*A Comparative Study Of Traditional And Digital Accounting Systems In Managing SME Finances*

**Studi Perbandingan Sistem Akuntansi Tradisional Dan Digital Dalam Mengelola Keuangan UKM**

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**ABSTRACT**
*Effective financial management is a critical determinant of SME performance and survival. Sound financial management enables business owners to monitor cash flows, allocate resources efficiently, comply with taxation and regulatory requirements, and make informed strategic decisions. This study employs a qualitative research approach using a literature review method to examine and compare traditional and digital accounting systems in managing SME finances. A literature review is an appropriate methodological approach when the objective of the study is to synthesize, analyze, and critically evaluate existing knowledge to identify patterns, gaps, and theoretical insights within a specific research domain. This study aimed to examine and compare traditional and digital accounting systems in managing SME finances through a comprehensive literature review. Based on the synthesis of existing academic studies and institutional reports, the findings demonstrate that accounting system choice plays a crucial role in determining the effectiveness of financial management practices in SMEs.*
*Keywords: Comparative; Traditional; Digital Accounting*

**ABSTRAK**
Manajemen keuangan yang efektif merupakan penentu penting kinerja dan kelangsungan hidup UKM. Manajemen keuangan yang baik memungkinkan pemilik usaha untuk memantau arus kas, mengalokasikan sumber daya secara efisien, mematuhi persyaratan perpajakan dan peraturan, serta membuat keputusan strategis yang tepat. Studi ini menggunakan pendekatan penelitian kualitatif dengan metode tinjauan pustaka untuk meneliti dan membandingkan sistem akuntansi tradisional dan digital dalam mengelola keuangan UKM. Tinjauan pustaka merupakan pendekatan metodologis yang tepat ketika tujuan penelitian adalah untuk mensintesis, menganalisis, dan mengevaluasi secara kritis pengetahuan yang ada untuk mengidentifikasi pola, kesenjangan, dan wawasan teoritis dalam domain penelitian tertentu. Studi ini bertujuan untuk meneliti dan membandingkan sistem akuntansi tradisional dan digital dalam mengelola keuangan UKM melalui tinjauan pustaka yang komprehensif. Berdasarkan sintesis studi akademis dan laporan institusional yang ada, temuan menunjukkan bahwa pilihan sistem akuntansi memainkan peran penting dalam menentukan efektivitas praktik manajemen keuangan di UKM.
**Kata Kunci**: Komparatif; Tradisional; Akuntansi Digital

## 1. Indtroduction

Small and Medium Enterprises (SMEs) are widely recognized as a fundamental pillar of economic development in both developed and developing countries. SMEs contribute significantly to job creation, income generation, innovation, and regional economic resilience. According to the World Bank (2020), SMEs account for approximately 90% of businesses and more than 50% of employment worldwide. In developing economies, SMEs play an even more strategic role by supporting local economies, reducing poverty, and fostering inclusive growth. Despite their importance, SMEs often face structural and managerial challenges that hinder their sustainability and long-term growth, particularly in the area of financial management.

Effective financial management is a critical determinant of SME performance and survival. Sound financial management enables business owners to monitor cash flows, allocate

resources efficiently, comply with taxation and regulatory requirements, and make informed strategic decisions (Atrill & McLaney, 2019). However, many SMEs struggle with inadequate accounting practices, limited financial literacy, and insufficient access to reliable financial information. Poor accounting systems can lead to inaccurate financial records, weak internal controls, and suboptimal decision-making, which ultimately increase the risk of business failure (Khan, Hussain, & Ajmal, 2021).

Traditionally, SMEs have relied on manual or semi-manual accounting systems to manage their financial activities. Traditional accounting systems typically involve paper-based bookkeeping, manual journal entries, spreadsheets, and basic accounting records maintained by business owners or non-professional staff. These systems are often preferred due to their simplicity, low implementation cost, and familiarity among SME operators (Sangster, 2016). For micro and small enterprises with limited transaction volumes, traditional accounting methods may initially appear sufficient to meet basic financial reporting needs.

Nevertheless, traditional accounting systems present several inherent limitations. Manual data entry increases the likelihood of human error, inconsistencies, and delays in financial reporting. The lack of real-time financial information makes it difficult for SME owners to track business performance accurately and respond promptly to financial problems (Rom & Rohde, 2017). Furthermore, traditional systems often lack adequate documentation and standardized reporting formats, which can hinder access to external financing from banks and investors that require reliable and transparent financial statements (OECD, 2019).

The rapid advancement of information and communication technology has significantly transformed accounting practices over the past two decades. The emergence of digital accounting systems—such as cloud-based accounting software, automated bookkeeping applications, and integrated enterprise resource planning (ERP) systems—has reshaped the way financial information is recorded, processed, and reported. Digital accounting systems offer features such as real-time data processing, automated calculations, standardized financial reports, data integration, and enhanced internal controls (Grande, Estébanez, & Colomina, 2011).

Digital accounting systems are increasingly promoted as an effective solution to overcome the financial management challenges faced by SMEs. By automating routine accounting tasks, digital systems can reduce human error, improve data accuracy, and increase operational efficiency. In addition, digital accounting enables timely access to financial information, which supports better planning, budgeting, and strategic decision-making (Romney & Steinbart, 2021). The adoption of digital accounting systems is also aligned with broader trends of digital transformation and Industry 4.0, which emphasize the use of technology to enhance organizational performance and competitiveness.

Despite the potential advantages, the adoption of digital accounting systems among SMEs remains uneven and relatively slow in many regions. A significant number of SMEs continue to rely on traditional accounting practices, even when digital alternatives are readily available. Several studies have identified key barriers to digital accounting adoption, including limited financial resources, lack of technological skills, resistance to change, inadequate infrastructure, and concerns about data security and privacy (Alsharari, Eid, & Assiri, 2020; Nguyen et al., 2022). These challenges are particularly pronounced among micro and small enterprises operating in developing economies.

Moreover, the effectiveness of digital accounting systems is not solely determined by technological availability but also by organizational readiness, user competence, and alignment with business needs. In some cases, SMEs that adopt digital accounting systems fail to fully utilize their capabilities due to insufficient training or poor system integration. As a result, the expected benefits of digitalization may not be fully realized, leading to skepticism among SME owners regarding the value of digital accounting investments (Khan et al., 2021).

Previous research has explored various aspects of accounting information systems and digitalization in SMEs, including adoption factors, implementation challenges, and performance outcomes. However, empirical studies that directly compare traditional and digital accounting systems in managing SME finances remain limited. Many studies focus exclusively on either traditional accounting practices or digital accounting adoption, without providing a comprehensive comparative analysis of their effectiveness, efficiency, and impact on financial management outcomes (Grande et al., 2011; Rom & Rohde, 2017).

The lack of comparative evidence creates a gap in the existing literature, particularly regarding how traditional and digital accounting systems differ in terms of accuracy, timeliness, cost-effectiveness, internal control, and decision-support capabilities for SMEs. Such comparative insights are essential for SME owners who must decide whether to maintain traditional accounting practices or transition to digital systems. Policymakers and support institutions also require empirical evidence to design effective programs that promote digital transformation among SMEs.

Furthermore, the increasing pressure for financial transparency, regulatory compliance, and access to external financing has made effective accounting systems more critical than ever for SMEs. Financial institutions and government agencies often require standardized financial reports as a prerequisite for credit access, tax compliance, and participation in development programs. SMEs that rely solely on traditional accounting systems may face difficulties meeting these requirements, thereby limiting their growth opportunities (OECD, 2019).

In this context, a comparative study of traditional and digital accounting systems in managing SME finances becomes highly relevant and timely. By systematically examining the strengths and weaknesses of each system, this research seeks to provide a deeper understanding of how accounting system choices influence financial management performance in SMEs. The study aims to evaluate key dimensions such as efficiency, accuracy, accessibility of financial information, cost implications, and decision-making support.

This research is expected to make both theoretical and practical contributions. From a theoretical perspective, it enriches the literature on accounting information systems and SME financial management by providing empirical evidence on the comparative effectiveness of traditional and digital accounting systems. From a practical perspective, the findings can serve as a reference for SME owners, accountants, and policymakers in formulating strategies to improve financial management practices and support sustainable SME development.

## 2. Method
### Research Design
This study employs a **qualitative research approach** using a **literature review method** to examine and compare traditional and digital accounting systems in managing SME finances. A literature review is an appropriate methodological approach when the objective of the study is to synthesize, analyze, and critically evaluate existing knowledge to identify patterns, gaps, and theoretical insights within a specific research domain (Snyder, 2019). Through this approach, the study systematically reviews relevant academic publications to build a comprehensive understanding of how different accounting systems influence financial management practices in SMEs.

The literature review method allows researchers to integrate findings from previous empirical and theoretical studies, providing a strong conceptual foundation for comparative analysis. This approach is particularly suitable for accounting and SME studies, where diverse perspectives and contextual factors influence research outcomes (Tranfield, Denyer, & Smart, 2003).

### Type of Literature Review

This research adopts a **narrative and thematic literature review** with a comparative analytical perspective. The narrative review is used to describe and interpret existing studies related to traditional accounting systems, digital accounting systems, and SME financial management. Meanwhile, thematic analysis is applied to identify recurring themes, similarities, and differences between the two accounting systems across the reviewed literature (Braun & Clarke, 2006).

The comparison focuses on key dimensions of financial management, including accounting accuracy, efficiency, cost-effectiveness, accessibility of financial information, internal control, and decision-making support. By organizing the literature around these themes, the study provides a structured comparison between traditional and digital accounting systems in the SME context.

**Data Sources**

The data used in this study consist of **secondary data** obtained from reputable academic sources. The literature was collected from international and national databases, including: Scopus, Web of Science, Google Scholar, ScienceDirect, Emerald Insight, Taylor & Francis Online.

The reviewed materials include peer-reviewed journal articles, academic books, conference proceedings, and reports published by recognized institutions such as the OECD and the World Bank. To ensure the relevance and currency of the analysis, the study prioritizes literature published between **2010 and 2024**, while seminal works are included to strengthen theoretical foundations.

**Literature Selection Criteria**

To ensure the quality and relevance of the reviewed literature, several inclusion and exclusion criteria were applied:

**Inclusion criteria:**
1. Studies focusing on accounting systems (traditional or digital) in SMEs.
2. Research discussing financial management, accounting information systems, or digitalization in SMEs.
3. Peer-reviewed journal articles, academic books, and authoritative institutional reports.
4. Publications written in English.
5.

**Exclusion criteria:**
1. Studies not related to SMEs or financial/accounting systems.
2. Non-academic sources without clear methodological rigor.
3. Publications with insufficient relevance to the comparative focus of the study.

The selection process helps ensure that the analyzed literature is credible, relevant, and aligned with the research objectives (Tranfield et al., 2003).

**Data Collection Procedure**

The literature collection process was conducted systematically through keyword-based searches using combinations of terms such as *"traditional accounting systems," "digital accounting systems," "accounting information systems," "SME financial management,"* and *"SME digitalization."* Boolean operators (AND, OR) were used to refine search results and improve accuracy.

After the initial search, titles and abstracts were screened to assess relevance. Full-text articles were then reviewed to determine their suitability for inclusion. Relevant information from selected studies was documented, categorized, and summarized to facilitate comparative analysis.

**Data Analysis Technique**

The analysis of the selected literature was conducted using **thematic content analysis**. This technique involves identifying, analyzing, and interpreting recurring themes and patterns within qualitative data (Braun & Clarke, 2006). In this study, the reviewed literature was analyzed by grouping findings into thematic categories related to:

1. Characteristics of traditional accounting systems in SMEs
2. Characteristics of digital accounting systems in SMEs
3. Advantages and limitations of traditional accounting systems
4. Advantages and limitations of digital accounting systems
5. Impact of accounting systems on SME financial management performance

Each theme was then compared across studies to identify similarities, differences, and contradictions in research findings. This comparative approach enables a deeper understanding of how traditional and digital accounting systems influence SME financial management outcomes.

## 4. Result And Discussion

**Results of the Literature Review**

Based on the analysis of selected literature, the findings indicate clear differences between traditional and digital accounting systems in managing SME finances. These differences are evident across several key dimensions, including efficiency, accuracy, accessibility of financial information, cost implications, internal control, and decision-making support. The reviewed studies consistently highlight that while traditional accounting systems remain widely used among SMEs, digital accounting systems demonstrate superior performance in supporting modern financial management needs.

**Characteristics of Traditional Accounting Systems in SMEs**

The literature shows that traditional accounting systems are characterized by manual bookkeeping, paper-based records, and basic spreadsheet usage. These systems are commonly managed by SME owners or non-professional staff with limited accounting expertise (Sangster, 2016). Traditional systems are perceived as simple, flexible, and low-cost, making them appealing to micro and small enterprises with limited financial and technological resources.

However, several studies reveal that traditional accounting systems often lack standardization and formal documentation, resulting in incomplete or inconsistent financial records (Atrill & McLaney, 2019). SMEs relying on traditional methods tend to focus primarily on recording cash inflows and outflows rather than producing comprehensive financial statements. As a result, financial information generated through traditional systems is often insufficient for external reporting, performance evaluation, and strategic planning.

**Characteristics of Digital Accounting Systems in SMEs**

In contrast, digital accounting systems utilize accounting software, cloud-based platforms, and automated data processing tools to manage financial information. The literature indicates that digital systems enable real-time recording, standardized reporting, and integration with other business functions such as inventory and sales management (Romney & Steinbart, 2021).

Digital accounting systems are found to significantly reduce manual workload and minimize human error through automation. Studies by Grande et al. (2011) and Rom and Rohde (2017) demonstrate that SMEs using digital accounting systems experience improved data accuracy, faster reporting cycles, and better financial transparency. Furthermore, cloud-based

systems enhance accessibility by allowing SME owners to access financial information anytime and anywhere, supporting more responsive financial management.

**Comparative Analysis of Accounting Systems**

**Efficiency and Accuracy**

The reviewed literature consistently indicates that digital accounting systems outperform traditional systems in terms of efficiency and accuracy. Automation of transaction recording, calculation, and reporting reduces the time required to complete accounting tasks and minimizes data entry errors (Romney & Steinbart, 2021). Traditional systems, on the other hand, are time-consuming and highly dependent on human accuracy, which increases the risk of errors and delays (Sangster, 2016).

**Financial Information Accessibility**

Digital accounting systems provide real-time access to financial information, enabling SMEs to monitor cash flows, expenses, and profitability more effectively. This real-time capability is largely absent in traditional accounting systems, where financial data is often updated periodically and may not reflect the current financial condition of the business (Rom & Rohde, 2017).

**Cost Considerations**

From a cost perspective, traditional accounting systems are initially less expensive, as they require minimal investment in technology. However, the literature suggests that hidden costs associated with inefficiency, errors, and limited decision support may outweigh these initial savings in the long term (OECD, 2019). Digital accounting systems involve upfront costs for software subscriptions and training, but they tend to generate long-term cost savings through improved efficiency and reduced reliance on external accounting services (Nguyen et al., 2022).

**Internal Control and Compliance**

The findings indicate that digital accounting systems offer stronger internal control mechanisms compared to traditional systems. Features such as access controls, audit trails, and automated compliance reporting enhance financial accountability and reduce the risk of fraud (Romney & Steinbart, 2021). Traditional systems often lack such controls, making them more vulnerable to data manipulation and compliance issues.

**Decision-Making Support**

The literature strongly supports the view that digital accounting systems provide better support for managerial decision-making. Through dashboards, financial analytics, and forecasting tools, digital systems enable SMEs to analyze financial performance and plan strategically (Grande et al., 2011). In contrast, traditional systems primarily serve record-keeping purposes and offer limited analytical capability.

**Discussion**

The results of this literature review reinforce the argument presented in the introduction that accounting system choice plays a critical role in SME financial management. While traditional accounting systems remain prevalent due to their simplicity and low initial cost, their limitations become increasingly evident as SMEs grow and operate in more competitive and regulated environments.

The superior performance of digital accounting systems in efficiency, accuracy, and decision support aligns with the broader literature on digital transformation and accounting information systems. Consistent with Rom and Rohde (2017), this study finds that digitalization

enhances the strategic role of accounting by transforming it from a record-keeping function into a value-adding management tool.

However, the findings also highlight that the benefits of digital accounting systems are not automatic. SMEs face significant challenges related to digital literacy, resource constraints, and resistance to change, which can limit the effective utilization of digital tools (Alsharari et al., 2020). This explains why many SMEs continue to rely on traditional accounting systems despite the availability of digital alternatives.

The comparative findings suggest that traditional accounting systems may still be suitable for micro-enterprises with very limited transaction volumes and simple financial structures. Nevertheless, as SMEs seek to improve financial transparency, access external financing, and comply with regulatory requirements, digital accounting systems become increasingly necessary.

From a theoretical perspective, this study contributes to accounting and SME literature by synthesizing empirical evidence on the comparative effectiveness of traditional and digital accounting systems. It addresses the research gap identified in previous studies by providing a structured comparison across multiple financial management dimensions.

Practically, the findings offer important implications for SME owners, policymakers, and support institutions. SME owners are encouraged to evaluate accounting system choices not only based on cost considerations but also on long-term strategic benefits. Policymakers and development agencies should focus on improving digital literacy, providing training programs, and offering incentives to facilitate digital accounting adoption among SMEs.

## 5. Conclusion

This study aimed to examine and compare traditional and digital accounting systems in managing SME finances through a comprehensive literature review. Based on the synthesis of existing academic studies and institutional reports, the findings demonstrate that accounting system choice plays a crucial role in determining the effectiveness of financial management practices in SMEs.

The review reveals that traditional accounting systems remain widely used among SMEs due to their simplicity, familiarity, and low initial implementation cost. These systems are generally suitable for micro and small enterprises with limited transaction volumes and simple financial structures. However, traditional accounting systems exhibit significant limitations, including a high risk of human error, delayed financial reporting, limited data accessibility, weak internal control, and insufficient support for strategic decision-making.

In contrast, digital accounting systems offer substantial advantages in terms of efficiency, accuracy, real-time financial information access, internal control, and decision-support capabilities. The automation and integration features of digital systems enhance financial transparency and enable SMEs to respond more effectively to dynamic business environments. The literature consistently indicates that SMEs adopting digital accounting systems experience improved financial performance, better compliance with regulatory requirements, and increased access to external financing.

Nevertheless, the study also highlights that the successful implementation of digital accounting systems is influenced by several contextual factors, such as digital literacy, organizational readiness, financial resources, and technological infrastructure. Without adequate training and support, SMEs may fail to fully realize the benefits of digital accounting adoption. Therefore, the transition from traditional to digital accounting systems should be viewed as a strategic and gradual process rather than a purely technological change.

Overall, this study concludes that while traditional accounting systems may still be relevant for very small enterprises, digital accounting systems are increasingly essential for SMEs

seeking sustainable growth, competitiveness, and financial accountability in a digitalized economy.

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