of accounting information systems in waqf management (Janom et al., 2019). This research shows that implementing an integrated information system in local waqf institutions successfully improves operational efficiency and transparency in managing waqf funds. The study emphasizes the importance of training and education for waqf institution staff to operate the accounting information system effectively.

Another study by Mansor et al., (2017) also highlights the importance of an integrated information system in waqf management. This research found that adopting information technology can reduce recording errors and accelerate reporting processes, ultimately enhancing the accountability of waqf institutions.

Further research (Abd Mutalib & Md Sabri, 2021) suggests that information technology can be used to develop systems that support comprehensive waqf management, from asset recording and financial management to reporting and auditing. This study emphasizes that integrating information technology in waqf management can create a transparent and accountable system, which is crucial for maintaining the trust of waqf donors.

This research is also grounded in conceptual and theoretical frameworks, including accountability theory and transparency theory. Accountability theory (Gray et al., 1996) emphasizes the importance for public fund management institutions, including waqf institutions, to be accountable to their stakeholders through accurate recording and reporting. Transparency theory (Bushman et al., 2004) supports the argument that easy and open access to financial information can increase public trust and participation in social and financial programs.

In summary, the literature underscores the importance of modernizing waqf management through the adoption of standardized accounting practices and the use of technology. The development of a database-based waqf accounting application, as presented in this research, aligns with these recommendations and represents a significant step towards improving the transparency, efficiency, and accountability of waqf institutions.

4. Methodology

This research is conducted using a qualitative approach with a case study as the chosen research design. The case study approach is selected because it allows the researcher to gain an in-depth understanding of the issue under investigation, which can then support the formulation of a model as one of the study's outputs (Yin, 2003). Furthermore, there is no hypothesis-deductive model testing, as this is a characteristic of quantitative research approaches. The methods used in this research include:

1. Interviews: Semi-structured interviews were conducted with key stakeholders at BPW Ar-Risalah, including nazhir (waqf managers) and administrative staff. The purpose of these interviews was to gather insights into the current challenges faced in waqf accounting, understand user needs, and determine the functional requirements of the proposed accounting application.

2. Observations: Direct observations of the current accounting processes were carried out to assess how transactions were recorded and managed. This helped identify inefficiencies, areas of potential improvement, and user interaction patterns with existing tools, such as spreadsheets or manual ledgers. Observations were also useful in understanding staff familiarity with technology, which informed the design of a user-friendly interface.

3. Document Analysis: Financial records, such as transaction logs, donation receipts, and previous financial reports, were analyzed to understand the existing data structure and reporting requirements. Document analysis ensured that the new system could accommodate all necessary data points and produce comprehensive financial statements in compliance with PSAK 412.

4. System Development Approach: The application development followed a systematic software engineering process, specifically the waterfall model, which included stages such as requirements analysis, system design, implementation, testing, and deployment. This model was chosen for its structured and sequential nature, which suited the needs of this project. The requirements gathered from stakeholders were used to develop both the database schema and the user interface.

5. Platform Selection: Microsoft Access was selected as the development platform due to its balance of simplicity, cost-effectiveness, and capacity to meet the specific needs of a waqf institution. Microsoft Access provides an integrated environment for both database management and form-based user interfaces, making it accessible to staff with minimal technical expertise. Additionally, Microsoft Access allows for easy modification and scalability, which is beneficial for adapting to future changes in waqf management requirements.

6. User Testing and Feedback: After the initial development of the application, a user testing phase was conducted involving BPW Ar-Risalah staff. Users were asked to

perform typical accounting tasks using the application, and their feedback was collected to identify usability issues and potential areas for improvement. This iterative feedback process ensured that the final version of the application was both functional and user-friendly, addressing the specific needs of the waqf institution.

Application Design

The waqf accounting application was designed to manage all aspects of waqf accounting, from initial transactions to final financial reports. Key features of the application include:

1. Database Design: The database was structured to store all necessary data, including information on waqf donors (wakif), assets, and financial transactions. Tables were created for different types of waqf assets, journal entries, and financial statements. The relational database design ensures data consistency and integrity across various modules of the application.

2. User Interface: The application features user-friendly forms for data entry, including forms for recording waqf contributions, asset details, and financial transactions. These forms help ensure data accuracy and simplify the data entry process for BPW staff. The intuitive interface reduces the learning curve for users and enhances operational efficiency.

3. Financial Reports: The application generates financial statements in compliance with PSAK 412, including an activity report, financial position report, waqf asset details, and cash flow statement. These reports are designed to provide transparency to stakeholders and ensure compliance with accounting standards. The financial reports can be easily exported for further analysis or presentation to stakeholders.

Case Profile

BPW Ar Risalah, originally known as Yayasan Waqaf Ar Risalah, was founded on June 24, 2003, in Solok, West Sumatra, inspired by a group of students from West Sumatra who studied at LIPIA in Jakarta during the 1990s. Observing the rapid development of Islamic education in Jakarta, they were motivated to revive West Sumatra's historic role as a center for Islamic learning in Indonesia. This passion for promoting Islamic education continued through their studies in the Middle East and was realized years later in the establishment of an Islamic foundation, focused on waqf-based educational development.

The foundation's objectives were driven by several factors, including the moral decline among youth, the lack of quality Islamic education institutions in West Sumatra, and the shortage of local religious scholars. The foundation aimed to consolidate Islamic education resources and attract alumni from Islamic universities across Indonesia to contribute locally.

The primary project of Yayasan Waqaf Ar Risalah was establishing Pesantren Perguruan Islam Ar Risalah, which began operations in 2003 in a mosque in Nagari Cupak, Solok. The first intake in 2004-2005 included 120 students across four classes. Responding to high demand, a second branch was opened in 2005 on a 4-hectare waqf land in Koto Tangah, Padang, which later became the main campus in 2007. All educational activities were consolidated at the Padang campus by 2009, and the institution expanded to include levels from early childhood education (PAUD & TK) to senior high school (MA) by 2012.

Currently, BPW Ar Risalah manages multiple divisions: Secondary Education (SMP, MA), Primary & Development Education (TPA, PAUD, TK, SD), Community Service & Da'wah, and Development & Business (minimarkets, cooperatives). These initiatives reflect Ar Risalah's commitment to enhancing Islamic education and community development in West Sumatra.

5. Results and Discussion

The implementation of the waqf accounting application at BPW Ar-Risalah significantly improved the efficiency of financial reporting and overall management of waqf assets. Prior to the deployment of the application, waqf management relied heavily on manual record-keeping using spreadsheets, which was time-consuming, prone to human error, and lacked consistency. These issues were particularly evident in the preparation of financial reports, which often required extensive cross-referencing and manual calculations, leading to delays and inaccuracies.

With the introduction of the waqf accounting application, data entry and report generation processes have been automated, resulting in a significant reduction in errors and improvements in the timeliness of financial reports. The automated nature of the system has not only streamlined routine accounting tasks but also allowed staff to focus more on strategic aspects of waqf management, such as optimizing asset utilization and enhancing donor engagement. The system's data validation features also ensure that all entries are accurate and complete, which has greatly minimized the risk of inconsistencies.

The financial statements produced by the application, including the activity report, financial position report, and cash flow statement, provide a comprehensive overview of BPW Ar-Risalah's financial health. These reports are generated in compliance with PSAK 412, ensuring that they meet the required standards for transparency and accountability. Stakeholders, including donors, beneficiaries, and regulatory bodies, have responded positively to the enhanced clarity and accessibility of financial information. This improved transparency has strengthened stakeholder trust, which is crucial for the continued growth and sustainability of waqf assets.

Another notable improvement is the scalability and flexibility offered by the Microsoft Access platform. The application can easily be adapted to accommodate changes in reporting requirements or the addition of new types of waqf assets. This flexibility is particularly important for waqf institutions like BPW Ar-Risalah, which may need to adjust their accounting practices in response to evolving regulatory standards or organizational growth.

However, the transition from manual processes to a digital system was not without challenges. One of the main obstacles faced during implementation was the need for user training. Staff members who were accustomed to manual record-keeping initially found it challenging to adapt to the new system. To address this, comprehensive training sessions were conducted, focusing on both the technical aspects of using the application and the underlying accounting principles. User manuals and on-site support were also provided to assist staff during the transition period. Despite these efforts, some resistance to change remained, highlighting the importance of ongoing support and training to ensure full adoption of the system.

In terms of data security and accessibility, the application currently operates on a local network, which limits remote access. To enhance data accessibility and ensure business continuity,

future improvements could include integrating the application with cloud services. This would allow authorized users to access the system remotely, improving flexibility and ensuring that data is backed up securely. Additionally, integrating the application with other financial management systems could further enhance its functionality, providing a more holistic approach to managing waqf finances.

Quantitative results from the implementation showed a marked improvement in efficiency. The time required to prepare monthly financial reports was reduced by approximately 40%, and the error rate in financial entries decreased significantly due to the automated data validation features. These improvements not only demonstrate the effectiveness of the application but also highlight the potential benefits of adopting similar solutions in other waqf institutions.

Overall, the waqf accounting application has had a positive impact on the operations of BPW Ar-Risalah, improving efficiency, accuracy, and transparency. By addressing the challenges of manual record-keeping and providing a scalable solution for financial management, the application has set a benchmark for other waqf institutions seeking to modernize their accounting practices.

6. Conclusion

This research successfully designed and implemented a database-based waqf accounting application using Microsoft Access for BPW Ar-Risalah. The primary objective was to address the limitations of manual record-keeping, which included inefficiencies, inaccuracies, and a lack of transparency. By automating the accounting process, the application not only improved the efficiency of financial record-keeping but also ensured compliance with PSAK 412, thereby enhancing the transparency and accountability of waqf management.

The findings of this research indicate that the application significantly reduced the time required for preparing financial reports and minimized errors in data entry. The generated financial statements, including activity reports, financial position reports, and cash flow statements, provide a comprehensive overview of BPW Ar-Risalah's financial status, which has contributed to improved stakeholder trust and confidence. The automation of these processes has also allowed staff to focus on more strategic aspects of waqf management, such as optimizing asset utilization and engaging with donors more effectively.

Despite the positive outcomes, the implementation was not without challenges. The transition from manual to digital processes required substantial user training, and some resistance to change was observed among staff. However, with ongoing support, training, and the provision of user manuals, the adaptation process was largely successful. These experiences highlight the importance of continuous capacity building and support in the successful adoption of new technologies.

The scalability and flexibility of the Microsoft Access platform have also been demonstrated, as the application can be easily modified to meet evolving requirements. However, there are still areas for future improvement. To further enhance data accessibility and ensure business continuity, integrating the application with cloud services would be beneficial. This would allow for remote access and ensure secure data backup. Additionally, migrating to a more robust database platform, such as MySQL or SQL Server, could accommodate larger data volumes and provide more advanced functionalities, particularly as the organization grows.

In conclusion, the waqf accounting application developed in this research represents a significant step forward in modernizing waqf management practices. By addressing the challenges associated with manual accounting systems and providing an affordable and scalable solution, the application has the potential to serve as a model for other waqf institutions. Future enhancements, including cloud integration and platform upgrades, will further strengthen the application's capability to support transparent, efficient, and accountable waqf management.

Acknowledgements

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