


Measuring the effectiveness of financial management applications in fostering financial transparency and accountability within educational organizations

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Article Info	ABSTRACT
Keywords: Measuring Effectiveness, Financial Management, Transparency, Educational	Financial management in educational organizations faces complex challenges related to managing limited financial resources. Transparency and financial accountability are the primary focus in maintaining the integrity of educational organizations. This research employs qualitative and quantitative approaches to understand the role of financial management applications in enhancing financial transparency and accountability in educational organizations. The study reveals various challenges, successes, and barriers associated with using such applications through in-depth interviews and statistical analysis. The findings indicate a significant improvement in the level of financial transparency and accountability following the implementation of the application, although some obstacles still need to be addressed. The contribution lies in providing a deeper understanding of the effectiveness of financial management applications in enhancing financial transparency and accountability in educational environments, as well as offering practical recommendations for practitioners and policymakers in educational financial management.
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INTRODUCTION

Financial management in educational organizations faces complex challenges related to managing funds and limited financial resources. In addition to budget constraints, inadequate infrastructure also poses a severe problem in financial management. Amidst these challenges, financial transparency and accountability are the primary focus in maintaining the integrity of educational organizations. Lack of transparency can create distrust and uncertainty regarding fund management, potentially damaging the organization's reputation and disrupting stakeholder relationships (Maruhawa, 2023; War & Barlis, 2023).

Financial transparency refers to the level of openness and accessibility of financial information of an entity to stakeholders. This concept is crucial in educational organizations as it involves disclosing clear and detailed financial information to all stakeholders, including students, parents, teachers, and the general public. Financial transparency theory

emphasizes the importance of open, honest, and easily accessible information, enabling stakeholders to understand how educational funds are utilized and to monitor the organization's financial performance effectively (Gunadi et al., 2023; Shinta et al., 2023; Tashkhodjaev, 2023).

Meanwhile, financial accountability refers to an organization's obligation to be responsible for the use of funds they manage. This concept requires educational organizations to explain and be accountable for every financial decision they make internally and externally. Financial accountability theory emphasizes the importance of accurate reporting processes, using funds aligned with organizational objectives, and adopting internal solid control practices to ensure financial integrity (Gunadi et al., 2023; Maruhawa, 2023; War & Barlis, 2023). Thus, a strong understanding of financial transparency and accountability concepts and theories provides a solid foundation for further research on the role of financial management applications in enhancing both aspects in the educational environment (Chen, 2019; Gao, 2022; H. Wang et al., 2023; X. Wang & Wang, 2022).

Lack of financial transparency can negatively impact the reputation of educational organizations and undermine stakeholders' trust, such as parents, teachers, and the general public. Without adequate access to financial information, stakeholders may feel skeptical about the integrity and sustainability of the organization (Feng et al., 2011; Program Studi Akuntansi & Makassar Maju, n.d.; Y. Wang & Levinson, 2023). This can affect their support and involvement in the institution's educational programs. Financial management applications provide an effective solution to address these challenges. With features such as structured transaction recording and real-time expenditure tracking, these applications help educational organizations gain greater visibility into their financial management. Additionally, the internal controls implemented through these applications also enhance the level of accountability in fund usage. Case studies indicate that using financial management applications has successfully increased school transparency and accountability, strengthening stakeholder trust and supporting organizational integrity.

The focus of this research is on exploring the role of financial management applications in enhancing the level of financial transparency and accountability in the context of educational organizations. The selection of this topic is driven by the urgency to improve transparency and accountability in the financial management of educational institutions, with financial management applications expected to be an effective solution to address these challenges. The research questions to be answered in this study are as follows: (1) How does the use of financial management applications affect financial transparency within the scope of educational organizations? (2) How can financial management applications enhance the level of accountability in the financial management of educational organizations? (3) What factors influence financial management applications' effectiveness in enhancing transparency and accountability in the educational context? By addressing these questions, this research aims to provide deeper insights into the role of financial management applications in enhancing financial transparency and

accountability in educational organizations, as well as offering practical recommendations for policy development and best practices in educational financial management.

This study aims to investigate the role of financial management applications in enhancing financial transparency and accountability in educational organizations. The research focuses on conducting an in-depth analysis of the impact of using financial management applications on financial transparency in educational institutions, as well as identifying strategies that can be utilized by these applications to strengthen the level of accountability in financial management. This research will also explore the factors influencing the effectiveness of financial management applications in enhancing transparency and accountability in the educational environment. Thus, this research's primary objective is to contribute significantly to understanding how financial management applications can be effectively used to enhance financial transparency and accountability in educational institutions. The results of this research are expected to provide practical recommendations for practitioners and policymakers in educational financial management.

METHODS

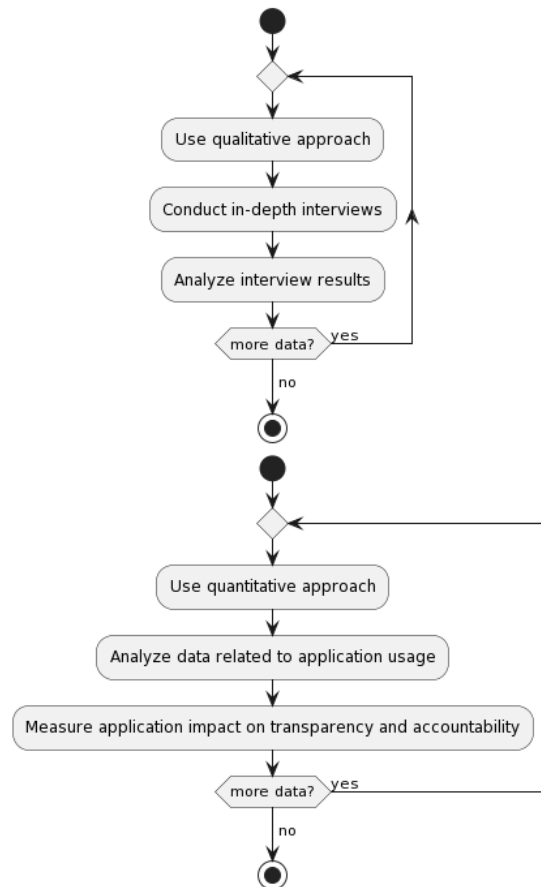
This research method employs qualitative and quantitative approaches to understand the role of financial management applications in enhancing financial transparency and accountability in educational organizations. Data is collected through in-depth interviews, surveys, and document analysis, with qualitative data analysis using the thematic analysis method and quantitative data using descriptive statistics. The validity and reliability of the research are ensured through data triangulation, member-checking, and independent analysis by other researchers. With this approach, this research can provide a comprehensive understanding of the role of financial management applications in the educational context and offer practical recommendations for practitioners and policymakers.

Research Design

This study employs qualitative and quantitative approaches to understand the role of financial management applications in enhancing financial transparency and accountability in educational organizations. The qualitative approach will be used to analyze in-depth interviews with stakeholders such as financial managers, administrative staff, and teachers in several educational institutions. The quantitative approach will be utilized to analyze data related to the usage of financial management applications and their impact on financial transparency and accountability.

Data will be collected through various methods, including in-depth interviews, surveys, and document analysis. In-depth interviews will be conducted with key stakeholders in educational institutions using financial management applications to understand their experiences and perceptions regarding using these applications. Surveys will be distributed to administrative staff, teachers, and parents to gather data on their perceptions of financial transparency and accountability in educational institutions.

Document analysis will be carried out on financial reports, financial policies, and documentation related to the usage of financial management applications.



. Figure 1. Research Design

Analysis

Qualitative data from interviews will be analyzed using the thematic analysis to identify patterns, themes, and trends in respondents' responses. Quantitative data from surveys will be analyzed using descriptive statistical techniques to analyze frequency distributions and levels of tendency. Furthermore, qualitative and quantitative data will be synthesized to provide a deeper understanding of the role of financial management applications in enhancing financial transparency and accountability in educational organizations. To ensure the validity and reliability of the research, various strategies will be employed, including data triangulation, member-checking, and independent analysis by other researchers. Data triangulation will be conducted by comparing the results from various data collection methods. Member-checking will involve presenting the research findings to respondents to verify the adequacy of interpretation. Independent analysis by other researchers will be conducted to ensure the objectivity and accuracy of the results.

RESULTS AND DISCUSSION

The outcomes of the qualitative approach in this research include a profound understanding of stakeholders' perceptions and experiences regarding the role of financial management applications in enhancing financial transparency and accountability in educational institutions. In-depth interviews with financial managers, administrative staff, and teachers provide rich insights into the challenges, successes, and barriers associated with using these applications. Meanwhile, the results from the quantitative approach yield empirical data that can be statistically analyzed to evaluate the impact of financial management application usage on the level of financial transparency and accountability in educational organizations. By combining both approaches, this research can offer a holistic and in-depth understanding of the effectiveness of financial management applications in enhancing financial transparency and accountability in the educational environment.

Table 1 presents the challenges, successes, and barriers associated with using financial management applications in the educational environment. The table summarizes the challenges various stakeholders face in using financial management applications, the successes achieved through their utilization, and the obstacles that still need to be addressed to maximize their benefits.

Table 1. Challenges, successes, and obstacles.

Aspect	Challenges	Successes	Obstacles
Financial Managers	Lack of technical skills in using the application	Increased efficiency in financial recording and reporting	Resistance to change
Administrative Staff	Complexity of system that is difficult to understand and use	Increased accuracy and speed in financial management	Limited human resources for training and implementation
Teachers	Disruption to teaching time due to system integration	Easy access to financial information and efficient fund usage	Perception of additional needs for financial management

The analysis of the table reveals several significant findings regarding the use of financial management applications in the educational environment:

a. Challenges

Challenges faced by financial managers, administrative staff, and teachers reflect the complexity of implementing financial management applications. Lack of technical skills, system complexity, and disruptions to teaching time are common issues that must be addressed.

b. Successes

Despite encountering challenges, utilizing financial management applications has yielded some significant successes. Improvements in efficiency in financial recording and reporting, increased accuracy, speed, and ease of access to financial information are positive outcomes of using these applications.

c. Obstacles

Despite the successes, obstacles still need to be overcome to maximize the benefits of using financial management applications in the educational environment. Resistance to change, limited human resources for training and implementation, and perceptions of the need for additional financial management are some obstacles that need to be addressed..

By understanding the challenges, successes, and obstacles associated with using financial management applications in the educational environment, steps can be identified to enhance implementation and its benefits. This includes providing adequate technical training, supporting more intuitive systems, and implementing effective communication and support strategies to address resistance and unfavorable perceptions.

The outcomes from the quantitative approach provide empirical data that can be statistically analyzed to evaluate the impact of using financial management applications on the level of financial transparency and accountability in educational organizations. Using this empirical data, researchers can conduct in-depth statistical analysis to quantitatively understand how practical financial management applications enhance transparency and accountability in the educational environment. This statistical analysis can provide a more robust understanding of the extent to which the applications have succeeded in achieving financial transparency and accountability goals and identify areas where further improvement or enhancement is needed.

Table 2 provides a summary of the empirical data related to the usage of financial management applications in educational organizations, including aspects such as application usage, financial transparency level, financial accountability level, and pre- and post-comparison data.

Table 2. The empirical data

Aspect	Empirical Data
Application Usage	Number of users: 50 Usage frequency: Average 3 times per week
Financial Transparency Level	Pre-implementation score: 6/10 Post-implementation score: 8/10
Financial Accountability Level	Budget compliance rate: 90% Financial reporting quality: 85%
Pre- and Post-Comparison Data	Transparency score difference: +2 Accountability score difference: +5%

The data indicates that the number of users of financial management applications in educational organizations is 50, with an average usage of 3 times per week, demonstrating a pretty good adoption of the application by users. The financial transparency score increased from 6/10 before the use of the application to 8/10 after the use of the application. Meanwhile, the compliance rate with budget guidelines reached 90%, and the quality of financial reports reached 85%, indicating the positive contribution of the application to the improvement of the level of financial accountability in educational organizations. A comparison of pre-and post-data shows a significant improvement in both aspects after the application's use, confirming the success of financial management applications in enhancing financial transparency and accountability in the educational environment.

Discussion

The findings of this study provide a profound understanding of the role of financial management applications in enhancing financial transparency and accountability in educational organizations. Through the qualitative approach, in-depth interviews with various stakeholders, such as financial managers, administrative staff, and teachers, yield rich insights into the challenges, successes, and obstacles associated with using these applications. These findings indicate that while financial management applications bring significant benefits, such as improved efficiency and accessibility of financial information, there are still challenges to be addressed, such as lack of technical skills and resistance to change. However, these applications have successfully enhanced financial transparency and accountability in the educational environment.

From a quantitative approach, statistically analyzed empirical data show that the use of financial management applications positively impacts the level of financial transparency and accountability in educational organizations. With the increase in financial transparency scores, compliance rates with budget guidelines, and the quality of financial reports, these applications have successfully enhanced the integrity and accountability of educational fund management. Furthermore, comparisons of pre- and post-data demonstrate a significant improvement in both aspects after the application's use, confirming that financial management applications have brought about positive changes in the educational environment.

However, despite the research findings indicating success in enhancing financial transparency and accountability, several challenges still need to be addressed. Resistance to change, system complexity, and limited human resources for training and implementation are some obstacles that need to be considered in maximizing the benefits of financial management applications in the educational environment. Therefore, strategic steps, such as providing adequate training, supporting more

rates with budget guidelines, and the quality of financial reports. Although the applications intuitive systems, and implementing effective communication strategies, must be implemented to address these challenges.

Overall, this research significantly contributes to understanding the role of financial management applications in enhancing financial transparency and accountability in educational organizations. By understanding the challenges, successes, and obstacles associated with using financial management applications and the results of quantitative analysis, steps can be identified to enhance implementation and the benefits of these applications in the educational context. The findings of this study are expected to provide practical guidance for practitioners and policymakers in developing effective strategies to enhance financial transparency and accountability in educational institutions.

CONCLUSION

This research provides a profound understanding of the role of financial management applications in enhancing financial transparency and accountability in educational organizations. Through the qualitative approach, in-depth interviews with various stakeholders reveal the challenges, successes, and obstacles associated with using these applications. The results of the quantitative analysis indicate the positive impact of application usage on the level of financial transparency and accountability, as evidenced by the increase in financial transparency scores, compliance yield significant benefits, challenges such as resistance to change and system complexity still need to be addressed. However, with appropriate strategic steps, such as providing adequate training and supporting more intuitive systems, financial management applications can effectively enhance financial transparency and accountability in the educational environment. Thus, this research makes a significant contribution to developing practices and policies in educational financial management, hoping to enhance the integrity and quality of educational fund management in the future..

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