

# Analysis of Accountants' Perceptions of the Use of Cloud Accounting in Improving the Accuracy and Efficiency of Financial Statements

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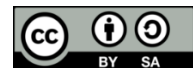
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## ABSTRACT

This study investigates accountants' perceptions of the use of cloud accounting in enhancing the accuracy and efficiency of financial statements. Utilizing a quantitative research design, data were collected from 120 accountants through a structured questionnaire using a 5-point Likert scale. The data were analyzed using SPSS version 25, employing descriptive statistics, validity and reliability tests, correlation analysis, and linear regression. The results indicate that cloud accounting is perceived to significantly improve both the accuracy and efficiency of financial reporting. High correlation values and strong regression results support the positive relationship between cloud accounting usage and financial reporting quality. These findings highlight the strategic importance of cloud-based systems in modern accounting practices and support the adoption of cloud technology to improve organizational performance and transparency.

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## 1. INTRODUCTION

In the era of rapid technological advancement, the field of accounting is undergoing significant transformation, particularly with the emergence of cloud-based technologies. Cloud accounting, as a modern financial management solution, allows users to access and process financial data in real time through internet-based platforms. This innovation has gained widespread attention due to its potential to improve the accuracy, efficiency, and reliability of financial reporting processes.

The integration of cloud-based solutions into accounting practices is transforming traditional methods and offering new opportunities for strategic business management. Cloud accounting enhances productivity by automating routine tasks, reducing the time and effort required for data entry and processing [1], while also offering scalability and remote access, allowing businesses to adjust resources according to their needs and enabling accountants to work from anywhere [2]. Moreover, it reduces maintenance costs associated with traditional

systems, as updates and backups are managed by service providers [2]. From a strategic perspective, cloud accounting facilitates faster and more accurate data collection, processing, and analysis to support decision-making [3], shifting the accountant's role toward data interpretation and strategic consulting [4]. This evolution demands new competencies, such as analytical skills and proficiency in emerging technologies [4]. However, the transition to cloud accounting also poses challenges, requiring changes in organizational culture and enhancement of personnel qualifications to maximize its benefits [1]. Accountants must continuously advance their technological understanding and embrace tools like Power BI and programming languages such as SQL [4], while educational institutions must adapt their curricula to equip future professionals with the skills needed to navigate digital transformation [5].

Traditionally, accounting tasks were performed using desktop-based software or manual record-keeping systems, which often resulted in time-consuming procedures, increased risks of human error, and limited accessibility. However, cloud accounting has revolutionized traditional practices by offering key advantages such as automation of data entry, real-time synchronization, scalability, and seamless integration with other business systems—enhancements that significantly improve the quality and timeliness of financial information in dynamic business environments. Cloud accounting automates data entry, minimizing human error and saving time [6], [7], while real-time synchronization allows for immediate updates and access to financial data, facilitating timely decision-making [8]. Its scalability enables businesses to adjust resources as needed without significant investment [2], [7], and seamless integration ensures cohesive operations and data consistency across platforms (Mishra, 2024). Additionally, cloud accounting provides remote access to financial data, supporting collaboration among stakeholders regardless of location and fostering a paperless environment that enhances efficiency and

reduces costs [9]. From a cost perspective, it reduces maintenance expenses and offers a cost-effective solution for financial management [2], [8], while also driving innovation by enabling the adoption of new technologies and improvement of financial processes [8].

Despite its growing popularity, the adoption of cloud accounting is not solely determined by technical capabilities but also depends on the perceptions and acceptance of accounting professionals who are directly involved in the financial reporting process. Understanding how accountants perceive the impact of cloud accounting on their work is essential for organizations planning to implement or expand their use of such technology. This study seeks to analyze accountants' perceptions of the use of cloud accounting in improving the accuracy and efficiency of financial statements. By investigating how accounting professionals evaluate the benefits and potential challenges of cloud-based systems, this research provides valuable insights into the alignment between technological innovation and professional practice.

## 2. LITERATURE REVIEW

### 2.1 *Cloud Accounting: Definition and Characteristics*

Cloud accounting, leveraging cloud-based platforms, has revolutionized traditional accounting by offering features such as real-time data access, automatic updates, remote collaboration, and scalability, all of which are underpinned by core cloud characteristics like on-demand self-service, broad network access, and rapid elasticity. This technological shift is driven by its ability to enhance performance, reduce costs, and provide flexible infrastructure tailored to modern business needs. Cloud accounting enables users to access financial data in real time from any location, thereby supporting timely decision-making and collaboration among stakeholders [2], [9]. The automatic software updates ensure systems are current without manual effort, lowering maintenance costs [10], while remote accessibility fosters

collaboration between accountants, business owners, and partners regardless of physical location [7], [9]. Moreover, its scalable infrastructure allows businesses to adjust resources efficiently, leading to cost savings when compared to traditional accounting systems [2], [10]. Cloud accounting enhances efficiency by automating tasks and offering customizable solutions for diverse business contexts [7], though concerns related to data security and privacy persist, highlighting the need for organizations to implement robust measures to safeguard data integrity [7].

### **2.2 Benefits of Cloud Accounting for Financial Reporting**

Cloud accounting significantly enhances the accuracy and efficiency of financial reporting by leveraging real-time data access, automation, and the integration of financial modules, enabling timely decision-making and reducing transaction processing delays. Real-time access to financial data allows organizations to respond swiftly to market changes and optimize resource allocation [8], [11], while automation minimizes human error and enhances the consistency of financial records [12]. AI-driven technologies further improve the quality of financial reports by automating routine tasks and reducing manual errors [13]. Additionally, the integration of various financial modules within cloud accounting platforms streamlines data entry, reconciliation, and report generation [6], minimizing duplication and ensuring more accurate financial data [8]. These features collectively enhance organizational responsiveness and agility, empowering better strategic decision-making through real-time reporting and up-to-date financial information [11], [13].

### **2.3 Efficiency Improvements through Cloud Accounting**

Efficiency in accounting refers to the ability to complete financial tasks with optimal use of time and resources, and cloud accounting significantly enhances this operational efficiency through features such as automated bank feeds, recurring transactions, and standardized workflows that streamline routine tasks, reduce

processing time, and enable accountants to focus on higher-value activities like financial analysis and strategic planning [6], [14]. Additionally, cloud accounting facilitates real-time collaboration among professionals by allowing multiple users to access and work on the same file from different locations, which is especially beneficial in the post-pandemic era of hybrid work environments [8]. The scalability and flexibility of cloud-based solutions allow firms to dynamically adjust computing resources based on business demands, enhancing operational agility and cost-efficiency [14]. However, alongside these advantages, cloud accounting also presents challenges, such as data security and privacy concerns, which necessitate robust encryption protocols and authentication mechanisms to protect sensitive financial information [14]. Furthermore, integrating cloud systems with existing business processes can be complex and requires strategic planning to ensure seamless and effective implementation [8].

### **2.4 Accountants' Perceptions and Technology Acceptance**

The successful implementation of cloud accounting is significantly influenced by the perceptions of accounting professionals, as emphasized by the Technology Acceptance Model (TAM), which identifies perceived usefulness and perceived ease of use as critical factors in technology adoption. Empirical studies affirm that accountants are more likely to adopt cloud accounting if they perceive it as beneficial and user-friendly, with evidence from SMEs in Vietnam and start-ups in Indonesia showing that these perceptions positively impact their intention to use such systems [15], [16]. In Nigeria, accountants view cloud-based accounting technology (CBAT) as highly useful, particularly when supported by experience and computer proficiency [17]. External influences, including professional associations and peer pressure, also play a significant role in adoption decisions [17], while organizational context—such as national work culture and practices—affects adoption behaviors, as demonstrated by differences between Australian and Southeast Asian accountants [18]. Despite these drivers,

challenges remain, especially concerns over data security, system reliability, and the learning curve, which tend to be more pronounced among older professionals [17]. However, experience and technological proficiency can serve as moderating factors, strengthening the relationship between perceived ease of use, usefulness, and actual adoption behavior, thereby enhancing the success of cloud accounting implementation [17].

### **2.5 Research Gap**

Although many studies have highlighted the technical and economic benefits of cloud accounting, limited research has focused specifically on the perceptions of professional accountants regarding its impact on financial statement accuracy and efficiency. This study aims to fill that gap by using a structured quantitative approach to measure how accounting practitioners in various organizations evaluate cloud accounting in their daily work.

## **3. METHODS**

### **3.1 Research Approach**

A quantitative approach was chosen to collect measurable data on accountants' perceptions. This approach allows for statistical analysis of relationships between variables, enabling the researcher to determine whether cloud accounting is perceived to positively affect the accuracy and efficiency of financial reporting.

### **3.2 Population and Sample**

The population in this study consists of professional accountants working in both public and private sector organizations that have adopted or are familiar with cloud accounting systems. The sample size for this study is 120 respondents, selected using purposive sampling based on their knowledge and experience with cloud-based accounting software such as Xero, QuickBooks Online, SAP Cloud, or similar platforms.

### **3.3 Data Collection Method**

Primary data were collected using a structured questionnaire distributed both online and in printed form, consisting of two

main sections. Section A gathered demographic data, including age, gender, years of experience, industry type, and cloud accounting usage frequency. Section B contained statements designed to assess respondents' perceptions of the accuracy and efficiency improvements resulting from the use of cloud accounting. Each item in Section B was measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), to capture the degree of agreement with each statement.

### **3.4 Research Variables**

This study includes one main independent variable and two dependent variables, namely the Use of Cloud Accounting (UCA) as the independent variable, and the Perceived Accuracy of Financial Statements (PAFS) and Perceived Efficiency of Financial Statements (PEFS) as the dependent variables. Each variable is represented by multiple indicators derived from existing literature and validated instruments that have been adapted specifically for the purposes of this study.

### **3.5 Instrument Validity and Reliability**

Before full-scale distribution, the questionnaire was pilot tested with 20 respondents to evaluate its validity and reliability. Validity testing was conducted using Pearson correlation to determine whether each statement significantly correlated with its respective variable, with a cut-off value of  $r > 0.30$  indicating acceptable validity. Reliability testing was performed using Cronbach's Alpha, where a value above 0.70 was considered acceptable to confirm internal consistency of the instrument.

### **3.6 Data Analysis Technique**

The collected data were processed and analyzed using SPSS version 25 through a series of statistical procedures. Descriptive statistics were employed to summarize demographic information and general response trends, while validity and reliability tests, as previously described, ensured the quality of the measurement instruments. Pearson correlation analysis was conducted to examine the relationship between the use of cloud accounting and perceived improvements in the accuracy and efficiency

of financial reporting. Furthermore, linear regression analysis was used to determine the extent to which cloud accounting usage predicts perceived improvements in financial statement quality. A significance level of  $\alpha = 0.05$  was applied, indicating that relationships or effects were considered statistically significant if the p-value was less than 0.05.

## 4. RESULTS AND DISCUSSION

### 4.1 Descriptive Statistics

Descriptive analysis was conducted to summarize the demographic profile of the 120 respondents. In terms of gender distribution, 60% were male and 40% female. The respondents' ages were categorized as follows: 25% were 30 years old or younger, 50% were between 31 and 45 years old, and 25% were older than 45. Regarding accounting experience, 40% had 1–5 years of experience, 35% had 6–10 years, and 25% had more than 10 years. The participants came from diverse industries, with 30% working in manufacturing, 25% in services, 20% in finance, and 25% in other sectors. Notably, all respondents (100%) reported using or being

familiar with cloud accounting platforms, indicating a relevant sample for this study.

In addition to demographic data, respondents provided their perceptions on the impact of cloud accounting using a 5-point Likert scale. The mean score for accuracy-related statements was 4.12, while the mean score for efficiency-related statements was 4.25, both of which fall into the high category. These results suggest that the majority of respondents agree that cloud accounting positively influences the accuracy and efficiency of financial reporting, supporting the study's premise regarding the benefits of cloud-based financial systems.

### 4.2 Validity and Reliability Testing

The validity test showed that all items had significant positive correlations with their respective total scores ( $r > 0.305$ ;  $p < 0.05$ ), indicating that all indicators used in the questionnaire were valid. The reliability test results also demonstrated high internal consistency, with Cronbach's Alpha values of 0.821 for Cloud Accounting Use, 0.847 for Financial Statement Accuracy, and 0.872 for Financial Statement Efficiency, all exceeding the acceptable threshold of 0.70.

### 4.3 Correlation Analysis

Table 1. Correlation Analysis

Variables	Pearson Correlation (r)	Sig. (2-tailed)
Cloud Accounting – Accuracy	0.671	0.000
Cloud Accounting – Efficiency	0.714	0.000

There is a strong and significant positive correlation between the use of cloud accounting and both dependent variables, indicating that greater utilization of cloud accounting systems is associated with higher perceived accuracy and efficiency in preparing financial statements. The results of the Pearson correlation analysis show that the correlation between Cloud Accounting and Accuracy is  $r = 0.671$  with a significance value of  $p = 0.000$ , demonstrating a statistically strong and significant relationship. This means that the higher the level of cloud accounting usage, the higher the respondents' perception of improved financial statement accuracy, reflecting the role of cloud technology in reducing manual errors,

accelerating reconciliation, and enhancing the reliability of financial data. Meanwhile, the correlation between Cloud Accounting and Efficiency is  $r = 0.714$  with  $p = 0.000$ , indicating a very strong and significant relationship between the two variables. This finding reinforces the argument that cloud accounting not only improves accuracy but also enhances efficiency in financial reporting processes. Features such as transaction automation, real-time data updates, and remote access enable financial operations to be conducted more quickly and with fewer resources. Overall, these results demonstrate that the adoption of cloud accounting has a clear positive impact on the quality of financial reporting in terms of both accuracy and efficiency.

#### **4.4 Regression Analysis**

##### **4.4.1 Regression Model 1: Cloud Accounting → Financial Statement Accuracy**

The regression analysis shows that the use of cloud accounting explains 45.1% of the variance in the perceived accuracy of financial statements, as indicated by an R Square value of 0.451. The model is statistically significant, with an F-value of 96.573 and a significance level of  $p = 0.000$ . Additionally, the beta coefficient (B) is 0.671 with a p-value of 0.000, confirming that the relationship between cloud accounting usage and perceived accuracy is both positive and significant. These results suggest that cloud accounting plays a substantial role in enhancing the perceived accuracy of financial reporting.

##### **4.4.2 Regression Model 2: Cloud Accounting → Financial Statement Efficiency**

The second regression model demonstrates that cloud accounting explains 51.0% of the variance in perceived efficiency, as indicated by an R Square value of 0.510. The model is statistically significant, with an F-value of 123.234 and a p-value of 0.000. The beta coefficient (B) of 0.714, also significant at  $p = 0.000$ , confirms a strong and positive relationship between the use of cloud accounting and the perceived efficiency of financial reporting. These findings indicate that cloud accounting has a substantial and significant impact on enhancing efficiency in financial processes.

#### **4.5 Discussion**

The results clearly demonstrate that accountants perceive cloud accounting as a valuable tool for improving financial reporting. The high mean scores, along with strong correlation and regression values, support the hypothesis that cloud accounting significantly enhances both the accuracy and efficiency of financial statements. These quantitative findings provide solid evidence that the adoption of cloud-based financial systems aligns well with the evolving needs of accounting professionals in a digital environment.

These findings are consistent with previous studies that emphasize the role of automation, real-time data access, and system

integration in enhancing the quality of financial reporting. Cloud computing has been recognized as a crucial factor in improving reporting quality, especially in sectors like banking, by advancing automation, analytics, and collaboration [19]. For example, a study on Banque Misr in Egypt revealed that cloud computing attributes explained 49.7% of the variance in financial reporting quality, with measured service and broad network access having the strongest positive effects [19]. Additionally, IT integration has contributed significantly to reducing manual errors and improving departmental coordination, with 60% of respondents reporting fewer errors and 40% noting enhanced collaboration [11]. Real-time reporting enabled by IT systems has also empowered organizations to respond quickly to market changes and optimize resource allocation [11].

Moreover, the findings reinforce the Technology Acceptance Model (TAM), particularly regarding perceived usefulness and ease of use. Prior research has shown that these two constructs significantly influence the adoption of accounting information systems (AIS), which in turn impact firm performance [20]. Efficiency, trust, accuracy, and reliability are among the critical benefits that strengthen the value proposition of AIS [20], [21]. In this study, the high levels of perceived accuracy and efficiency suggest that cloud accounting is well-received by professionals and effectively supports better financial decision-making, reinforcing the strategic importance of cloud-based solutions in the accounting domain.

Additionally, the positive perception of cloud accounting indicates the growing readiness of accounting professionals to adopt cloud technologies, especially when supported by user-friendly platforms and adequate training. This readiness not only facilitates smoother adoption but also supports broader goals such as regulatory compliance, financial transparency, and faster decision-making within organizations. Nevertheless, it is essential to acknowledge that despite the overall positive perception, some respondents in the pilot study expressed

concerns about data security and potential system downtimes. These challenges must be carefully addressed by organizations when selecting cloud service providers or designing their implementation strategies to ensure reliability and user confidence.

## 5. CONCLUSION

This study concludes that cloud accounting is perceived positively by accounting professionals in enhancing the accuracy and efficiency of financial statement preparation. The statistical analysis reveals strong and significant relationships between the use of cloud accounting and improvements in financial reporting, with regression results indicating that 45.1% of the variance in perceived accuracy and 51.0% in perceived efficiency can be explained by cloud-based system usage. These findings are consistent with previous research and underscore the value of cloud accounting in

supporting better decision-making, ensuring more reliable financial data, and streamlining financial processes. Additionally, the results validate the Technology Acceptance Model (TAM), showing that perceived usefulness significantly shapes professionals' attitudes toward adopting technological innovations.

From a managerial standpoint, these findings highlight the importance of investing in cloud accounting solutions and providing sufficient training and technical support for accounting personnel to optimize adoption and maximize benefits. Organizations should also proactively address concerns related to data security, system reliability, and business continuity to enhance user confidence and long-term sustainability. For future research, it is recommended to investigate how perceptions may vary across different industries and to assess the long-term impact of cloud accounting adoption on organizational performance, financial transparency, and regulatory compliance.

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