

# Perception and Digital Transformation: A Study of Cloud Accounting Adoption among SMEs in Denpasar

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## Article History:

Received on 15 September 2025

1st Revision 16 September 2025

2nd Revision 06 October 2025

3rd Revision 06 November 2025

Accepted 16 December 2025

## Abstract

**Purpose:** To examine how Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) influence Cloud-Based Accounting Effectiveness (CBAE) and, subsequently, Firm Performance (FP) among SMEs in Denpasar.

**Methodology/Approach:** Survey data were collected from 100 SMEs that actively use cloud accounting systems (Jurnal by Mekari, Accurate Online, Kledo, Xero, Zahir Online, QuickBooks). The data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) in SmartPLS 4.0 to assess measurement and structural models under the TAM 3 framework.

**Results/Findings:** PEOU and PU significantly enhance CBAE. In turn, CBAE positively affects FP and mediates the effects of PEOU and PU on FP, underscoring system effectiveness as a conduit that translates user perceptions into business outcomes.

**Conclusions:** When cloud accounting is easy to use and perceived as useful, system effectiveness improves, which in turn enhances SME performance in Denpasar. CBAE mediates the effects of PEOU and PU on performance, indicating that real gains arise from effective application, not perceptions alone.

**Limitations:** The study focuses on SMEs in Denpasar and relies on self-reported survey data, which may limit generalizability to other regions or larger firms.

**Contribution:** This research extends TAM 3 by integrating CBAE as a mediating variable and provides empirical evidence that digital accounting adoption drives SME performance. Practical guidance is offered for SME owners, policymakers, and service providers to refine adoption strategies and financial management.

**Keywords:** *Cloud Accounting, Firm Performance, Perceived Ease of Use, Perceived Usefulness, Technology Acceptance Model 3.*

**How to Cite:** Putri, N. P. A. N., Permana, G. P. L., Mohaidin, N. J. (2025). Perception and Digital Transformation: A Study of Cloud Accounting Adoption among SMEs in Denpasar. *Reviu Akuntansi, Manajemen, dan Bisnis*, 5(2), 413-428.

## 1. Introduction

Changes in accounting information systems are driven by the emergence of digital technologies. Currently, cloud-based accounting allows real-time recording and reporting. This situation makes accounting processes faster, more accurate, and efficient by providing convenient access to data from various locations at any time (Setiawan et al., 2020). In an increasingly dynamic market, this technology is seen as a crucial tactic for enhancing organizational performance and accelerating data-driven decision-making. The availability of infrastructure is only one factor determining successful implementation; user acceptance is another critical factor. Among these acceptance factors are perceived usefulness (the belief that using the technology can improve work productivity) and perceived ease of use (the belief that the system is easy to use without requiring much effort) (Wicaksono 2022).

Positive perceptions of how simple and beneficial a system is encourage optimal use of its features, which, in turn, can enhance its effectiveness. This effectiveness can be understood in the context of cloud-based accounting as Cloud-Based Accounting Effectiveness (CBAE), which refers to the system's ability to provide timely, accurate, secure, and relevant financial data for management decision-making. An effective CBAE accelerates reporting, reduces administrative costs, minimizes recording errors, and improves adaptability to changes in the business environment. The combined impact of these factors leads to better business success (Rahayu & Utami, 2023). The push for digitalization in Indonesia continues to grow through various programs and legislative efforts, particularly in the MSME sector. However, there is a significant disparity in the adoption of cloud-based accounting. According to several studies and publications, the challenges include low digital literacy levels, concerns over data security, and differing opinions on the benefits of the technology (Mujalli et al., 2024).

The Technology Acceptance Model (TAM 3) framework was used in this study to provide a more detailed explanation of technology adoption and to understand user acceptance criteria amidst current limitations. This model is an enhancement of the previous TAM and TAM 2 models, primarily published by Venkatesh and Bala (2008). In addition to adding extra variables, it clarifies the interaction between various factors that influence consumers' technological acceptance responses. The benefits and ease of use of the components from the previous models remain the foundation. Furthermore, this model incorporates a social influence component, similar to that found in TAM 2, and in many modern implementations, it also includes constructs such as subjective norms, trust, and supportive conditions to capture the psychological, organizational, and social aspects of the acceptance process.

According to TAM 3, the intention to use technology is mainly determined by perceived usefulness, perceived ease of use, social influence, trust, supportive conditions and subjective norms. Thus, this intention becomes the main predictor of actual system usage (Wicaksono, 2022). The primary focus of TAM 3 implementation in this study is the Small and Medium Enterprises (SMEs) sector. This industry is considered strategic because of its contribution to GDP, welfare improvement, and job creation (Kholifah & Andini, 2024). SMEs are officially recognized by Law No. 20 of 2008, which defines small businesses as those with assets ranging from IDR 50 million to IDR 500 million and medium businesses as those with assets ranging from IDR 500 million to IDR 10 billion (Kholifah & Andini, 2024).

Denpasar was selected as the study location because of its relatively high Internet penetration and suitability for cloud-based accounting features that utilize online platforms. According to data released by the Bali Provincial Statistics Agency in 2023, Denpasar has the highest proportion of Internet users in Bali Province (87.54%), followed by Badung (83.18%), with other districts showing varying levels of connectivity. 69.77% of the population aged 5 years and older, 69.77% have internet access, compared to 70.39% in Tabanan, 83.18% in Badung, 70.85% in Gianyar, 63.38% in Klungkung, 65.40% in Bangli, 57.09% in Karangasem, 62.02% in Buleleng, and 87.54% in Denpasar. The provincial average was 73.34%. These data show that the infrastructure readiness and internet usage culture at the user level in Denpasar are conducive to cloud accounting adoption (BPS Provinsi Bali, 2023).

However, despite the high infrastructure readiness and great potential of the technology, several previous studies, such as Aziz et al. (2024), which highlight operational efficiency, and Wahyudi et al. (2024), which emphasize the improvement in financial reporting quality, show that cloud accounting has a positive impact on organizational performance. However, research specifically addressing SMEs in Indonesia using the TAM 3 framework remains limited. Moreover, the effectiveness of the system as a bridge between perception and business success is rarely emphasized in research that focuses solely on the direct relationship between user perceptions and intention to use.

Therefore, this study offers a novelty by developing the TAM 3 framework through the addition of a mediation variable called Cloud-Based Accounting Effectiveness (CBAE), which bridges the relationship between Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) with Firm Performance. This innovation is expected to make a theoretical contribution by expanding the application of TAM 3 in the context of digital accounting and provide practical insights for SMEs and

cloud accounting service providers to understand the key factors for successful technology adoption in improving firm performance, especially in the SME sector in Bali.

## **2. Literature Review and Hypothesis Development**

### **2.1 Technology Acceptance Model 3 (TAM 3)**

This hypothesis provides a framework for studying how users behave when adopting new technologies. The theoretical foundation of this study is the Technology Acceptance Model (TAM), introduced by Davis in 1989, which seeks to predict and explain how consumers accept information technology. The TAM offers a theoretical framework for understanding the factors influencing technology adoption within organizations. In its most basic form, TAM explains how users' attitudes, intentions, and actual usage behavior are influenced by their perceptions of the usefulness and ease of use of information systems. TAM 3, a more comprehensive version of this model, was used to provide a deeper assessment of user adoption behavior.

By utilizing TAM 3 as a broader theory, this study focuses on two key variables: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). These two factors are essential elements of TAM 3, which directly affect the level of technology adoption. Therefore, these factors were selected for this study. Perceived Ease of Use (PEOU) measures how easy users believe it is to learn, understand, and use cloud-based accounting technology. Perceived Usefulness (PU) highlights the belief that using technology provides observable benefits, such as improving the speed, accuracy, and efficiency of financial recording and management. As a result, this study focuses on how perceptions about the ease of use and usefulness of technology affect the Cloud-Based Accounting Effectiveness (CBAE), which in turn influences how well a business performs

### **2.2 Resource-Based View (RBV)**

According to this concept, a company is viewed as a collection of assets that can be used to gain competitive advantages and enhance both short- and long-term outputs (Barney, 1991). The resource-based view (RBV) provides a framework for evaluating a business's internal capabilities in creating competitive advantages through the use of its assets (Grant, 1991). Additionally, Penrose (1959) emphasized that businesses can be viewed as collections of resources managed to generate value. This thesis is based on the idea that a company's competitiveness is ultimately determined by how well it can access, control, and manage its resources.

Company resources are fundamentally divided into two categories:

1. Tangible resources include money, factories, equipment, and manufacturing facilities.
2. Intangible resources include organizational competencies, reputation, technology, and knowledge (Russo & Fouts, 1997).

Furthermore, Barney (1991) highlights the importance of organizational structure, governance, and informal networks as elements contributing to competitive advantage. According to RBV, internal company resources that are valuable, rare, difficult to imitate, and non-substitutable (VRIN) are essential for long-term competitive advantage.

According to the RBV, VRIN resources, which are valuable, rare, unique, and non-substitutable, form the foundation of a company's long-term competitive advantage. These resources can be either tangible or intangible (e.g., reputation, expertise, and technical superiority) (Barney 2007). The RBV theory has been extended with the concept of dynamic capabilities to address rapidly changing business environments. This implies that companies must remain relevant and superior (Dhir, 2024). It must not only possess strategic resources but also manage and adapt to them (through allocation, coordination, and management). The theory has also evolved to acknowledge that the mere existence of resources is not sufficient; it is equally important to consider how a business organizes, integrates, and uses those resources to produce operational efficiencies and firm performance. Empirical research linking resources and internal capabilities to observable outcomes, such as efficiency, innovation, and competitive advantage, is frequently associated with modern RBV (Sathesh 2024).

In terms of firm performance variables, the RBV highlights that a company's ability to manage and utilize rare, unique, and difficult-to-imitate internal resources—whether they are technology, financial capital, human resource competencies, or physical assets—has a significant impact on success (Barney, 1991; Grant, 1991). Implementing a cloud-based accounting system can be considered a strategic asset that enhances decision-making accuracy, information quality, and operational efficiency. Therefore, the Resource-Based View theory explains that the use of technology-based resources directly improves competitiveness and achieves sustainable business performance while ensuring the continuity of business activities.

### **2.3 Perceived Ease of Use**

The Technology Acceptance Model (TAM) includes this variable as one of its core components. This concept explains how much people believe that a technology is easy to understand and use without much effort (Davis 1989). Perceived Ease of Use (PEOU), as used in the context of the Technology Acceptance Model (TAM), refers to the extent to which a person believes that using a system or technology does not require significant mental or physical effort (Chen 2023). Clear usage instructions, user interaction with the system interface, and the availability of technical support and adequate resources all influence the formation of this impression. The concept of perceived ease of PU can be measured using four key indicators, as outlined by Wicaksono (2022):

1. Ease of Learning  
This indicates the extent to which consumers believe that learning a technology can be done quickly and easily. Features and interface designs that help new users learn are strongly related to this aspect.
2. Ease of Use  
Refers to the ease with which users can operate technology once they have a good understanding of its functionality, including system navigation, process efficiency, and ease of use for basic tasks.
3. Availability of Technical Support  
Enhances consumer confidence that the technology is easy to use by reflecting their opinions about the availability of reliable technical support services when issues arise.
4. Availability of Resources
5. This relates to perceptions of the accessibility of equipment, software, and Internet connections that allow the technology to function as effectively as possible. Inadequate resource support can make it difficult to operate even basic technologies.

### **2.4 Perceived Usefulness**

According to (Wicaksono, 2022), his construct describes a person's belief that using a particular method or technology can improve their task performance. The more benefits people perceive, the more likely they are to accept and continue using technology. The degree of efficiency, effectiveness, benefits, and compatibility of the technology with the workforce and operational needs determines its perceived usefulness. Perceived usefulness can be evaluated using six indicators, as outlined by (Kristiani & Putri, 2022)

1. Work More Quickly: The ability of the technology to speed up task completion.
2. Makes Job Easier: The contribution of technology in making tasks easier to execute.
3. Increase Productivity: The role of technology in enhancing work productivity.
4. Enhance Effectiveness: The extent to which the technology can improve performance.
5. Job Performance: The positive impact of technology on achieving job performance.
6. Useful: The degree of benefit provided by the technology in supporting the user's activities.

### **2.5 Cloud-Based Accounting Effectiveness**

The degree to which a cloud-based accounting system helps businesses perform accounting tasks effectively, accurately, and on time supports optimal financial management and high-quality decision-making. This is known as Cloud-Based Accounting Effectiveness (CBAE). According to Novitasari et al. (2023), an efficient system not only improves operational efficiency but also reduces data entry errors, enhances the accuracy of financial reports, and accelerates the reporting and auditing processes.

According to Hung et al. (2023), several indices can be applied to estimate how well a cloud-based accounting system performs, including:

1. Accounting Information Quality  
Data produced by a Cloud-Based Accounting (CBA) system should be timely, accurate, and reliable. An efficient system generates precise and relevant data that are easy to use for decision-making.
2. Ease of Access  
The ability to access real-time data for users from various locations, including individuals who also need access to Cloud-Based Accounting.
3. Simplification of Accounting Processes  
The ease of simplifying accounting procedures, including system automation.
4. Documentation of Procedures  
Accounting operations and procedures can be recorded, compiled, and stored in an organized manner using cloud-based accounting systems.
5. Standardization of Accounting Processes  
More uniform and standardized accounting procedures tend to reduce human errors, which often occur in non-standardized procedures.

## **2.6 Firm Performance**

Business operations over a certain period are measured using predefined criteria, such as profitability, sales growth, market share, return on investment, and customer satisfaction, to assess a company's success. Firm performance is often defined as the result achieved over a specific period based on previously set criteria or benchmarks. These achievements must be measurable, objectively, and accurately represent the business conditions using a set of established metrics. According to Ningwati et al. (2022), performance evaluation is conducted to determine how well a company's activities and services meet the set goals. Hung et al., (2023) propose several metrics that can be used to evaluate firm performance, including:

1. Overall Profitability
2. Sales Revenue
3. Market Share
4. Return on Investment (ROI)
5. Customer Satisfaction

## **2.7 The Influence of Perceived Ease of Use on Cloud-Based Accounting Effectiveness**

Perceived Ease of Use is one of the foundational concepts in the Technology Acceptance Model (TAM). This concept explains how much a person believes that a technology can be understood and used easily without requiring significant effort (Davis, 1989) (PEOU) is a concept used in the Technology Acceptance Model (TAM) framework, which describes how much a person believes that a system or technology does not require mental or physical effort to operate (Chen 2023). When it role in how well users can integrate cloud-based accounting systems into their daily operations, perceived ease of use (PEOU) plays a significant role. Users are more likely to continue integrating technology into their company's operations if they believe that the technology is easy to use and understand. When implementing new ideas, Small and Medium Enterprises (SMEs) often face resource and technology limitations. In this context, ease of use is a key factor that influences the success of the system's implementation.

According to Wirawan et al. (2024), SMEs that use user-friendly systems are often better at managing their financial and accounting data. Increased productivity, faster processing of financial transactions, and quicker preparation of financial reports are indicators of their effectiveness. In other words, companies can maximize technology usage, reduce data management errors, and operate more efficiently when their systems are easy to use.

**H1:** The Perceived Ease of Use positively influences the effectiveness of cloud-based accounting.

## ***2.8 Perceived Usefulness and Cloud-Based Accounting Effectiveness***

One of the key components of the Technology Acceptance Model (TAM) by Davis (1989) is Perceived Usefulness. This concept explains the extent to which a person believes that using a system or technology can improve their performance in task completion. The degree to which users feel that a system can enhance their ability to accomplish tasks is known as Perceived Usefulness (PU). In the context of cloud-based accounting, users who believe that the system can provide timely, accurate, and relevant financial reports according to the company's requirements are more likely to use the technology.

Continuous system use is also driven by the perception that the system can reduce human error, save time, and increase financial transparency. SMEs that see cloud-based accounting as a tool that facilitates and speeds up the creation of accurate financial reports believe that this system is highly helpful in supporting operational tasks and in strategic decision-making. According to Al-Okaily et al. (2023), Users are motivated to adopt technology and fully utilize its potential to enhance financial management and company performance when they have a strong understanding of its usefulness.

**H2:** Perceived Usefulness positively influences the effectiveness of cloud-based accounting.

## ***2.9 The Influence of Cloud-Based Accounting Effectiveness on Firm Performance***

The degree to which a cloud-based accounting system helps businesses perform accounting tasks quickly, accurately, and effectively is known as **cloud-based accounting effectiveness** (CBE). This enhances financial management and supports high-quality decision making. An efficient system accelerates reporting and auditing processes, reduces data input errors, improves the accuracy of financial reports, and increases operational efficiency (Novitasari et al. 2023). Long-term improvement in firm performance will occur based on users' evaluation of the system's ability to assist in effective financial management. For example, a cloud-based accounting system that allows **SME owners** to control expenses, manage cash flows, and produce more accurate and timely financial reports will increase overall operational efficiency of SMEs. According to Abdullah et al. (2023), SMEs that successfully utilize cloud-based accounting can enhance their business performance through better cost control, faster decision-making, and improved financial management.

**H3:** The effectiveness of cloud-based accounting positively influences firm performance.

## ***2.10 The Influence of Perceived Ease of Use on Firm Performance Mediated by Cloud-Based Accounting Effectiveness***

Through the efficiency of cloud-based accounting, perceived ease of use (PEOU) also affects business performance. Users feel more comfortable and confident when using a system adopted by SMEs if the system is easy to understand and use. This ease reduces the psychological barriers that might prevent entrepreneurs from adopting new technologies. A simple and user-friendly solution enables SMEs to focus on important tasks, such as strategic decision-making and financial management, without being hindered by operational challenges. By managing costs, accelerating decision-making, and ensuring accurate financial reporting, this situation drives productivity and efficiency improvements, which ultimately enhance the business performance.

**H4:** Perceived Ease of Use positively influences firm performance through cloud-based accounting effectiveness.

## ***2.11 The Influence of Perceived Usefulness on Firm Performance Mediated by Cloud-Based Accounting Effectiveness***

The idea that the use of technology can improve work performance and job outcomes is known as Perceived Usefulness (PU) in the context of Technology Acceptance Model 3 (TAM 3). The extent to which business owners or employees believe that a cloud-based accounting solution can improve the quality of financial reporting, process efficiency, and timeliness of corporate decision-making is a measure of PU in the context of cloud-based accounting. According to TAM 3, PU is influenced by factors that affect users' intentions and behaviors towards technology, such as job relevance, output quality, and proven results (Venkatesh et al., 2008). A high PU motivates users to maximize the use of the system, which ultimately enhances the effectiveness of the cloud-based accounting system (

Accounting Effectiveness). This efficiency is reflected in the system's ability to display accurate, up-to-date, secure, and easily accessible data, which accelerates reporting, reduces errors, and facilitates data-driven decision-making. Therefore, while PU directly affects business performance, this effect is amplified when cloud-based accounting effectiveness serves as a mediator. This is because only a truly effective system can realize perceived benefits in the form of improved financial and operational business performance.

**H5:** Perceived Usefulness positively influences firm performance through cloud-based accounting effectiveness.

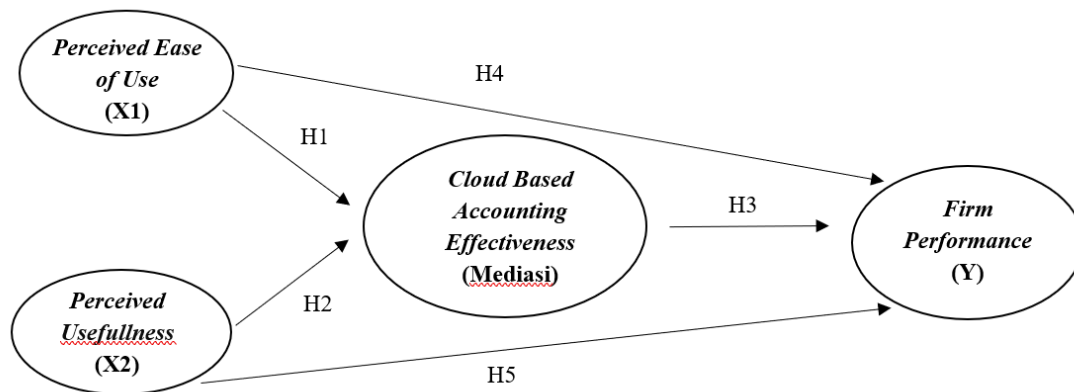


Figure 1. Conceptual Framework  
Source: Data processed by the Researcher, 2025

### 3. Research Methodology

#### 3.1 Research Location

This study was conducted in Denpasar for strategic reasons related to the high level of Internet penetration. Denpasar has the highest internet connectivity rate of 87.54%, according to Badan Pusat Statistik (BPS) Provinsi Bali (2023). This indicates a high level of digital technology use in the community, which is relevant to the focus of this study on cloud-based accounting, which is web-based.

#### 3.2 Population and Sample

##### 3.2.1 Population

Sugiyono (2022) defines the population as a generalization area that includes items or individuals who meet a set of criteria established by the researcher for evaluation. The population places equal emphasis on both the quantity and intrinsic quality or attributes of items. All small and medium-sized enterprise (SME) owners in Denpasar who manage their company's finances using a cloud-based accounting system were included in this study. Purposive sampling, which involves selecting participants based on predetermined standards to ensure that the collected data align with the research objectives, was used to choose the sample.

##### 3.2.2 Sample

A sample is a subset of the population components with attributes selected by the researcher for analysis (Sugiyono, 2022). The sampling method used was purposive sampling, where participants were selected based on predefined standards to ensure that the collected data were relevant to the research objectives. The sample criteria for this study were as follows:

1. SME owners who operated in Denpasar.
2. Those who had used a cloud-based accounting system for at least the past three months.

Using the method proposed by Hair et al. (2017), the sample size was calculated to be 5–10 times the number of research indicators. Considering 20 indicators, the required sample size is

$$N = 5 \times 20 \text{ to } 10 \times 20$$

$$N = 100 \text{ to } 200$$

Thus, the minimum sample size was 100 respondents, and the maximum was 200 respondents. SMEs in Denpasar that have been using cloud-based accounting for at least three months were selected as the final sample.

### **3.3 Data Type**

This study used quantitative data, which refers to information represented by numerical values that have undergone statistical analysis (Sugiyono, 2022). The quantitative approach, based on a positivist perspective, uses systematic variable measurements to test hypotheses. Deductive reasoning was used to answer the research questions using theories that have been developed and tested with field evidence.

### **3.4 Data Source**

Original information collected directly from respondents without intermediary involvement is known as primary data (Sugiyono, 2022). Through questionnaire completion, SME owners in Denpasar who have been using cloud-based accounting for at least the past three months provided the primary data. The purposeful selection of respondents ensured that the collected information aligned with the research objectives.

### **3.5 Data Collection Technique**

The questionnaire used for data collection was based on a Likert scale. The questionnaire was chosen as an efficient data collection method because it allowed the researcher to gather data that aligned with the research standards (Sugiyono, 2022). Using a 5-point Likert scale, this tool was designed to assess each variable.

1 = Strongly Disagree (SD)

2 = Disagree (D)

3 = Neutral (N)

4 = Agree (A)

5 = Strongly Agree (SA)

### **3.6 Research Instrument Testing**

#### **3.6.1 Measurement Model (Outer Model)**

1. Validity Test: Validity testing was conducted to assess the appropriateness of the instrument with the object or construct it aims to measure (Sugiyono, 2022). Dalam pendekatan *Partial Least Squares* (PLS), validitas diuji melalui:
  - a. Convergent Validity: An indicator is considered valid if the outer loading  $> 0.70$ , communality  $> 0.50$ , and Average Variance Extracted (AVE)  $> 0.50$ .
  - b. Discriminant Validity: A construct is considered valid if the square root of the AVE is greater than the correlation between constructs, and the cross-loading of the indicators on other constructs is  $< 0.70$ .
2. Reliability Test  
Reliability measures the consistency of the respondents' answers. An instrument is considered reliable if Cronbach's alpha is  $> 0.70$ .

### **3.7 Data Analysis Technique**

The Partial Least Squares structural equation modeling (PLS-SEM) variance-based method was used to analyze the data using SmartPLS. This approach is reliable even in the presence of multicollinearity, missing data, or small sample sizes and allows for simultaneous testing of both the measurement and structural models.

#### **3.7.1 Structural Model (Inner Model)**

The inner model tests the causal relationships between the latent variables. The evaluation was carried out through:

1.  $R^2$ : Shows the proportion of variance in the dependent variable that can be explained by the independent variables. A value close to 1 indicates a good predictive performance.
2. T-values: Tests the significance of the relationships between variables at a significance level of 5%. The hypothesis is accepted if the t-statistic  $> 1.64$  ( $H_a$ ) and rejected if  $< 1.64$  ( $H_o$ ).



3. Mediation Test: Conducted to test the role of Cloud-Based Accounting Effectiveness (M1) as a mediator. The indirect effect was tested using bootstrapping in SmartPLS with the criterion  $p < 0.05$ .

#### 4. Results and Discussion

Table 1. Variable Indicators

Variable	Indicator	Details
<b>Perceived Ease of Use (X1)</b>	1. Learning Ease 2. Ease of Use 3. Availability of Technical Support 4. Availability of Resources (David 1989)	1. Cloud Accounting is easy to understand and learn. 2. Cloud Accounting is easy to operate once learned. 3. Adequate technical support is available when encountering difficulties in using Cloud Accounting. 4. My hardware and internet connection are sufficient to ensure the effective use of Cloud Accounting.
<b>Perceived Usefulness (X2)</b>	1. Work Faster 2. Simplifying Work 3. Increasing Productivity 4. Enhancing Effectiveness 5. Job Performance 6. Usefulness Kristiani & Putri (2022)	1. Cloud Accounting helps me complete tasks faster. 2. Cloud Accounting makes my work easier. 3. Cloud Accounting increases my work productivity. 4. Cloud Accounting enhances my work effectiveness. 5. My performance improves with the use of Cloud Accounting. 6. Cloud Accounting is very useful in supporting my work
<b>Cloud-Based Accounting Effectiveness (Z)</b>	1. Accounting Information Quality 2. Ease of Access 3. Simplification of Accounting Processes 4. Documentation of Procedures 5. Standardization of Accounting Processes Hung et al., (2023)	1. Cloud Accounting produces accurate accounting information. 2. I am able to access data in real-time through Cloud Accounting. 3. Cloud Accounting reduces manual steps in accounting workflows. 4. Cloud Accounting supports the documentation of accounting procedures in a structured manner. 5. Cloud Accounting makes daily accounting processes more standardized.
<b>Firm Performance (Y)</b>	1. Overall Profitability 2. Sales Revenue 3. Market Share 4. Return on Investment 5. Customer Satisfaction Hung et al., (2023)	1. The use of Cloud Accounting has a positive impact on business profitability. 2. The use of Cloud Accounting drives business sales growth. 3. The use of Cloud Accounting helps expand business market reach. 4. Cloud Accounting investment provides adequate returns for the company. 5. The use of Cloud Accounting improves customer satisfaction with business services.

Table 1.2 Respondent Characteristics (N = 100)

Characteristic	Category	Frequency (n)	Percentage (%)
<b>Type of Business</b>	Culinary	32	32,0
	Fashion	17	17,0
	Crafts	12	12,0
	Agribusiness	8	8,0
	Services	21	21,0
	Automotive	6	6,0
	Others	4	4,0
<b>Business Duration</b>	< 1 year	28	28,0
	1–3 years	45	45,0
	> 3 years	27	27,0
<b>Usia Responden</b>	18–27 years	41	41,0
	28–45 years	46	46,0
	> 45 years	13	13,0
<b>Type of Cloud Accounting</b>	Jurnal by Mekari	30	30,0
	Accurate Online	22	22,0
	Kledo	15	15,0
	Xero	10	10,0
	Zahir Online	8	8,0
	QuickBooks	7	7,0
	Others	8	8,0

A total of 100 small and medium enterprises (SMEs) using cloud-based accounting systems participated in this survey. Respondent characteristics were differentiated based on their age, type of cloud-based accounting program used, duration of business operations, and type of company they managed. The food industry accounted for 32% of the respondents, followed by the service industry (21%), fashion (17%), crafts (12%), agriculture (8%), automotive (6%), and other sectors (4%). These results indicate that cloud-based accounting solutions are most commonly used in the food and service industries. Among the surveyed respondents, 28% had been operating for less than a year, 45% had been in business for one to three years, and 27% had been operating for more than three years. Most respondents, as indicated by this data, are in the early to mid-growth stages of their businesses.

A quarter of the respondents were aged between 18 and 27 years, followed by those between 28 and 45 years (46%) and those over 45 years (13%). This shows that most cloud accounting users are young, successful entrepreneurs. Respondents used a variety of systems for cloud accounting: Jurnal by Mekari (30%), Accurate Online (22%), Kledo (15%), Xero (10%), Zahir Online (8%), QuickBooks (7%), and other applications (8%). This fluctuation suggests that SME choices vary depending on their unique business needs and capabilities.

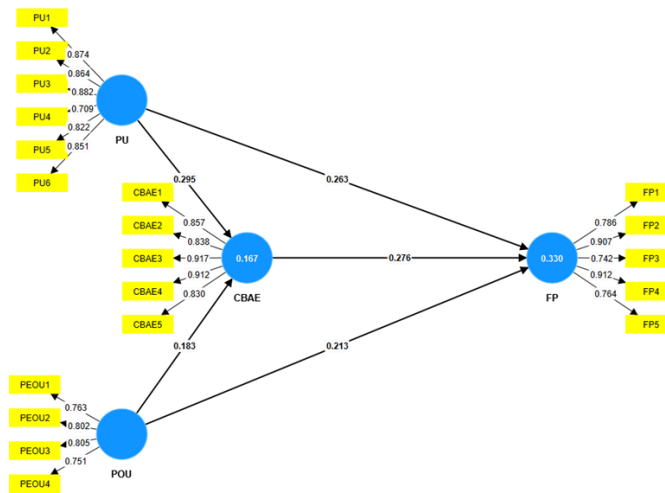


Figure 2. Partial Least Square (PLS) Model Scheme

Source: Research Data, 2025

In the final evaluation of this study, the measurement model (outer model) revealed the following constructs: Perceived Ease of Use (PEOU) was measured by four indicators; Cloud-Based Accounting Effectiveness (CBAE) was measured by five indicators; Firm Performance (FP) was represented by five indicators; and Perceived Usefulness (PU) consisted of six indicators. The reflective measurement model was evaluated using SmartPLS based on four main criteria: Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) for each construct were used to assess the validity and reliability of these variables.

#### 4.1 Convergent Validity

Convergent validity was used to evaluate the validity of convergence. If the outer loadings of the indicators are higher than 0.70, the indicator is considered to have a strong convergence. The outer loading values for each indicator of the research variables were as follows:

Table 1.3 Outer Loadings

Variable	Indicator	Outer Loading	Remarks
<b><i>Perceived Ease of Use (X1)</i></b>	X1.1	0,763	Valid
	X1.2	0,802	Valid
	X1.3	0,805	Valid
	X1.4	0,751	Valid
<b><i>Perceived Usefulness (X2)</i></b>	X2.1	0,875	Valid
	X2.2	0,864	Valid
	X2.3	0,882	Valid
	X2.4	0,709	Valid
	X2.5	0,822	Valid
	X2.6	0,851	Valid
<b><i>Cloud-Based Accounting Effectiveness (Z)</i></b>	Z1	0,857	Valid
	Z2	0,838	Valid
	Z3	0,917	Valid
	Z4	0,912	Valid
	Z5	0,830	Valid
<b><i>Firm Performance (Y)</i></b>	Y1	0,786	Valid
	Y2	0,907	Valid
	Y3	0,742	Valid
	Y4	0,912	Valid
	Y5	0,764	Valid

Source: Research Data, 2025

#### 4.2 Discriminant Validity

Table 1.4 Average Variance Extracted (AVE))

Variable	AVE	Remarks
<i>Perceived Ease of Use</i>	0,610	Valid
<i>Perceived Usefulness</i>	0,698	Valid
<i>Cloud-Based Accounting Effectiveness</i>	0,759	Valid
<i>Firm Performance</i>	0,698	Valid

Source: Research Data, 2025

The Average Variance Extracted (AVE) value for each construct was greater than the recommended threshold of 0.50, as shown in Table 1.4. This indicates that each concept has a clear distinction in this study and validates that each construct meets the requirements of discriminant validity.

#### 4.3 Composite Reliability

Table 1.5 Composite Reliability

Variable	Value	Remarks
PEOU	0,798	Reliable
PU	0,929	Reliable
CBAE	0,938	Reliable
FP	0,898	Reliable

Source: Research Data, 2025

The data in Table 1.5 show that the Composite Reliability (CR) value for all variables is greater than 0.70; therefore, it can be concluded that each variable has adequate reliability.

#### 4.4 Cronbach's Alpha

Tabel 1.6 Cronbach's Alpha

Variable	Value	Remarks
PEOU	0,798	Reliable
PU	0,913	Reliable
CBAE	0,921	Reliable
FP	0,881	Reliable

Source: Research Data, 2025

The Cronbach's alpha values in Table 1.6 show that all variables have scores above 0.70, which means that these variables have a good level of reliability.

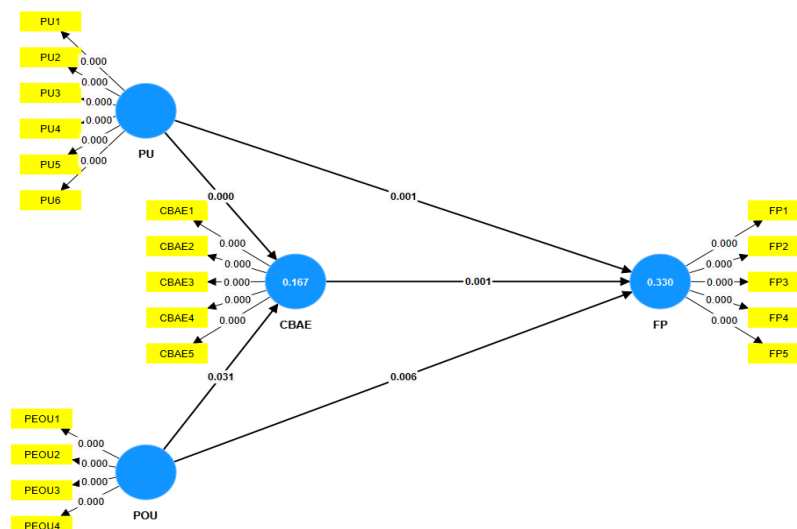


Figure 3: Inner Model  
Source: Research Data, 2025

#### 4.5 Coefficient of Determination ( $R^2$ )

The R-squared ( $R^2$ ) value for the dependent variable shows how well the predictor factors explain the variation in the endogenous latent variable. An  $R^2$  value in the range of 0.67 to 1.00 generally indicates very good predictive power, 0.33 to 0.67 indicates moderate predictive power, and 0.19 to 0.33 indicates poor predictive power.

Table 1.7

Variable	<i>R Square</i> ( $R^2$ )	<i>R Square Adjusted</i>
CBAE	0,167	0,150
FP	0,330	0,309

Source: Research Data, 2025

Based on the test results, the  $R^2$  value for Firm Performance (FP) is 0.330. This indicates that the predictor variables (CBAE, PEOU, and PU) explain 33.0% of the variation in business performance, with the remaining 67.0% being influenced by factors not included in this model. This value indicates a moderate predictive capability. In contrast, the  $R^2$  value for Cloud-Based Accounting Effectiveness (CBAE) is 0.167, meaning that external factors explain 83.3% of the variation in cloud accounting effectiveness, while PEOU and PU explain only 16.7% of the variation. Based on these results, the CBAE variable had poor predictive power.

#### 4.6 Q-Square

In regression analysis, the Q-Square statistic serves the same purpose as the coefficient of determination ( $R^2$ ), which is to assess how well the model fits observed data. The better the model fit, the higher the Q-Square value. The formula used to calculate the Q-Square is as follows:

$$\begin{aligned}
 &= 1 - [(1 - R^2_1) \times (1 - R^2_2)] \\
 &= 1 - [(1 - 0.1668) \times (1 - 0.3297)] \\
 &= 1 - (0.8332 \times 0.6703) \\
 &= 1 - 0.5585 \\
 &= 0.4415
 \end{aligned}$$

The model in this study has moderate predictive relevance and is suitable for application, as indicated by a Q-squared value of approximately 0.442 or 44.2%..

#### 4.7 Hypothesis Testing Results

Table 1.8: Hypothesis Testing Results

Variable Relationship	Coefficient	<i>t-statistic</i>	<i>p-value</i>	Conclusion
CBAE → FP	0,276	3,28	0,0005	Accepted
PEOU → CBAE	0,183	1,86	0,0314	Accepted
PU → CBAE	0,295	3,35	0,0004	Accepted
PEOU → CBAE → FP	0,051	1,81	0,0349	Accepted
PU → CBAE → FP	0,081	2,06	0,0194	Accepted

Source: Research Data, 2025

### 5. Conclusion

This study provides empirical support for the idea that users' perceptions of the usefulness and ease of use of a system play a key role in the successful adoption of cloud-based accounting in small and medium enterprises (SMEs). Based on the test results, the  $R^2$  for Firm Performance (FP) is 0.330, indicating that the predictors (CBAE, PEOU, and PU) explain 33% of the variation in business performance, while the remaining 67% is influenced by factors not included in the model. This suggests that the model has a moderate predictive accuracy. On the other hand, the  $R^2$  for Cloud-Based

Accounting Effectiveness (CBAE) is 0.167, meaning that the PEOU and PU variables only explain 16.7% of the variation in the effectiveness of the cloud accounting system, while 83.3% is influenced by external factors.

This suggests that the CBAE has poor predictive power. Overall, Perceived Usefulness (PU) enhances business owners' confidence in the ability of the cloud accounting system to support managerial activities, particularly in managing the financial aspects of the business. Meanwhile, Perceived Ease of Use (PEOU) positively influences the effectiveness of the cloud accounting system by making it easier to learn and use. These two factors influence CBAE, which subsequently impacts Firm Performance (FP). The findings suggest that the adoption of cloud-based accounting technology improves efficiency in financial record-keeping and reporting and enhances the quality of managerial decision-making. However, improved business performance can only be achieved if the system is implemented correctly and tailored to the operational needs of SMEs.

### Limitations

Based on the research findings and existing limitations, future studies are recommended to include the variable of technology pessimism as an external factor that may affect the acceptance and use of cloud-based accounting systems. This variable is important because skepticism towards the security and reliability of technology has been shown to reduce digital adoption intentions. Additionally, future studies are expected to be more specific in comparing the effectiveness of various cloud accounting platforms, such as Kledo, Jurnal by Mekari, and Accurate Online, to provide a comparative overview of the features and performance of the systems that best meet the operational needs of SMEs. This approach would expand the theoretical understanding while offering practical benefits for the development of technology adoption strategies in the SME sector.

### Acknowledgments

The author expresses their deepest appreciation to all SME owners who participated in this study and provided valuable information on the use of cloud-based accounting systems. Gratitude is also extended to the academic institutions, supervisors, and all those who provided scientific, technical and moral support throughout the research process. Special thanks are also given to my family, colleagues, and everyone who contributed motivation and assistance, enabling the successful completion of this research.

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