The impact of cloud accounting on financial transparency and decision making in Vietnamese enterprises

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Abstract:

This research addresses how cloud accounting impacts financial transparency and decisionmaking in Vietnamese enterprises. The purpose of this research is to explore the specific benefits and challenges of cloud accounting in the Vietnamese business context, where digital transformation is still emerging. The study used a qualitative approach, using case studies, conducting 15 semi-structured interviews with 5 financial managers; 5 accountants; and 5 chief financial officers (CFOs) or executives, and conducting 2 focus group discussions with key stakeholders from five Vietnamese companies across various industries (2 manufacturing companies; 1 technology and IT services company; 1 retail and e-commerce company; and 1 financial services company). The findings reveal that cloud accounting significantly improves financial transparency through real-time data access and enhances decision-making by providing accurate, up-to-date financial information. However, challenges such as system integration difficulties and high implementation costs were also identified. These results are significant because they highlight both the potential of cloud accounting to transform financial management in Vietnam and the barriers that businesses must overcome to fully realize these benefits. The study suggests that addressing these challenges through training, customization, and policy support could accelerate cloud accounting adoption and improve financial practices across the country.

Keywords: Cloud accounting, economic decision, financial transparency, Vietnam

Introduction

In recent decades, cloud computing has revolutionized numerous industries by offering scalable, flexible, and cost-efficient solutions for data storage, processing, and management across various business functions. Cloud technology allows users to access software applications, data, and services over the internet, significantly reducing the need for local servers or infrastructure. Among the many business functions that have benefitted from the rise of cloud computing, accounting has emerged as a critical area that is being transformed by cloud-based solutions. Cloud accounting, specifically, enables organizations to manage their financial data and processes through internet-hosted software, allowing real-time access to financial information from any location. This shift from traditional on-premise accounting systems to cloud-based platforms has enhanced the efficiency, accuracy, and scalability of financial operations in businesses of all sizes.

The importance of financial transparency and decision-making has grown substantially in today's competitive business environment. Financial transparency refers to the accurate and timely disclosure of financial information, both internally for management and externally for stakeholders, such as investors, regulators, and customers. It has become a cornerstone of good corporate governance and is essential for maintaining trust and credibility with stakeholders. Transparent financial reporting allows businesses to demonstrate their financial health, comply with regulatory requirements, and make strategic decisions based on accurate data. In parallel, decision-making has become increasingly data-driven in the modern business landscape. Timely

and accurate financial data is crucial for managers and executives to make informed decisions regarding budgeting, investments, and resource allocation, all of which can significantly affect a company's performance and sustainability.

Cloud accounting plays a pivotal role in enhancing both financial transparency and decision-making. By leveraging cloud-based systems, businesses can gain real-time access to their financial data, which allows for more accurate and timely reporting. Features such as automated data entry, integrated financial management tools, and remote access make cloud accounting an invaluable asset for modern enterprises. Additionally, cloud accounting offers numerous benefits, including cost savings, improved collaboration, scalability, and enhanced security measures. These systems are designed to streamline financial processes, reduce human error, and provide businesses with comprehensive insights into their financial performance.

The relevance of this topic is particularly pronounced within the context of Vietnamese enterprises, as Vietnam is currently undergoing a significant digital transformation. Vietnam's economy has experienced rapid growth in recent years, spurred by increasing foreign direct investment, the development of a dynamic private sector, and the government's push for digital innovation across industries. As enterprises in Vietnam strive to remain competitive, cloud technologies, including cloud accounting, are seen as key enablers of this transformation. Vietnamese businesses, especially small and medium-sized enterprises (SMEs), are beginning to recognize the importance of adopting cloud-based solutions to enhance their operational efficiency and financial management. However, while the potential benefits of cloud accounting are clear, there remain questions regarding how effectively Vietnamese enterprises are leveraging these systems to improve financial transparency and decision-making.

Understanding the impact of cloud accounting on financial transparency and decision-making is particularly important for Vietnamese businesses for several reasons. First, as Vietnam continues its rapid economic development, many enterprises are facing increasing demands for financial transparency from both domestic and international stakeholders. Investors, regulatory bodies, and customers are placing higher expectations on businesses to provide accurate and timely financial information. Cloud accounting has the potential to address these demands by providing real-time financial data and automating reporting processes, thereby reducing the likelihood of errors or discrepancies. For Vietnamese businesses, particularly those that operate in highly regulated industries such as finance, manufacturing, or export services, the ability to maintain transparent financial records is crucial for compliance and long-term sustainability.

Second, effective decision-making is at the heart of business success. In a fast-paced and competitive environment like Vietnam's, where market conditions can change rapidly, businesses need to be agile and data-driven. Cloud accounting offers decision-makers instant access to key financial metrics, enabling them to make informed choices about resource allocation, budgeting, and strategy development. The integration of cloud accounting with other business management tools, such as enterprise resource planning (ERP) systems and customer relationship management (CRM) systems, further enhances its capacity to provide comprehensive insights into a company's operations. As a result, cloud accounting has the potential to significantly reduce the time required for decision-making, allowing Vietnamese enterprises to respond more quickly to market opportunities or challenges.

Despite these anticipated benefits, there remains a gap in the existing literature concerning how cloud accounting is being utilized in the Vietnamese business context. Much of the current research on cloud accounting has been conducted in Western markets or in more developed economies, where cloud adoption is more widespread, and regulatory frameworks are more established. Studies from countries such as the United States, the United Kingdom, and Australia have highlighted the positive impacts of cloud accounting on financial management and decision-making (Dai et al., 2020; Jasimuddin et al., 2019). However, the unique cultural, economic, and regulatory landscape of Vietnam presents a different set of challenges and opportunities for cloud accounting adoption. For instance, Vietnamese businesses may face issues related to the

cost of cloud adoption, concerns about data security, or a lack of technical expertise, which could hinder the effective use of cloud accounting systems.

Furthermore, most of the current studies on cloud accounting focus on quantitative metrics, such as cost savings and efficiency improvements, without exploring the qualitative aspects of how these systems impact the decision-making process or the level of transparency in financial reporting. There is a need for qualitative research that delves deeper into the experiences of Vietnamese businesses, particularly SMEs, to understand how cloud accounting is influencing their financial practices and decision-making processes. Such research could provide valuable insights for both businesses and policymakers as they seek to promote the adoption of cloud technologies across the country.

Given the gaps in the existing literature and the growing importance of cloud accounting in Vietnam, this study aims to achieve several key objectives. First, it seeks to explore how cloud accounting enhances financial transparency in Vietnamese enterprises. Financial transparency is essential for maintaining trust with stakeholders and ensuring compliance with local and international regulations. This study will examine how cloud accounting systems contribute to more accurate and timely financial reporting and how they address common issues with traditional accounting methods, such as errors in manual data entry or delays in report generation. Second, the study aims to investigate the influence of cloud accounting on managerial decision-making processes. Effective decision-making requires access to reliable and up-to-date financial information. This study will explore how cloud accounting systems provide Vietnamese managers and executives with the data they need to make informed decisions, as well as how these systems are integrated into broader business strategies. By understanding the relationship between cloud accounting and decision-making, this research will shed light on whether cloud accounting is truly helping Vietnamese enterprises become more agile and responsive to market changes. Finally, the study will seek to identify the key factors that contribute to or hinder the benefits of cloud accounting in the Vietnamese business context. While cloud accounting systems offer many potential advantages, their effectiveness may be limited by various factors, such as the cost of implementation, concerns about data security, or a lack of skilled personnel. This study will explore these challenges in detail, drawing on the experiences of Vietnamese businesses to identify best practices for overcoming them. The findings of this research will be particularly valuable for SMEs, which often face resource constraints and may struggle to adopt new technologies without sufficient support or guidance.

Literature Review

2.1. Cloud Accounting: An Overview

Cloud accounting, a subset of cloud computing applications, refers to the practice of using cloud-based software systems to manage and store accounting data. Unlike traditional on-premise accounting systems, cloud accounting allows users to access financial information and perform accounting tasks over the internet, enabling real-time data processing and accessibility from virtually any location. As defined by Mistry (2019), cloud accounting is "an accounting solution that allows businesses to manage their financial data through software hosted on remote servers, providing a more flexible and scalable approach to financial management." The scope of cloud accounting spans various functions, including bookkeeping, invoicing, financial reporting, asset management, and payroll processing. Moreover, cloud accounting systems often integrate with other enterprise software tools, such as customer relationship management (CRM) and enterprise resource planning (ERP) systems, thereby streamlining operations across different business departments.

One of the key features of cloud accounting is real-time data access, which enables businesses to make more informed decisions based on up-to-date financial information. Traditional accounting systems often rely on periodic updates, which can lead to delays in financial reporting and decision-making. In contrast, cloud accounting systems provide

continuous access to financial data, allowing managers to monitor cash flow, track expenses, and generate financial reports in real-time. This feature is particularly valuable in fast-paced business environments, where timely access to financial information can significantly impact strategic decision-making (Warren & Hutchinson, 2019).

Automation is another crucial functionality of cloud accounting systems. Many cloud-based accounting platforms come equipped with automated processes for tasks such as data entry, invoice generation, and tax calculations. These automation features reduce the likelihood of human error and free up time for accountants and financial managers to focus on more strategic activities. Furthermore, cloud accounting systems often include built-in compliance tools that automatically update to reflect changes in tax laws and accounting standards, ensuring that businesses remain compliant with local and international regulations (Bhimani & Willcocks, 2020).

Remote accessibility is a defining characteristic of cloud accounting. As businesses increasingly adopt flexible working arrangements, the ability to access financial data from any location has become essential. Cloud accounting systems allow employees and managers to access financial information securely from their home offices, client sites, or while traveling. This remote access capability not only enhances efficiency but also improves collaboration among team members, as multiple users can work simultaneously on the same financial data without the need for physical presence or complex system configurations (Khan & Al-Akkad, 2021).

Several theoretical frameworks have been applied to cloud computing and its adoption in accounting practices. The Technology Acceptance Model (TAM), proposed by Davis (1989), is one such framework that explains how users come to accept and use new technologies. According to TAM, two main factors influence technology acceptance: perceived usefulness and perceived ease of use. In the context of cloud accounting, perceived usefulness refers to the extent to which users believe that cloud accounting will enhance their job performance, while perceived ease of use refers to how easy users perceive the system to be. Studies applying TAM to cloud accounting indicate that businesses are more likely to adopt cloud-based accounting systems if they perceive these systems as beneficial and easy to use (Thongwatcharatewee et al., 2020).

Another relevant theoretical framework is the Diffusion of Innovations (DOI) theory, developed by Rogers (2003). DOI theory explains how, why, and at what rate new technologies spread within organizations. According to this theory, the adoption of cloud accounting in enterprises can be influenced by factors such as the relative advantage of cloud systems over traditional accounting methods, the compatibility of cloud systems with existing business processes, and the level of complexity involved in implementing these systems. DOI theory highlights the role of organizational readiness, including the availability of necessary infrastructure and expertise, in determining the speed and success of cloud accounting adoption (Garrison et al., 2019).

2.2. Financial Transparency in Enterprises

Financial transparency is a cornerstone of effective corporate governance. It refers to the practice of providing stakeholders - such as investors, creditors, regulators, and employees - with accurate, timely, and comprehensive financial information. According to Bushman et al. (2004), financial transparency involves the "dissemination of financial information that is relevant and reliable to stakeholders for the purpose of monitoring and decision-making." Transparency ensures that internal and external stakeholders have access to data that reflects the true financial position of a company, enabling them to make informed decisions regarding investments, compliance, and strategic planning. In today's globalized economy, financial transparency is essential for maintaining investor confidence, mitigating financial risks, and ensuring regulatory compliance.

One of the primary mechanisms for ensuring financial transparency is financial reporting. Financial reports, including income statements, balance sheets, and cash flow statements, provide a snapshot of a company's financial health. These reports enable stakeholders to evaluate the company's performance, assess its financial stability, and identify potential risks. In addition to standard financial reports, many companies also produce disclosures related to corporate governance, risk management, and sustainability practices. The accuracy and reliability of these reports are crucial for transparency, as stakeholders rely on them to make decisions about resource allocation, investment, and regulatory compliance (Healy & Palepu, 2001).

Accountability is closely related to transparency in financial reporting. Accountability refers to the obligation of companies to explain and justify their financial decisions and actions to stakeholders. Transparent financial reporting is a key component of accountability because it holds companies responsible for their financial performance and governance practices. When companies are transparent in their financial reporting, they provide stakeholders with the information needed to hold management accountable for their decisions. This, in turn, enhances the overall quality of corporate governance and reduces the likelihood of financial mismanagement or fraudulent activities (Jensen & Meckling, 1976).

In Vietnam, financial transparency is not only a matter of corporate governance but also a legal requirement. The Vietnamese government has implemented various regulatory frameworks to promote transparency and accountability in financial reporting. For example, the Ministry of Finance (MOF) and the State Audit Office of Vietnam (SAV) are responsible for overseeing financial reporting standards and ensuring compliance with tax regulations and auditing requirements. Vietnamese enterprises are required to comply with the Vietnamese Accounting Standards (VAS) and International Financial Reporting Standards (IFRS), which set guidelines for the preparation and presentation of financial statements. These standards are designed to ensure that financial reports are accurate, consistent, and comparable across different industries and sectors (Nguyen & Tran, 2021; Hung & Que, 2024).

Tax regulations also play a significant role in promoting financial transparency in Vietnam. Enterprises are required to maintain accurate financial records for tax purposes and submit regular tax declarations to the General Department of Taxation (GDT). Failure to comply with tax regulations can result in penalties, fines, or legal action. Moreover, the Vietnamese government has introduced electronic tax filing systems and digital signatures, which streamline the tax reporting process and reduce opportunities for tax evasion. These measures are part of a broader effort to modernize Vietnam's financial system and enhance transparency in financial reporting (Vu et al., 2020; Huy & Manh, 2022).

Auditing standards further reinforce financial transparency by ensuring that companies' financial statements are subject to independent verification. External audits provide an objective assessment of a company's financial position and performance, helping to identify any discrepancies or irregularities in financial reporting. Vietnamese enterprises, particularly publicly listed companies, are required to undergo regular independent audits to ensure compliance with financial reporting standards and regulatory requirements. Auditors play a critical role in promoting transparency by providing stakeholders with assurance that the financial statements accurately reflect the company's financial condition (Dang et al., 2022; Pham, 2022).

In summary, financial transparency is a critical component of corporate governance, ensuring that stakeholders have access to reliable and accurate financial information. In Vietnam, regulatory frameworks related to accounting standards, tax regulations, and auditing requirements play a crucial role in promoting transparency and accountability in financial reporting. As Vietnamese enterprises increasingly adopt cloud accounting systems, these systems have the potential to further enhance transparency by providing real-time access to financial data, automating reporting processes, and ensuring compliance with regulatory requirements.

2.3. Decision-Making in Enterprises

Decision-making in corporate settings is a complex, multi-layered process that involves the evaluation of information, the weighing of alternatives, and the selection of actions that align with organizational goals. According to Simon (1960), decision-making is a core managerial function, and it can be broadly categorized into three types: strategic, operational, and tactical decisions. Each type of decision requires different levels of information and analysis, and financial data play a pivotal role in informing these decisions.

Strategic decisions are long-term and have significant implications for the overall direction and performance of an organization. These decisions, often made by top management, focus on issues such as market expansion, mergers and acquisitions, and large-scale investments. Financial data are critical in strategic decision-making as they provide insights into the company's financial health, growth potential, and return on investment (ROI) for major initiatives. For instance, a company's decision to enter a new market or launch a new product line would require careful analysis of financial forecasts, cost structures, and profitability projections (Eisenhardt & Zbaracki, 1992).

Operational decisions, on the other hand, are concerned with the day-to-day functioning of the business. These decisions are typically made by mid-level managers and focus on optimizing processes, managing resources, and maintaining efficiency. Financial data such as cash flow statements, profit margins, and expense reports inform operational decisions by providing managers with the information needed to control costs, allocate resources efficiently, and ensure profitability in the short-term. For example, decisions about inventory management, pricing strategies, or vendor contracts rely heavily on up-to-date financial information (Mintzberg et al., 1976).

Tactical decisions are more immediate and specific, often involving short-term actions that support broader strategic goals. These decisions typically involve middle and lower management and may include adjusting production schedules, managing working capital, or implementing marketing campaigns. Accurate financial data are essential for tactical decisions as they help managers assess the current financial position of the company and make adjustments to meet immediate objectives without compromising long-term goals (Anthony & Govindarajan, 2007).

The timeliness and accuracy of financial information are crucial for effective decision-making across all levels of an organization. A study by McKinsey & Company (2018) found that companies with access to real-time financial data are able to make faster, more informed decisions, potentially leading to a competitive advantage. Timely financial information allows managers to respond quickly to changes in the business environment, such as fluctuations in demand or changes in market conditions. Accuracy is equally important, as decisions based on incorrect or outdated information can lead to costly mistakes, such as overestimating revenue projections or underestimating expenses. Therefore, maintaining accurate financial records and ensuring that data are readily available are essential for supporting effective decision-making processes in enterprises.

2.4. Cloud Accounting and Financial Transparency

The role of cloud accounting in improving financial transparency has been the subject of numerous studies in recent years. Cloud accounting systems, with their ability to provide real-time access to financial data, have been shown to enhance the accuracy and timeliness of financial reporting, which are key components of transparency. According to Warren and Hutchinson (2019), one of the primary advantages of cloud accounting is its capacity for real-time reporting. This feature ensures that financial statements are continually updated as transactions occur, providing stakeholders with an accurate, up-to-date view of the company's financial position. Real-time reporting is especially beneficial for businesses operating in fast-paced industries where financial conditions can change rapidly.

Another way cloud accounting improves transparency is through the use of automated processes that reduce the likelihood of human error. Traditional accounting methods often involve manual data entry, which can result in mistakes that compromise the accuracy of financial reports. Cloud accounting systems automate many of these processes, such as reconciliation, invoicing, and expense tracking, thereby reducing the risk of errors and ensuring that financial data are accurate and reliable. Bhimani & Willcocks (2020) argue that automation is one of the most significant advantages of cloud accounting, as it not only enhances accuracy but also increases efficiency by reducing the time required to complete routine accounting tasks.

In addition to real-time reporting and automation, cloud accounting systems offer improved audit trails, which further contribute to financial transparency. An audit trail is a step-by-step record of transactions that enables auditors and stakeholders to track the flow of financial data from the source to the final report. Cloud accounting systems automatically generate and store detailed records of all financial transactions, allowing auditors to verify the accuracy and completeness of financial statements with ease. This level of transparency is particularly important for regulatory compliance, as it ensures that businesses can provide auditors with the documentation needed to verify their financial activities (Garrison et al., 2019). Moreover, the ability to maintain a clear audit trail enhances accountability, as it makes it easier to identify and correct discrepancies or irregularities in financial reporting.

Cloud accounting also addresses several common issues associated with traditional accounting methods that can hinder transparency. One of these issues is the lack of timely access to financial data. In traditional systems, financial reports are often generated at the end of accounting periods, which can delay decision-making and obscure a company's current financial position. By contrast, cloud accounting systems provide continuous, real-time access to financial information, ensuring that stakeholders have the most up-to-date data available. Another issue with traditional accounting methods is the difficulty of integrating financial data from different departments or locations. Cloud accounting systems allow for seamless integration of financial information across multiple business units, making it easier to consolidate data and generate comprehensive reports (Dai et al., 2020). This level of integration is particularly important for large enterprises with complex organizational structures, as it enhances their ability to provide accurate and transparent financial reports to stakeholders.

2.5. Cloud Accounting and Decision-Making

The impact of cloud accounting on managerial decision-making has also been widely studied, particularly in the context of improving the quality and speed of decisions. The ability of cloud accounting systems to provide real-time financial data and advanced analytics has been shown to significantly enhance the decision-making process in businesses of all sizes. For instance, Khan and Al-Akkad (2021) found that businesses using cloud accounting systems reported faster decision-making processes due to the immediate availability of financial information. Managers no longer have to wait for end-of-month reports to assess the company's financial position; instead, they can access real-time data at any time, allowing them to make decisions quickly and confidently.

Real-time data and analytics play a critical role in facilitating informed decision-making. Cloud accounting systems often include built-in analytical tools that allow managers to generate financial forecasts, create budgets, and assess key performance indicators (KPIs) with a few clicks. These tools provide valuable insights into the company's financial health and performance, enabling managers to identify trends, assess risks, and make data-driven decisions. According to a study by Thongwatcharatewee et al. (2020), the ability to access real-time analytics not only improves the accuracy of decisions but also enhances the company's ability to respond to market changes and capitalize on new opportunities in a timely manner.

One of the key areas where cloud accounting has proven particularly beneficial is in forecasting and budgeting. Traditional methods of financial forecasting and budgeting often rely

on outdated or incomplete data, which can lead to inaccurate projections. Cloud accounting systems, on the other hand, use real-time data to generate more accurate and reliable forecasts. These systems allow managers to create dynamic budgets that can be adjusted as new financial data become available, ensuring that the company's financial plans remain aligned with its current performance and market conditions (Warren & Hutchinson, 2019). In addition, cloud accounting systems enable scenario analysis, allowing managers to model different financial outcomes based on various assumptions, such as changes in revenue, expenses, or market conditions. This capability enhances strategic planning by helping managers anticipate potential risks and opportunities, thereby improving the company's ability to achieve its long-term objectives.

In conclusion, cloud accounting has a profound impact on both financial transparency and decision-making within enterprises. By providing real-time access to accurate financial data, automating key accounting processes, and offering advanced analytics, cloud accounting systems enable businesses to improve their financial reporting and make more informed, data-driven decisions. As businesses in Vietnam continue to adopt cloud accounting solutions, these systems are likely to play an increasingly important role in enhancing transparency and efficiency in financial management.

Methodology

This study applies qualitative research design to examine the impact of cloud accounting on financial transparency and decision making in Vietnamese enterprises. The study focuses on gathering in-depth, contextual information through case studies, interviews, and focus groups with key stakeholders at selected companies. The study included five Vietnamese firms that have adopted cloud accounting in their operations. These companies are selected based on their size, industry, and level of cloud accounting implementation. The sample includes a combination of small and medium-sized enterprises (SMEs) and large corporations in a variety of industries to ensure diverse perspectives. The selected companies come from the following sectors: 2 manufacturing companies; 1 IT technology and services; 1 retail and e-commerce company; and 1 financial services company.

A total of 15 interviews were conducted with key stakeholders directly related to the use of cloud accounting in their respective companies. This group includes: 5 Financial Managers; 5 Accountants; and 5 Chief Financial Officers (CFOs) or executives. Each interview lasts between 45 minutes and 1 hour, allowing for a detailed exploration of participants' experiences with cloud accounting systems and their perceptions of how these systems affect financial transparency and decision making processes. The interviews were conducted over a two-month period, from July to September 2024.

Two focus group discussions were held, each involving 6 to 7 participants from companies using cloud accounting. Participants include: Accountants; IT Managers responsible for cloud system deployment; Financial analysts. Each group discussion lasts approximately 1.5 to 2 hours and aims to gather general insights into the challenges, benefits, and overall impact of cloud accounting from a broader organizational perspective. Focus discussions were conducted in September 2024.

In addition to interviews and focus groups, internal financial reports and documents from the three selected companies were reviewed. These documents include: Financial statements before and after applying cloud accounting; Audit reports; Internal memos related to the financial decision making process.

The collected data was analyzed using thematic analysis to identify topics frequently related to financial transparency and decision making. Interview minutes, focus group discussions, and case study materials have been carefully coded to highlight models of how cloud accounting systems impact financial processes. Thematic analysis focuses on: Improving real-time reporting

and financial accuracy; Changes in decision-making speed and quality; Challenges encountered during cloud accounting implementation.

Findings

4.1. Impact on Financial Transparency

The study reveals significant improvements in financial transparency among Vietnamese enterprises following the adoption of cloud accounting systems. One of the most striking findings is how cloud accounting enhances access to real-time financial data, a feature that has transformed the way companies manage and monitor their financial performance. Many interviewees emphasized the importance of having immediate access to up-to-date financial information. For example, the CFO of a manufacturing company noted, "Before we implemented cloud accounting, our financial reports were always delayed by at least a week. Now, I can pull real-time data at any moment, which allows us to make quicker decisions, especially in managing cash flow and inventory." This ability to view financial data in real-time has enabled businesses to respond more swiftly to market changes, manage expenses more effectively, and ensure that financial strategies are aligned with current performance metrics.

In addition to real-time access, respondents reported perceived improvements in the accuracy and reliability of financial reporting. Automation features within cloud accounting systems, such as automated data entry and reconciliation, have reduced the errors that were previously common in manual accounting processes. An accountant from a technology company commented, "We used to spend hours manually entering data into spreadsheets, and there was always a risk of mistakes. Cloud accounting has cut down on those errors and improved the overall reliability of our reports." The ability of cloud accounting systems to automatically update financial records and integrate data from various departments has not only minimized human error but also increased the consistency and reliability of financial reports. This improvement has had a significant impact on how companies present their financial information to stakeholders, including investors, regulatory bodies, and auditors.

Moreover, cloud accounting plays a crucial role in enhancing auditability and compliance with Vietnamese regulations. One of the key features of cloud accounting systems is their ability to maintain a comprehensive audit trail. Every transaction, no matter how small, is recorded and can be easily traced back to its source. This traceability is essential for both internal and external audits, providing auditors with the documentation they need to verify the accuracy and authenticity of financial statements. A finance manager from a retail company shared, "The audit process has become much smoother since we adopted cloud accounting. Auditors can track every transaction in real-time, and they no longer have to sift through piles of paperwork. This has made compliance with tax regulations and financial reporting standards much easier for us." In Vietnam, where compliance with tax regulations and financial reporting standards is critical, cloud accounting systems are proving to be invaluable tools for ensuring that companies meet their regulatory obligations efficiently and transparently.

However, despite these benefits, there are notable challenges that enterprises face in achieving full financial transparency through cloud accounting. One recurring issue mentioned by several interviewees is the difficulty of system integration. Many Vietnamese enterprises, particularly larger ones, rely on a variety of software systems to manage different business functions, such as inventory, customer relationships, and human resources. Integrating these systems with cloud accounting software has proven to be a complex and time-consuming process. As an IT manager from a financial services company explained, "The biggest challenge for us was getting all of our systems to talk to each other. We had to invest a lot of time and resources into integrating our legacy systems with the cloud platform, and even now, there are still some gaps." These integration challenges can slow down the adoption of cloud accounting and limit its effectiveness in providing a fully transparent, unified financial view across the organization.

Another challenge relates to data accuracy during the transition to cloud accounting. While cloud accounting systems are designed to improve accuracy, the migration of data from traditional systems to the cloud can introduce errors if not handled carefully. Several respondents reported issues with data inconsistencies during the initial implementation phase. A finance director from a manufacturing company noted, "We encountered discrepancies in our financial data when we first switched to cloud accounting. Some historical data didn't transfer correctly, and it took us months to sort everything out." Such data migration issues can temporarily hinder financial transparency, as companies may need to dedicate significant time and resources to cleaning up and verifying their financial records post-migration.

Despite these challenges, most of the enterprises interviewed expressed confidence that the benefits of cloud accounting far outweigh the initial difficulties. As businesses continue to refine their systems and address integration and data accuracy issues, the potential for cloud accounting to enhance financial transparency will likely increase. Overall, the findings indicate that cloud accounting systems are fundamentally reshaping financial transparency in Vietnamese enterprises by providing real-time data access, improving the accuracy of financial reports, and streamlining compliance processes, though full transparency requires overcoming technical and integration hurdles.

4.2. Impact on Decision-Making

The findings from the interviews and focus groups reveal that cloud accounting has had a substantial positive effect on facilitating faster and more informed decision-making in Vietnamese enterprises. Across different industries, respondents emphasized how cloud accounting systems have streamlined access to financial data, enabling quicker analysis and more timely decisions. A finance manager from a retail company noted, "Before we had cloud accounting, financial reports would take days to compile, which delayed our decision-making process, especially for day-to-day operational decisions. Now, with real-time data, we can make decisions on the spot." This immediate access to up-to-date financial information allows managers and executives to act quickly, whether adjusting pricing, managing cash flow, or responding to changes in market conditions. The speed at which financial data can be retrieved and analyzed is a key advantage cited by many respondents, particularly in high-paced industries such as retail and manufacturing, where quick decision-making can be the difference between capitalizing on a market opportunity or missing it.

One of the most significant contributions of cloud accounting to decision-making is the availability of real-time data, which plays a critical role in improving both strategic and operational decisions. Strategic decisions, such as expanding into new markets or launching new products, require a deep understanding of a company's financial position and potential risks. With cloud accounting, executives can access real-time financial dashboards that display key metrics like revenue forecasts, profit margins, and cash flow projections. A CFO from a technology company explained, "Having real-time data at our fingertips makes a world of difference in our ability to plan for the future. It gives us confidence in our financial forecasts and allows us to strategize based on accurate and current information." This real-time access is not limited to strategic decisions; it also informs operational decisions such as resource allocation, inventory management, and vendor negotiations. An operations manager from a manufacturing firm highlighted, "With cloud accounting, we can immediately see the impact of operational changes on our finances, so we can adjust production schedules or supply orders without waiting for monthly reports." This ability to make operational adjustments based on real-time data helps businesses operate more efficiently and avoid costly delays.

The value of cloud accounting in forecasting and budgeting processes is another area that was frequently mentioned by executives and managers. Many respondents highlighted how cloud accounting systems have improved the accuracy and flexibility of budgeting and forecasting, allowing for more dynamic financial planning. In traditional systems, budgets are

often set periodically and can become outdated quickly. Cloud accounting, however, allows for continuous updates to financial forecasts based on real-time data. A finance director at a financial services firm shared, "Cloud accounting has completely changed how we approach budgeting. We can now adjust our budgets in real time, based on the latest financial data, which makes our forecasts much more accurate." This flexibility allows companies to react more quickly to changes in market conditions or business performance, ensuring that their financial plans remain relevant and actionable. Additionally, cloud accounting platforms often come with built-in forecasting tools that automate much of the budgeting process, reducing the manual effort required and improving the overall accuracy of financial projections.

Despite these advantages, the study also identified several limitations or barriers to using cloud accounting for decision-making. One of the most frequently mentioned barriers was the cost of implementation. While cloud accounting can reduce long-term costs by streamlining financial processes, the initial investment in adopting these systems can be prohibitive for some smaller companies. A finance manager from an SME noted, "The upfront costs of implementing cloud accounting were quite high for us, and it took some time before we started seeing the financial benefits." Many small and medium-sized enterprises (SMEs) in Vietnam find it challenging to justify the initial expense, even if the long-term benefits seem promising. Additionally, the cost of training employees to use the new system can also be a significant barrier, particularly for companies that have limited financial or human resources.

Another common challenge is resistance to change, especially among long-serving staff who are accustomed to traditional accounting methods. Several respondents mentioned that the transition to cloud accounting was met with skepticism from employees who were hesitant to adopt new technologies. A CFO from a retail company explained, "There was some pushback from our accounting team when we first introduced the cloud system. They were comfortable with the old way of doing things and didn't see the need to change." This resistance can slow down the implementation process and reduce the effectiveness of cloud accounting in improving decision-making. Overcoming this reluctance often requires significant change management efforts, including training and demonstrating the tangible benefits of the new system to staff.

Lastly, lack of technical expertise was cited as a barrier, particularly among smaller businesses that may not have dedicated IT departments. While cloud accounting systems are designed to be user-friendly, they still require a certain level of technical knowledge for installation, customization, and maintenance. An IT manager from a manufacturing company pointed out, "We had to bring in external consultants to help set up the system because our in-house team didn't have the expertise. That added extra costs and delayed the full rollout of the system." Smaller companies, in particular, may struggle with the technical aspects of integrating cloud accounting into their existing operations, which can limit the system's potential to improve decision-making in the short term.

In conclusion, while cloud accounting has proven to be a powerful tool for faster and more informed decision-making, particularly through the provision of real-time data and enhanced forecasting and budgeting capabilities, its full potential can be hindered by challenges such as high implementation costs, resistance to change, and technical expertise gaps. These barriers must be addressed for Vietnamese enterprises to fully leverage the advantages of cloud accounting in their decision-making processes. Nevertheless, the overall perception among executives and managers is that the benefits far outweigh the drawbacks, making cloud accounting a valuable asset in today's rapidly evolving business landscape.

4.3. Differentiation by Enterprise Size

The findings from the study revealed notable variations in the impact of cloud accounting on financial transparency and decision-making between SMEs and large enterprises. These differences are primarily driven by the distinct challenges and resource constraints faced by smaller companies compared to their larger counterparts. While both types of enterprises

experienced benefits from adopting cloud accounting, the degree to which these benefits were realized varied significantly according to the size of the organization.

For small and medium-sized enterprises, cloud accounting was particularly transformative in improving financial transparency. Many SMEs in Vietnam traditionally struggle with maintaining accurate and timely financial records due to limited staff and outdated systems. The implementation of cloud accounting addressed this issue by automating several time-consuming tasks, such as data entry, reconciliation, and report generation. A finance manager from a small technology firm commented, "Before we switched to cloud accounting, we had constant issues with delayed financial reports and manual errors. Now, everything is automated, and I can generate real-time reports with just a click." These improvements in transparency were critical for SMEs, as they often operate with tighter margins and less room for financial error. The ability to access real-time financial data allowed SMEs to better manage cash flow, reduce errors, and maintain more accurate financial records, which in turn helped them build trust with investors and regulatory bodies.

In contrast, large enterprises often had more established financial systems in place prior to adopting cloud accounting. As a result, the improvements in transparency were less dramatic but still significant. For large companies, the greatest benefit of cloud accounting was the ability to consolidate financial data across multiple departments or geographic locations. A CFO from a large manufacturing company explained, "We have operations in several countries, and before cloud accounting, it was a nightmare trying to consolidate all the financial data from different regions. Now, with cloud accounting, we can centralize everything in one platform, which improves transparency across the entire organization." This ability to integrate financial data from different divisions allowed large enterprises to create more comprehensive and accurate financial reports, enhancing their transparency to stakeholders, including shareholders and auditors. However, the transition to cloud accounting was often more complex for large enterprises due to the size and complexity of their operations, which required significant time and resources to fully implement and integrate the system.

The study also highlighted differences in adoption rates and system utilization based on company size and resources. SMEs were generally slower to adopt cloud accounting due to financial constraints and concerns over the initial investment required. For many smaller businesses, the cost of implementing cloud accounting, including software licensing fees and employee training, was seen as a significant hurdle. A small business owner from the retail sector shared, "We were hesitant to switch to cloud accounting because of the upfront costs. It's a big investment for a small company like ours, and we weren't sure if it would pay off in the long run." Despite these concerns, once SMEs adopted cloud accounting, they often reported high levels of satisfaction with the system's ability to streamline financial processes and improve transparency. The lower cost of cloud accounting compared to traditional on-premise systems, which require expensive hardware and IT maintenance, was eventually seen as a long-term financial benefit for SMEs.

In contrast, large enterprises were generally quicker to adopt cloud accounting, as they had greater financial and human resources to invest in new technologies. Many large companies had already begun the process of digital transformation, and cloud accounting was seen as a natural extension of their efforts to modernize their operations. A financial director from a large financial services firm noted, "We were already moving towards more digital solutions, so adopting cloud accounting was a logical next step. We had the budget and the IT infrastructure to support it." For large enterprises, the ability to customize cloud accounting systems to meet their specific needs was also a key factor in their decision to adopt the technology. These companies often utilized advanced features such as customized financial dashboards, predictive analytics, and integration with other enterprise systems, such as ERP and CRM platforms, to optimize their financial management processes. This level of customization allowed large enterprises to fully leverage the capabilities of cloud accounting to enhance decision-making and financial reporting.

However, the study also found that system utilization varied between SMEs and large enterprises. While large enterprises tended to use more advanced features of cloud accounting systems, such as automated forecasting and advanced analytics, SMEs often used the basic functionalities, such as real-time reporting and automated bookkeeping. This difference in utilization is likely due to the varying levels of technical expertise and resources available to each type of business. A finance manager from an SME remarked, "We're still getting used to the basic features of the system. We haven't yet explored all the advanced tools like predictive analytics, but what we're using now has already made a big difference." On the other hand, a CFO from a large corporation explained, "We've integrated cloud accounting with our other business systems, and we're using it for everything from detailed financial forecasting to scenario planning. It's a critical part of our decision-making process."

In terms of decision-making, SMEs benefited primarily from the speed and accuracy of financial reporting, which allowed them to make more informed decisions in real-time. However, they often faced challenges in utilizing the more advanced decision-making tools offered by cloud accounting due to a lack of technical expertise or resources. Large enterprises, with their greater access to financial and technical resources, were able to take full advantage of cloud accounting's advanced features, using them to enhance both strategic and operational decision-making. These companies were able to leverage cloud accounting data to make more precise forecasts, manage risks more effectively, and align their financial strategies with broader business goals.

In conclusion, while both SMEs and large enterprises experienced improvements in financial transparency and decision-making through cloud accounting, the extent of these improvements varied significantly based on company size and resources. SMEs saw substantial gains in transparency and reporting accuracy but were slower to adopt the technology and less likely to use its advanced features. Large enterprises, by contrast, were quicker to adopt cloud accounting and utilized its full range of functionalities to improve both transparency and decision-making on a larger scale. These differences highlight the importance of adapting cloud accounting solutions to fit the specific needs and capabilities of businesses of different sizes.

Discussion

5.1. Discuss the findings

The findings of this study offer significant insights into how cloud accounting is reshaping financial transparency and decision-making within Vietnamese enterprises. When compared to existing literature on the subject, these findings both align with and diverge from previously established research, particularly in the context of developing economies like Vietnam. Prior studies, such as those by Bhimani and Willcocks (2020), have highlighted the global benefits of cloud accounting, including real-time data access, reduced human error, and enhanced compliance capabilities. The results of this study support these claims, as Vietnamese enterprises reported similar improvements in financial reporting accuracy and auditability. For instance, the case of the manufacturing company that streamlined its financial consolidation processes across multiple regions mirrors findings in other studies where cloud integration plays a crucial role in reducing financial reporting delays (Warren & Hutchinson, 2019).

However, where this study diverges from existing literature is in its focus on the challenges specific to Vietnamese enterprises. While much of the global literature often emphasizes the scalability and flexibility of cloud accounting systems, the findings here reveal that system integration and data migration issues remain significant barriers for full adoption in Vietnam. Several respondents cited difficulties in integrating cloud accounting with legacy systems, a point less frequently discussed in studies conducted in more developed economies, where businesses are often further along in their digital transformation journeys. This suggests that while the overall benefits of cloud accounting are universal, the Vietnamese context introduces unique challenges that must be addressed for cloud accounting to reach its full potential.

The findings indicate that cloud accounting offers specific benefits for Vietnamese enterprises, particularly in improving financial transparency and decision-making. For financial transparency, cloud accounting's capacity for real-time reporting emerged as one of the most transformative features. Enterprises, especially SMEs, which previously relied on outdated manual processes, now have access to up-to-date financial information, allowing for more accurate and timely reporting. This improvement has had a direct impact on stakeholder trust and regulatory compliance, as businesses can provide more consistent and reliable financial information to investors, auditors, and tax authorities. In a country like Vietnam, where regulatory compliance is critical for business survival, the ability to generate real-time, accurate reports is a game-changer. As one CFO from a financial services firm noted, "Cloud accounting helps us stay on top of all the latest financial regulations, and we're never behind on our reporting anymore." This not only reduces the risk of penalties but also positions businesses as more credible and trustworthy in the eyes of both domestic and international stakeholders.

When it comes to decision-making, the ability to access real-time data has enabled Vietnamese enterprises to make faster and more informed decisions. As the study found, both SMEs and large enterprises have benefitted from cloud accounting's real-time financial dashboards, which allow managers and executives to monitor key performance indicators (KPIs) and make adjustments in real time. For SMEs, this has been particularly impactful in managing cash flow and inventory, while larger enterprises have used cloud accounting to optimize strategic decision-making and investment planning. The fact that even smaller firms can now access the same high-quality financial data as larger companies levels the playing field, enabling them to compete more effectively in the marketplace. This supports the findings of Khan and Al-Akkad (2021), who argue that cloud accounting democratizes access to financial data, offering smaller businesses the same tools that were once only available to large corporations.

Another notable benefit is the role cloud accounting plays in enhancing forecasting and budgeting processes. The ability to continuously update financial forecasts based on real-time data has allowed Vietnamese enterprises to create more dynamic and flexible budgets. This is particularly important in a country like Vietnam, where market conditions can change rapidly, and businesses need to be agile to survive. As a finance manager from a technology firm remarked, "We can now adjust our budgets on the fly, which means we're never caught off guard by sudden market changes." This adaptability is a critical advantage in the fast-growing Vietnamese economy, where businesses must be able to pivot quickly to seize new opportunities or mitigate risks.

5.2. Policy implications Implications for Business Practices

The findings of this study suggest several practical recommendations for Vietnamese enterprises to fully leverage cloud accounting for financial transparency. First, businesses should invest in training programs to ensure that employees are proficient in using cloud accounting systems. This will help reduce errors and maximize the benefits of real-time financial reporting. Additionally, companies should focus on system integration, ensuring that their cloud accounting platform seamlessly connects with other business management tools, such as ERP and CRM systems, to provide a holistic view of financial data across departments.

To improve decision-making processes, businesses can take specific steps such as utilizing cloud-based analytics tools for forecasting and budgeting. By employing real-time data dashboards, managers can make more informed decisions quickly, allowing them to respond to market changes more effectively. Enterprises should also prioritize customizing their cloud accounting systems to meet their specific business needs—whether for cash flow management, operational efficiency, or strategic planning.

For vendors and software developers, it is crucial to tailor cloud accounting solutions to the unique requirements of Vietnamese enterprises. This includes creating affordable pricing models for SMEs and developing localized features that align with Vietnam's regulatory framework. Additionally, offering integration solutions and localized support services can help businesses overcome the technical challenges of adopting cloud systems.

Implications for Policy and Regulation

Policymakers play a critical role in promoting the adoption of cloud accounting to enhance financial transparency in Vietnam. To encourage widespread uptake, the government can offer tax incentives or subsidies to businesses that invest in cloud technologies, particularly SMEs that may struggle with the initial costs of implementation. Additionally, regulatory changes that standardize the use of cloud accounting in financial reporting across sectors could promote broader adoption by ensuring that cloud-based systems meet the compliance needs of Vietnamese enterprises.

Moreover, policymakers should support the development of public-private partnerships that provide businesses with access to cloud accounting training, resources, and expert consultations. This would address the challenges of technical expertise and further incentivize businesses to adopt cloud-based solutions, thus fostering a culture of digital transformation and enhancing the overall transparency of Vietnam's financial landscape.

Conclusion

In conclusion, this study highlights the significant impact of cloud accounting on financial transparency and decision-making in Vietnamese enterprises. The findings reveal that cloud accounting systems greatly enhance transparency by providing real-time financial data, improving the accuracy and reliability of financial reporting, and facilitating compliance with Vietnamese regulations. Moreover, cloud accounting empowers businesses to make faster and better-informed decisions, thanks to the availability of up-to-date financial information and enhanced tools for forecasting and budgeting. These benefits are particularly pronounced for SMEs, which often experience transformational improvements in financial processes after adopting cloud solutions.

However, the study also identifies several challenges that hinder the full realization of cloud accounting's potential. System integration issues, especially with legacy software, and data migration problems are common barriers. Additionally, the high cost of implementation and the resistance to change among employees pose obstacles, particularly for smaller businesses with limited resources. Despite these challenges, the overall consensus is that the advantages of cloud accounting—such as improved transparency and decision-making—far outweigh the drawbacks. The findings underscore the importance of technical support, training, and customized solutions to help businesses overcome these challenges and fully leverage the benefits of cloud accounting in the Vietnamese business context.

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