Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4, 2202-2224
2024
Publisher: Learning Gate
DOI: 10.55214/25768484.v8i4.1592

Analysis of factors influencing cloud accounting adoption in Indonesian start-up companies using the technology acceptance model (TAM) and technology, organization, and environment (TOE) frameworks

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Abstract: This study was implemented to identify the connection between technology, environment, and organization factors and the impact on perceived benefits and its influence on adopting cloud accounting. This research developed the Technology, Organization, and Environment (TOE) framework, the Technology Acceptance Model (TAM), and the intention to adopt cloud accounting for start-up companies in Indonesia. Start-ups are pioneering businesses with flexible, independent natures and risk of failure. There were 340 valid responses collected from online questionnaires shared with start-up companies' employees who were working in the accounting and finance departments. Those responses were processed with Smart PLS with SEM (Smart Equation Modelling). The result indicates that start-up companies are adopting cloud accounting based on their requirements and are not fully pushed by the TOE framework but are affected by perceived usefulness and ease of use. Start-ups will adopt cloud accounting, which is easy to use. However, to gain usefulness, the start-ups will be more pressured by their requirement instead of TOE as they tend to keep improving by their condition as independent and flexible companies.

Keywords: *Cloud accounting, Start-up, Technology adoption, TAM, TOE.*

1. Introduction

Start-up companies is a fast growing business in Indonesia [1]. Based on *Start-up ranking* , as of January 11 2024, Indonesia has 2,566 start-up companies and it included in 10 countries with the largest *start-up* in the world and still increased. S*tart-up* is different from traditional business but deep latent in matter innovation, ambition as well as orientation growth. Start-up has no any consolidated and moving in flexible [3]. It has a bigger scale if compared with business other such as MSMEs, family ownership companies and others. Thus, start-ups have failed opportunities or more risk if compared to other companies.

Based on Mujalli *et al.*, (2024) [4] the information technology used by the company will determine the increase in competitiveness and profits of the company, one of which is a start-up company. The cloud system eliminates the need for users on the device but allows use with access anywhere with a network connection. Cloud computing helps companies compete effectively in today's economy. Cloud is a distributed architectural system of interconnected computers provided by suppliers according to a service level agreement [5]. Cloud computing provides facilities for users not to store data on devices and makes it easier for users to use complex programs [4].

Start-ups are known as companies that predominantly use technology. In the context of technology, ERP systems as well as accountants and management are involved in running the accounting process, especially in cloud-based accounting systems [6]. Information systems are external reporting infrastructure and management accounting practices where accounting information systems convert

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transactions into accounting information that is used for other purposes [7]. According to Kubota & Okuda (2022) [7] cloud systems provide unlimited relationships and strengthen the positive relationship between the usefulness of management accounting information and the quality of decision-making which is strengthened by the disclosure of more updated reports. As it has high flexibility and efficiency, an accounting information system that uses cloud-based will change accounting practices in producing output in the form of financial reports. Given that start-ups are flexible businesses compared to other businesses, the use of the cloud tends to be easier to use because of the accessibility and capabilities of the cloud system.

The development of the accounting world is gradually leading to technological advances because technology makes accounting more accessible and user-friendly. Cloud-based accounting provides all users, including business owners, accountants, auditors, customers, and others, simultaneous access to financial reports. However, not all users can adequately use the ease of access to the cloud system. Mujalli *et al.* 2024) [4] explained that there are challenges from the cloud system, namely its complex structure and comparability issues where companies and users need to adjust. Cloud-based accounting also requires senior management to consider changes in culture, processes, and relationships in the workplace. Based on Ma *et al.*, (2021) [8], cloud accounting presents competitive challenges in the market, which are important considerations for companies. Cloud service providers play a role in facilitating cloud adoption with challenges such as availability and customer support, as well as concerns about access, transmission, and others. However, the adoption of cloud accounting is not growing as fast as expected. This could be due to technical issues such as flexibility, human resources, technology experience, etc. Technological and organizational factors influence the perception of the system's ease of use, which provides convenience for efficiency and improved job performance. This is a technology, organization, and environment (TOE) concept that explains the application of cloud-based accounting. According to Ma *et al.*, (2021) [8], perceived ease is the extent to which a person believes that using a system will be free from effort, and perceived usefulness is where a person believes that using a particular system will improve their job performance. These perceptions are elements of the technology acceptance model (TAM). This model has successfully predicted and explained user intentions in various contexts to take advantage of performance efficiency and productivity from cloud accounting if users have accumulated sufficient knowledge and resources. According to Mujalli *et al.* (2024) [4], environmental factors such as availability, reliability, and security issues also influence the use of cloud-based accounting. Start-up businesses are small and flexible which are easy for top management to pay attention to. In addition, start-up businesses are also dominant in using technology. However, the adoption of cloud accounting is not growing as fast as expected due to a lack of resources, accessibility, and knowledge. Thus, this study will develop and test a combined TAM and TOE model to investigate the factors that play a role in using cloud accounting in start-up companies in Indonesia.

2. Literature Review

2.1. Start-up

Start-up is a company that different from a traditional or latent business in terms of innovation, ambition, and growth orientation, which does not have a consolidated business model and moves flexibly if compared to other businesses, such as MSMEs, family businesses, and others [3]. Ghezzi *et al.* (2022) [3] also explained that start-up companies do not have a consolidated business model and move flexibly and on a large scale compared to other companies such as MSMEs, family companies, and others. Therefore, start-up companies have a higher chance of failure or risk than other businesses.

Start-up companies are predominantly using technology. In the context of technology, ERP systems, accountants, and management are involved in the accounting process, especially in cloud-based accounting systems [6]. In addition to the development of flexible types of businesses and enterprises, the progress of information technology that is currently running has the potential to make long-term differences in the way accounting is carried out in general and specifically [9]. According to Kubota & Okuda (2022) [7] , cloud systems in start-up companies provide unlimited relationships and strengthen

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
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the positive relationship between the usefulness of management accounting information and the quality of decision-making, which is strengthened by disclosing more updated reports. As it has high flexibility and efficiency, an accounting information system that uses the cloud will change accounting practices in producing output in the form of financial reports in start-ups. Given that start-ups are flexible businesses compared to other companies, the use of the cloud tends to be easier to use because of the accessibility and capabilities of the cloud system.

2.2. Cloud Accounting

Cloud accounting is a modern accounting concept that functions in data processing with a collection of distributed information systems and applications within a cloud information framework without knowing the actual system [5]. Saad *et al.*,(2022) [10] explained that cloud accounting has the same function as a traditional accounting system, but the characteristics of the two systems are significantly different. Conventional accounting systems require special storage for software installation, and users cannot use devices other than applications on the desktop. In contrast, cloud accounting allows users to use the system remotely connected to the internet without special storage on the desktop. Cloud accounting offers redundancy and real-time data updates. Data storage is all on remote servers or the cloud so that organizations do not incur additional costs for server maintenance Saad *et al.* (2022) [10] Cloud accounting benefits companies of all sizes because it can be customized with cloud software according to needs [5].

2.3. Intention to Adopt Cloud Accounting

Information systems are external reporting infrastructure and management accounting practices where accounting information systems convert transactions into accounting information used for other purposes [7]. The ERP systems used are diverse to facilitate accounting work and practices, with different operations and cloud-based systems. Cloud-based systems provide unlimited relationships and strengthen the positive relationship between the usefulness of management accounting information and the quality of decision-making, which is strengthened by disclosing more updated reports. As previously mentioned, the capabilities of accounting information systems increase the significance of commodity bookkeeping and improve time efficiency [8]. Moreover, in the current era, cloud-based is wider to operate and support research. These things encourage organizations to have the intensity to adopt cloud accounting, especially based on Saad *et al.* (2022) [10], cloud accounting offers real-time data redundancy updates and data storage on remote servers, allowing organizations to save operational costs.

2.4. Technology, Organization and Environment (TOE) Framework

TOE model explains the adoption of information systems in companies that combine technology, environment, and organization [4]. This model was developed by Tornatzky et al. (1990) to describe the phenomenon of technology adoption in organizational analysis units. The TOE framework explains that technological progress, organizational structure, and industrial environment influence how information systems can be accepted [11]. This theoretical framework considers all the driving forces that impact the initiative to adopt information systems.

The following is the TOE framework presented by Tornatzky *et al.* (1990).

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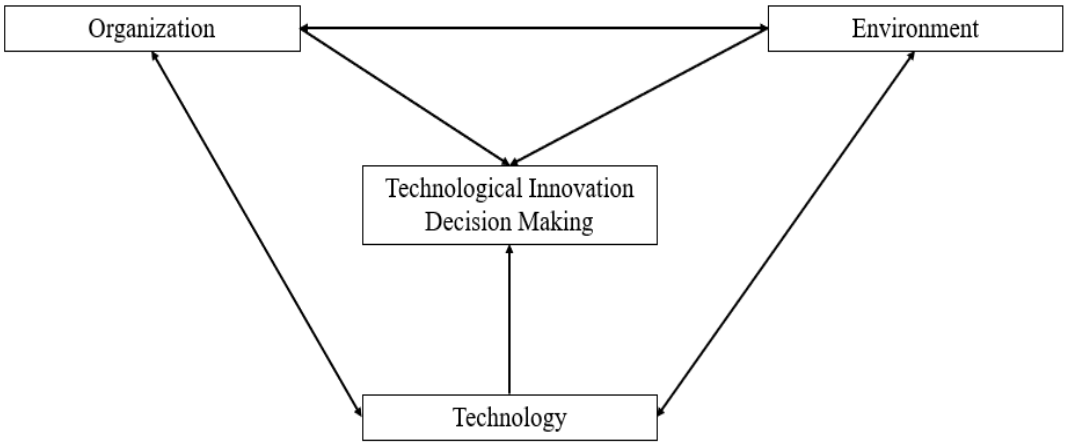

Figure 1.
Framework technology, organization, and environment (TOE).
Source: Tornatzky *et al*. (1990).

2.4.1. Technology Context

In technology adoption assessment, technology context includes existing and emerging technology attributes [4]. The technology contexts often used are relative advantage, suitability, complexity, triability, and observability [11]. Several other studies use other constructs, such as feature completeness, availability, privacy, security, organizational readiness, and managerial competence [12, 5, 13]. This study will use three technology contexts: relative advantage, suitability, and complexity.

Relative advantage is a benchmark where technology provides advantages to the organization. In this context, organizations considered superior will show that the organization is influenced by its technological advantages [4]. Relative advantage is one of the contexts that is contrastingly felt by technology adoption [11]. Aligarh *et al*., (2023) [11] also explained that the relative advantages of implementing cloud computing include increasing the speed of business communication, efficient inter-company coordination, customer communication, time efficiency, and others. Researches conducted by Chatterjee *et al*., (2021 [13], Tawfik *et al*. (2023) [5], Mujalli *et al*. (2024) [4], and Aligarh *et al*., (2023) [11] shown that relative advantages have a positive influence because technology continues to develop and relative advantages are increasingly highlighted, expecially in the adoption process, which affects the extent to which the ease and usefulness of adopting cloud accounting. Thus, the research hypothesis is:

H_1: Relative advantage has a significant positive effect on the perception of usefulness in adopting cloud accounting.

H_2: Relative advantage has a significant positive the perception of ease of use when adopting cloud accounting.

Compatibility is a benchmark where innovation is equivalent and aligned with values, previous experiences, and user requirements [13, 4]. Compatibility can also be interpreted as the extent to which the existing organization can easily integrate the system [13]. Compatibility considers the organization's ability to reconcile new technologies and innovations with existing values, behavioral patterns, and experiences [4]. Research conducted by Chatterjee *et al*., (2021) [13] and Mujalli *et al*. (2024) [4] showed significant positive results because a system not aligned with organizational activities will hinder innovation adoption. However, Chatterjee *et al*., (2021) [13] also revealed that compatibility did not have a significant effect due to the inadequate number of respondents in their study. Thus, the research hypothesis is:

H_3: Compatibility has a significant positive effect on perceived usefulness in adopting cloud accounting.

H_4: Compatibility has a significant positive effect on perceived ease of use in adopting cloud accounting.

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Complexity is the difficulty with which an innovation can be used and understood. The more complex, the lower the acceptance by users and vice versa [11]. Complexity has a negative relationship when adopting innovations, and the lower the level of complexity, the easier it is to adopt innovations [4] companies with challenges in improving or designing operational procedures effectively. In adopting cloud accounting, complexity is assessed based on application integration, data transfer efficiency, implementation duration, and system functionality [13]. However, regarding the intention to adopt cloud accounting, research conducted by Aligarh *et al.* (2023) [11] explains that a high level of complexity will reduce acceptance. The same results are also shown by research conducted by Chatterjee *et al.*, (2021) [13], where complexity will reduce the perception of usefulness. Thus, the research hypothesis is:

H_5: Complexity has a negative significant effect on the perception of usefulness in adopting cloud accounting.
H_6: Complexity has a negative significant effect on the perception of ease of use when adopting cloud accounting.

2.4.2. Organization Context

Organizational factors include management support, resources, and environmental factors, including external influences, government incentives, and anything that can facilitate or hinder business operations [11]. Several studies use other constructs such as company size, available resources, project size, competitive advantage, partner support, and infrastructure [12, 5, 13]. This study will use the organizational context in the form of organizational resources, employee capabilities, and top management support.

Organizational resources are determined by the perception and assessment of managers, commitment, and control of an organization in managing information technology [5]. Technological competence refers to the extent to which an organization utilizes the organization's internal technology assets, such as information technology infrastructure [4] According to Chatterjee *et al.* (2021) [13], implementing innovative technology is influenced by certain characteristics, such as organizational size and resource availability. The availability of resources is an important factor that plays a role in measuring organizational readiness [4]. In addition, the availability of technological resources affects the implementation of electronic data exchange, including the organization's financial and technological readiness [13]. Research conducted by Mujalli *et al.*, (2024) [4], Eldalabeeh *et al.* (2021), [14], dan Chatterjee *et al.* (2021) [13] showed significant positive results because the use of the system depends on the level of organizational ability and knowledge. Thus, the research hypothesis is:

H_7: Organizational resources have a significant positive effect on the perception of usefulness in adopting cloud accounting.

Employees have an important impact on shaping work results and act as company assets [13]. A competent organization reflects skilled employees. Competent, knowledgeable employees are needed to achieve successful technology adoption [13]. This aims to ensure that technology adoption can be realized effectively, considering the varying complexity of the system [13]. Research conducted by Chatterjee *et al.* (2021) [13] and Mujalli *et al.* (2024) [4] showed significant positive results because competent employees will support the adoption of cloud accounting to the maximum because of the ease and usefulness gained from their competence. Thus, the research hypothesis is:

H_8: Employee capability has a significant positive effect on the perception of usefulness in adopting cloud accounting.
H_9: Employee capability has a significant positive effect on the perception of ease of use when adopting cloud accounting.

Top management support increases technological awareness and acceptance of new technologies [11]. This technology can also involve top managers who decide to implement it to learn their leadership style, motivation, and characteristics for top managers with experience in accounting and those without [15]. To build a competitive and dominant market environment, top management support plays a very important role because it allows organizations to overcome internal challenges and resistance to change [11]. This supports the TOE model, where top management support is part of the

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ISSN: 2576-8484
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organizational context. Based on the results of research conducted by Tawfik *et al.* (2023) [5], top management has an insignificant effect on the perception of usefulness but has a significant positive impact on the perception of ease of use because, according to management, finding a service provider who has good experience in the field of cloud accounting is difficult to do. According to Eldalabeeh *et al.* (2021) [14], top management support also has a significant positive effect on the perception of usefulness and ease of use because top management support can reduce resistance and conflict to realize the potential of cloud accounting. Thus, the research hypothesis is:

H_{10}: Top management support has a significant positive effect on the perception of usefulness in adopting cloud accounting.

H_{11}: Top management support has a significant positive effect on the perception of ease of use when adopting cloud accounting.

2.4.3. Environtment Context (Insititutional Theory)

Environmental context is related to the company's operational facilities and constraints [11]. These environmental factors include competitors, business partners, culture, government, incentives, and technological infrastructure [5]. Some studies use other constructs such as competition intensity, market environment, government rules and regulations, competitive pressures, and technological resource infrastructure [12, 5, 13].

Institutional theory is applied to investigate the diffusion or adoption of technology carried out by organizations, which emphasizes that organizational actions or decisions are not driven by structural changes for effectiveness or efficiency but influenced by environmental factors and the need for organizational legitimacy [16]. This theory emphasizes that decisions taken by organizations are outside of rational ways and thinking. Based on Alshirah *et al.* (2021) [16] organizations tend to increase the legitimacy of decision-making through support from the institutional environment and act based on estimates that justify their decisions. This theory also explained the process by which certain structures, rules, schemes, norms, and routines are established and accepted as authoritarian social behavior by investigating their adoption, adaptation, development processes, dissemination, and to what extent they are no longer used [17]. According to Adjei *et al.* (2021) [17], institutions play a role in efforts to understand information technology innovation, and institutions have a stronger influence than innovations that are influenced even though they will change over time. This theory describes three main dimensions called institutional pressure, namely coercive pressure, mimetic pressure, and normative pressure.

Coercive pressure results from informal and formal pressures exerted by other organizations that cause dependence on cultural expectation in the organization's society [16]. When companies are forced to use certain rules or structures, this pressure is forced to be used. Adjei *et al.* (2021) [17] identified the government, parent organizations, and organizations with dominant resources as sources of coercive pressure on the organization. Research conducted by Mujalli *et al.* (2024) [4] showed that coercive pressure had no significant effect because business owners believed it would be financial pressure. Research conducted by Adjei *et al.* (2021) [17] dan Alshirah *et al.* (2021) [16] showed that coercive pressure had a significant positive effect as it guided the company's intention to adopt cloud accounting and led to a better environment. Thus, the research hypothesis is

H_{12}: Coercive pressure significantly affects the intention to adopt cloud accounting.

Mimetic pressure is a factor that refers to ambiguous goals where companies take advantage of and imitate their competitors who are considered successful [16]. With this pressure, organizations will compete to achieve superior performance. In an environment with uncertainty and a poor understanding of technology, organizations will imitate organizations that structurally success [4]. Research conducted by Tawfik *et al.* (2023) [5] shows that mimetic pressure does not have a significant effect because when companies face fierce competition, they tend to implement more aggressive changes. Research conducted by Adjei *et al.* (2021) [17] and Mujalli *et al.*, (2024) [4] shows that mimetic

Edelweiss Applied Science and Technology
ISSN: 2576-8484
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pressure impacts technology adoption due to the competitiveness between organizations. Thus, the research hypothesis is:

H_{13}: Mimetic pressure has a significant positive effect on the intention to adopt cloud accounting.

Normative pressure can arise from business affiliations, networks, and professional associations [4]. Professional networks and associations influence organizations to adopt technology based on normative principles. In normative pressure, cultural professionalism influences an organization where companies must comply with professional standards and valid procedures [4]. Research conducted by Mujalli *et al.*, (2024) [4] showed significant positive results because companies carried out normative pressure without coercion but encouraged company compliance, especially in the technology field. However, research conducted by Adjei *et al.* (2021) [17] showed negative results due to perceived obstacles. Thus, the research hypothesis is

H_{14}: Normative pressure has a significant positive effect on the intention to adopt cloud accounting.

2.5. Technology Acceptance Model (TAM)

Technology acceptance model (TAM) is introduced by Davis, *et al.* (1989) [18]. The model explains the factors that influence when users adopt new devices or technologies and apply them in the field. Based on Aligarh *et al.* (2023) [11], adopting new technology depends on the perception of usefulness and the perception of use, where TAM emphasizes both perceptions as key factors influencing system use. TAM facilitates estimating individuals' adoption and utilization of information technology in a professional environment. TAM combines the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) to explain the perspective user actors. TAM influences the user's views and ease of use of new technology, indirectly influencing the user's desire to adopt the technology and shaping user behavior towards the technology.

Perceived usefulness refers to the user's belief in the capacity of a technology to improve their performance [4]. The perception of the usefulness of technology will motivate users to use the technology [13]. In perceived usefulness, the usefulness perceived by the user refers to the user's belief in the effectiveness of technology to improve job performance.

Perceived ease of use is related to factors that determine user acceptance, which indicates the extent to which users feel the technology is easy to use without making significant effort [4]. Mujalli *et al.* (2024) also explained that perceived ease of use indicates that if a system is easy to use, it will be more likely to be used.

Based on research conducted by Chatterjee *et al.*, (2021), the two elements of the TAM model, namely perceived usefulness and perceived ease of use, determine user intentions in technology that correlate with ERP satisfaction. Based on, perceived usefulness and ease of use are fundamental and different constructs that influence the decision to use information technology. TAM was originally proposed to explain acceptance intentions but was verified when describing user intentions or system success. Davis, *et al.* (1989) [18] demonstrated that both perceptions influence user attitudes toward the use of technology and intentions to use it, resulting in actual use.

The following is the TAM framework presented by Davis, *et al.* (1989) [18].

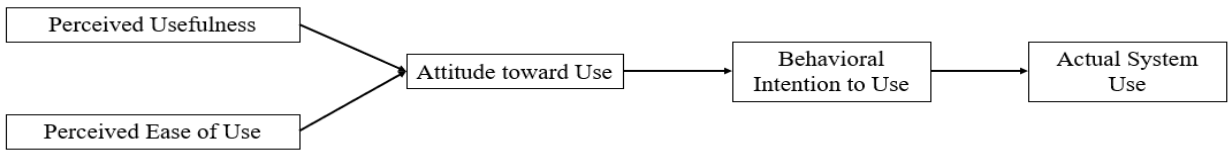

Figure 2.
Framework technology acceptance model (TAM).
Source: Davis *et al.* (1989).

The ease of use of a system or technology is referred to as the perception of ease by system users [4]. The perception of the usefulness of technology will motivate users to use the technology Chatterjee *et al.*, (2021) [13]. To clarify the willingness of individuals to use technology, the perception of usefulness has been effectively used, which shows that the application system improves user performance in an organization. Perceived usefulness includes job relevance and quality of results. This encourages the interpretation that individuals form a perceived usefulness assessment because users can compare what needs to be done and achieved in their work Chatterjee *et al.*, (2021) [13]. Research conducted by Chatterjee *et al.*, (2021) [13] and Mujalli *et al.* (2024) [4] showed significant positive results because the perception of usefulness directs and motivates users to adopt technology. Thus, the research hypothesis is as followz

H_{15}: Perceived usefulness significantly affects the intention to adopt cloud accounting.

Perceived ease of use predicts user intention to use a new system or technology [4]. If a system is easy to use, then the system will have a greater chance of being used [4]. Research conducted by Chatterjee *et al.*, (2021) [13] shows a positive influence on perceived ease of use, which means that the intention to adopt cloud accounting depends on the ease of use. Thus, the research hypothesis is:

H_{16}: Perceived ease of use has a significant positive effect on the intention to adopt cloud accounting.

H_{17}: Perceived ease of use has a significant positive effect on perceived usefulness.

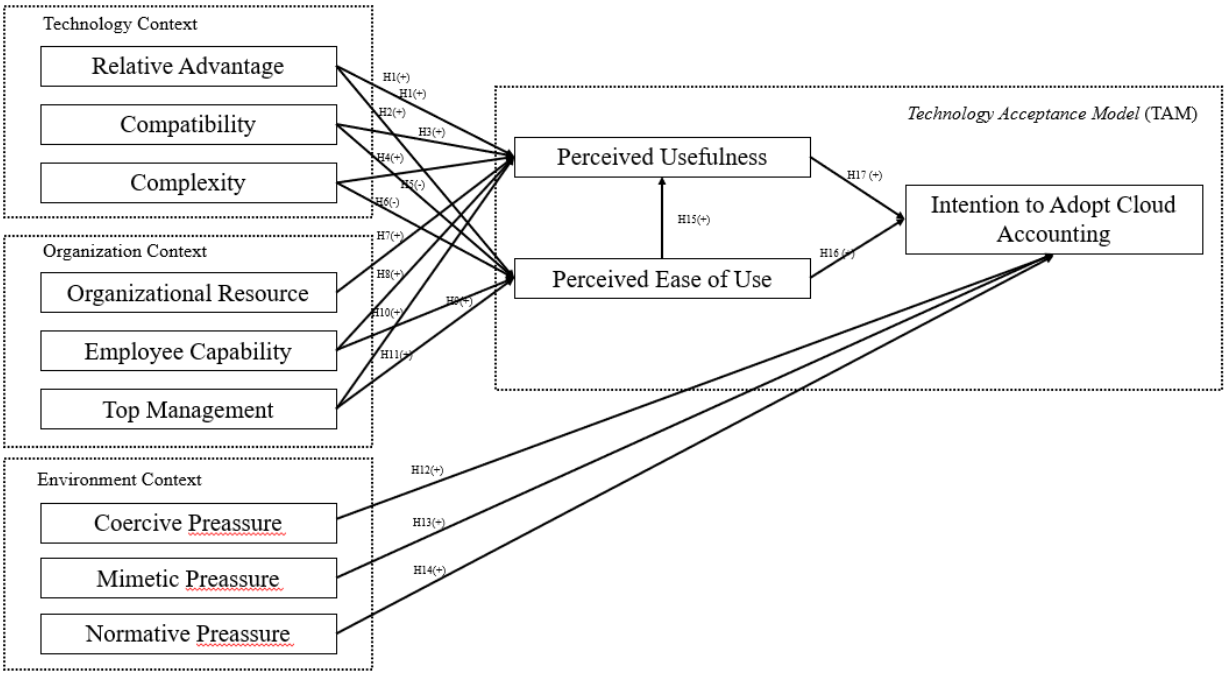

Figure 3.
Research model.

3. Research Methodology

This study was conducted to determine and identify the relationship between technological and organizational factors, their impact on perceived benefits, and their influence on the intention to adopt cloud accounting. This study uses a quantitative method, and data samples are collected through a questionnaire. The questionnaire was distributed to respondents who were employees of start-up companies and worked in the accounting department. Based on the start-up ranking, as of January 11,

Edelweiss Applied Science and Technology
ISSN: 2576-8484
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2024, Indonesia had 2,566 companies, and the number of samples needed according to the Slovin formula was 346. The questionnaire was distributed online, and 346 data were received, with 340 valid data. The measurement is using Linkert scale with a 5-point scale ranging from 1 (farthest from the indicator) and 5 (closest to the indicator). Data analysis using the PLS-SEM method involving an outer model consisting of convergent validity, discriminant validity, average variance extracted (AVE), and composite reliability and an inner model consisting of r-square, f-square, q-square, and estimate for path coefficients, as well as importance-performance Map analysis. The application used is Smart PLS 4.0

4. Results and Discussion of Findings

4.1 Descriptive Analysis

This study focuses on accounting employees working in start-up companies in Indonesia. It used 346 samples based on the Slovin formula. Data were collected by distributing questionnaires online to respondents. Of the 346 questionnaires distributed, all were received, and 100% could be processed. The following is the profile of respondents who participated in this study, presented in Table 1.

Table 1.
Respondent profile.

Variable identity respondent	Category	Amount	Percentage
Gender	Man	128	37%
	Woman	218	63%
Age	18-24	81	23%
	25-30	121	35%
	31-35	67	19%
	36-40	32	9%
	41-45	28	8%
	46-50	7	2%
	51-55	2	1%
	>55	8	2%
Company field	Education	15	4%
	Tourist	10	3%
	Technology information	52	15%
	Finance	66	19%
	Insurance start-up	16	5%
	Securities	4	1%
	Ecommerce	24	7%
	Health	9	3%
	Property	11	3%
	Agriculture	6	2%
	Accommodation	3	1%
	Transportation	9	3%
	Expedition	7	2%
	Trading	44	13%
	Industry	31	9%
	Outsourcing	8	2%
	Food and beverage	7	2%
	Entertainment	1	0%
	Health	9	3%
	Manufacturing	2	1%
	Tourist	7	2%

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Variable identity respondent	Category	Amount	Percentage
	Other	5	1%
Years of service	< 5 years	160	42%
	5-10 years	144	46%
	11-20 years	40	12%
	>21 years	2	1%

Source: Primary data processed , 2024.

Based on Table 1, the percentage of demographic data, such as gender, age, company industry, and length of service of respondents, can be seen. Based on the data collected, the female respondents were 218 (67%), and the male respondents were 128 (37%). Based on age, most respondents were aged 25-30 years, namely 121 people (35%). Then, based on the company industry, most respondents worked in the financial sector, with as many as 66 people (19%), and in information technology, as many as 52 people (15%). Based on respondents' service length, most respondents had worked in the range of 5-10 years, namely 160 people (46%) and 144 people (42%) under five years.

4.2. Results

4.2.1. Outliers

After calculating the Z-score value, 6 respondents' answers were detected as outlier data, which required the data to be removed so that the total data that could be tested became 340 respondents' answers. After conducting an outlier evaluation, identification was carried out on data that had missing values. The tolerance value in SEM-PLS for missing values is a maximum of 5% of the total per indicator that is still accepted or maintained. Based on the processed data, there are no missing values from the indicators studied. Thus, all indicators can be maintained.

4.2.2. Outer Model

4.2.2.1. Convergent Validity

The test results presented in Table 2 show that most indicators have values above 0.7. These results indicate that the indicators in 1 construct have similar movements and are grouped. However, there are several indicators with values below 0.7, which means that these indicators must be removed from the data.

Table 2.
Convergent validity.

	RA	CA	CM	OR	EC	TM	CP	MP	NP	PU	PEU	IAC
RA1	0.890											
RA2	0.840											
RA3	0.829											
RA4	0.590											
CA1		0.823										
CA2		0.873										
CA3		0.841										
CM1			0.905									
CM2			0.793									
CM3			0.355									
CM4			0.365									
OR1				0.842								
OR2				0.860								
OR3				0.853								

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	RA	CA	CM	OR	EC	TM	CP	MP	NP	PU	PEU	IAC
OR4				0.894								
EC1					0.858							
EC2					0.863							
EC3					0.794							
EC4					0.823							
TM1						0.837						
TM2						0.872						
TM3						0.887						
TM4						0.858						
CP1							0.902					
CP2							0.911					
CP3							0.897					
MP1								0.785				
MP2								0.834				
MP3								0.903				
NP1									0.902			
NP2									0.901			
NP3									0.888			
PU1										0.850		
PU2										0.895		
PU3										0.864		
PU4										0.826		
PEU1											0.853	
PEU2											0.890	
PEU3											0.849	
PEU4											0.848	
ICA1												0.863
ICA2												0.890
ICA3												0.886
ICA4												0.881

Source: Primary data processed, 2024.

Below ada the removed indicators from the data.

Table 3.
Deleted indicator.

	RA	CM
RA4	0.590	
CM3		0.355
CM4		0.365

Source: Primary data processed, 2024.

Based on Table 3, both indicators are result are below 0.7. Thus, both must be removed from testing.

4.2.2.2. Discriminant Validity

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

Based on Table 4, all groups have the highest loading values on their constructs. The data shows that all variables are validated discriminant, and each loading value is greater than the loading from the correlation with other variables.

Table 4.
Discriminant validity.

	IAC	EC	CA	RA	CM	TM	PU	PEU	OR	CP	MP	NP
IAC	0.880											
EC	0.740	0.835										
CA	0.674	0.724	0.846									
RA	0.750	0.731	0.717	0.853								
CM	0.661	0.714	0.653	0.661	0.851							
TM	0.747	0.799	0.719	0.772	0.692	0.864						
PU	0.788	0.760	0.683	0.727	0.655	0.754	0.859					
PEU	0.794	0.801	0.703	0.722	0.660	0.780	0.811	0.860				
OR	0.702	0.767	0.715	0.711	0.624	0.829	0.722	0.760	0.863			
CP	0.471	0.542	0.495	0.450	0.457	0.501	0.451	0.554	0.568	0.903		
MP	0.478	0.545	0.491	0.443	0.458	0.528	0.477	0.547	0.574	0.663	0.842	
NP	0.478	0.560	0.521	0.461	0.469	0.517	0.508	0.556	0.568	0.792	0.734	0.897

Source: Primary data processed, 2024.

4.2.2.3. Average Variance Extracted (AVE)

Based on Table 5, all variables have AVE values above 0.5. These results indicate that the relationship between each construct and endogenous and exogenous variables is discriminant validated. Thus, each variable is worthy of being continued in testing.

Table 5.
Average variance extracted (AVE).

	Average variance extracted (AVE)
IAC	0.775
EC	0.698
CA	0.716
RA	0.728
CM	0.724
TM	0.746
PU	0.738
PEU	0.740
OR	0.744
CP	0.816
MP	0.709
NP	0.805

Source: Primary data processed, 2024.

4.2.2.4. Composite Reliability

Based on Table 6, the value generated from the composite reliability on all variables has exceeded 0.7, which means that all variables have been tested for reliability. In addition, all variables have values above 0.8, which means that the reliability of all variables tends to be high.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

Table 6.
Composite reliability.

	Composite reliability
IAC	0,932
EC	0,902
CA	0,883
RA	0,889
CM	0,839
TM	0,922
PU	0,918
PEU	0,919
OR	0,921
CP	0,930
MP	0,879
NP	0,925

Source: Primary data processed, 2024.

4.2.3. Inner Model

An inner model test must be conducted to determine the relationship between exogenous and endogenous variables. Tests were carried out, namely R-square, estimate for path coefficients, effect size (F-square), and prediction relevance (Q-Square).

4.2.3.1. R-Square

Based on Table 7, the R-Square value produced on all variables is above 0.67. These results indicate that the determination coefficient of endogenous constructs is strongly related.

Table 7.
R-square.

	R-square	R-square adjusted
IAC	0.694	0.689
PU	0.722	0.717
PEU	0.714	0.710

Source: Primary data processed, 2024.

4.2.3.2. Effect Size (F-Square)

Based on the results of the F-Square test presented in Table 9, the model is categorized as a small category because the F-Square value is above 0.02, but below 0.15 is employee ability towards perceived ease of use, relative advantage towards perceived ease, and top management towards perceived ease of use. The model categorized as a medium category is top management towards perceived ease of use, perceived usefulness, and perceived ease of use towards intention to adopt cloud accounting, and organizational resources towards perceived usefulness because the F-Square value is above 0.15 but below 0.35. However, not all constructs have an F-Square value above 0.02, which means that the influence of exogenous constructs on endogenous constructs is relatively small.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
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Table 8.
F-Square.

	F-square
EC->PU	0.012
EC->PEU	0.145
CA -> PU	0.003
CA -> PEU	0.018
RA -> PU	0.027
RA-> PEU	0.019
CM -> PU	0.007
CM-> PEU	0.003
TM -> PU	0.006
TM-> PEU	0.063
PU -> ICA	0.198
PEU -> ICA	0.169
PEU -> PU	0.170
OR -> PU	0.003
CP -> ICA	0.003
MP -> ICA	0.003
NP -> ICA	0.002

Source: Primary data processed, 2024.

4.2.3.3. Prediction Relevance (Q-Square)

Based on the results of the Q-Square test presented in Table 10, all values generated are above 0.35. This shows that the predictive ability of the model is very strong.

Table 9.
Q-Square.

	Q^2predict
ICA1	0.519
ICA2	0.507
ICA3	0.458
ICA4	0.507
PU1	0.460
PU2	0.494
PU3	0.502
PU4	0.476
PEU1	0.539
PEU2	0.550
PEU3	0.476
PEU4	0.515

Source: Primary data processed, 2024.

4.2.3.4. Estimate for Path Coefficients

Based on Table 8, the data processing results in original samples are presented: actual values, sample averages, standard deviations, t-statistics, and P Values. The variables of employee ability, suitability, relative advantage, complexity, top management, and organizational resources do not significantly affect perceived usability. Then, the complexity variable does not significantly affect perceived ease of use; all environmental contexts, namely mimetic pressure, coercive pressure, and normative pressure, do not significantly affect the intention to adopt cloud accounting. However, the

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

variables of complexity, suitability, relative advantage, top management, and perceived ease of use have a significant positive effect on perceived ease of use. In addition, perceived usefulness and ease of use variables significantly positively affect the intention to adopt cloud accounting.

Table 10.
Estimate for path coefficients.

	Original samples	Sample mean	Standard deviation	T statistics	P values	Results	Conclusion
KK -> PK	0.140	0.139	0.082	1,700	0.089	Not significant	Not proven
KK -> PKK	0.394	0.390	0.064	6,134	0,000	Significant positive	Proven
KS -> PK	0.063	0.062	0.057	1,121	0.262	Not significant	Not proven
KS -> PKK	0.122	0.124	0.052	2,327	0.020	Significant positive	Proven
KR -> PK	0.118	0.123	0.077	1,533	0.125	Not significant	Not proven
RA -> PEU	0.128	0.129	0.057	2,227	0.026	Significant positive	Proven
CM -> PU	0.018	0.018	0.056	0.316	0.752	Not significant	Not proven
CM -> PEU	0.017	0.018	0.045	0.379	0.705	Not significant	Not proven
TM -> PU	0.119	0.124	0.083	1,428	0.153	Not significant	Not proven
TM -> PEU	0.267	0.267	0.061	4,376	0,000	Significant positive	Proven
PU -> IAC	0.426	0.425	0.067	6,321	0,000	Significant positive	Proven
PEU -> IAC	0.421	0.422	0.071	5,917	0,000	Significant positive	Proven
PEU -> PU	0.425	0.419	0.083	5,114	0,000	Significant positive	Proven
OR -> PU	0.053	0.051	0.064	0.822	0.411	Not significant	Not proven
CP -> IAC	0.055	0.056	0.053	1,034	0.301	Not significant	Not proven
MP -> IAC	0.043	0.045	0.047	0.905	0.365	Not significant	Not proven
NP -> IAC	-0.047	-0.049	0.055	0.855	0.393	Not significant	Not proven

Source: Primary data processed, 2024.

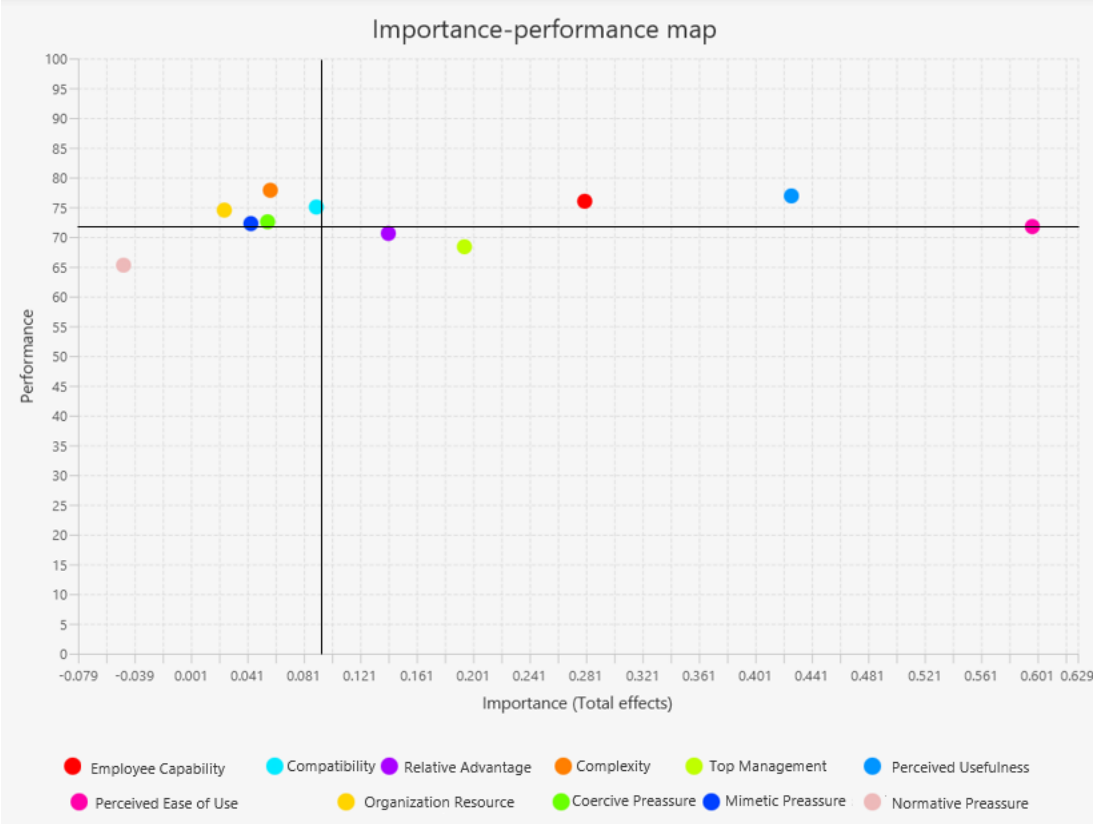

Figure 4.
Importance-performance map analysis.
Source: Processed data, 2024.

4.2.4. Importance-performance Map Analysis (IPMA)

Information:

Quadrant I : Side left of the Y line above the X line.
Quadrant II : Side right of line Y, above line X.
Quadrant III : Next door left of line Y, below line X.
Quadrant IV : Side right of line X, below line Y.

Based on Figure 4, the X line benchmark is 72.699, the average of performance, and the Y line benchmark is 0.103, the average of importance. In the graph shown, the perception of usefulness and employee ability is in quadrant I, which means that both variables have high performance and importance. Then, the relative advantage and coercive pressure are in quadrant II, which means these variables have good performance in influencing the dependent variable but are not very important. The perceived ease of use variable is between quadrant II and quadrant IV, which shows that the perception of ease of use is very important, and only some have good performance in influencing the dependent variable.

For the variables of complexity, coercive pressure, mimetic pressure, organizational resources, and compatibility, the values formed are in quadrant I, which means that they are not important but have good performance to influence the dependent variable. For the normative pressure variable, the resulting value is in quadrant III, meaning that it is unimportant and does not have good performance to influence the dependent variable.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

5. Discussion

Based on Table 10, the effect of relative advantage on perceived usability (H1) is not significant. Even though the system can be easy to use, it does not guarantee that users can feel the relative advantage of the system. This is also supported by the model of start-up companies that continue to innovate [3]. Thus, the relative advantage of system usability will continue to change according to the company's needs. However, the effect of relative advantage on Perceived Ease of Use (H2) shows a significant positive result because if the system is easy to use, users will find it easier to adopt and feel the relative advantage of the ease of use of the system. These results are in line with the research Chatterjee *et al.*, (2021) [13], Tawfik *et al.* (2023) [5], Mujalli *et al.* (2024) [4], dan Aligarh *et al.*, (2023) [11], which stated that perceived ease of use determines whether the system will be continued for use in the company,

The effect of compatibility on perceived usefulness (H3) has insignificant results because, in start-up companies, usability does not depend on suitability but on the technology needed to create perceived usefulness. Then, suitability has a significantly positive effect on perceived ease of use (H4) as a high level of suitability will allows users to use the system smoothly without requiring significant adjustments. These results align with research conducted by Chatterjee *et al.*, (2021) [13] dan Mujalli *et al.*, (2024) [4] because suitability is a reference for how innovation is equivalent to value, company experience, and user requirements.

The effect of complexity on perceived usefulness (H5) and perceived ease of use (H6) does not significantly impact. Start-up businesses are pioneering businesses that tend to be small in scale and different from traditional or latent companies in terms of innovation, ambition, and growth orientation [7]. Thus, start-ups tend to be more flexible. Because of these changes, the complexity level will continue to vary, so complexity is not the main influence on the perception of usefulness and ease of use when adopting cloud accounting. Organizational resources do not significantly influence the perception of usefulness (H7). It's due to the company already having adequate resources, so it is not a benchmark for the use of technology. Then, cloud accounting itself has affordable and easy-to-do features, so the system's use depends on how users use it. Thus, the perception of usefulness will depend on the cloud system because the company's resources are adequate.

Organizational resources have no significant effect on perceived usability (H7). The company already has adequate resources, so it is not a benchmark for technology use. Then, cloud accounting itself already has affordable and easy-to-use features, so the system's use depends on how users use it. Thus, the perception of usability will depend on the cloud system because the company's resources are adequate.

Employee capability has no significant effect on perceived usability (H8). Even though employees can adapt to using the system, they will not necessarily achieve perceived usability because of changes from various directions, such as company needs, system users, and technology. Modifications made by start-up businesses will drive employees to continue to adjust their abilities to create the expected perception of usability, even though employees can use the system easily. However, employee capability significantly positively affects perceived ease of use (H9) because educated and knowledgeable employees will understand the job demands. These results align with research conducted by Chatterjee *et al.* (2021) [13] dan Mujalli *et al.* (2024) [4] because competent employees will support the adoption of cloud accounting to the maximum because of the convenience gained from their competence.

Top management does not significantly affect the perception of usability (H10) because cloud accounting is a company need. However, rather than focusing on finding more adequate cloud services to create the expected perception of usability, top management will dominate the company's needs, such as operational efficiency, cost savings, business growth, and others. However, top management significantly positively affects the perception of ease of use (H11). Top management support can reduce resistance and conflict to realize the potential of cloud accounting, thereby increasing the system's perception of ease of use. These results are in line with research conducted by Chatterjee *et al.* (2021) [13], Mujalli *et al.* (2024) [4], Eldalabeeh *et al.*, (2021) [14] dan Aligarh *et al.* (2023) [11] because

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

technical progress viewed by top managers includes developing a long-term vision, strengthening value, resource allocation, efficiency and support to overcome barriers to change.

Coercive pressure does not significantly affect the intention to adopt cloud accounting (H12). The results of this study are in line with the research of Mujalli *et al.* (2024), [4] because coercive pressure also has the potential to damage competitiveness, but its impact is not yet known, and not all regulatory enforcement is carried out appropriately and effectively. Pressure from corporate partners, financial institutions, community culture, and other organizations are not the pressure that drives the adoption of cloud accounting but the needs of the company itself and vice versa. So, changes and innovations from start-ups that tend to be more independent will align with policies suitable for managing coercive pressure.

Mimetic pressure does not significantly affect the intention to adopt cloud accounting (H13). The results of this study are in line with research conducted by Tawfik *et al.* (2023) [5] because when companies face tough competition, companies will tend to implement more aggressive changes. This means that when companies know that competitors are not interested in cloud accounting, they will ignore it. Companies will also adopt cloud accounting based on their needs rather than paying attention to what competitors use and the company's activities as a reference for running a business.

Normative pressure does not significantly influence the intention to adopt cloud accounting (H14). Companies must comply with professional standards, procedures, and systems supported by institutions because they are normative. Based on research conducted by Bergmann *et al.* (2020) [9], start-up companies tend to be independent and continue to innovate so that norms do not bind them. Therefore, start-ups adopt technology based on their internal needs. Thus, normative pressure does not significantly influence the intention to adopt cloud accounting.

Perceived usefulness significantly affects the intention to adopt cloud accounting (H15). This positive significant effect is in line with research conducted by Chatterjee *et al.* (2021), [13], Na *et al.* (2022), [12], Eldalabeeh *et al.* (2021) [14] and Mujalli *et al.* (2024) [5], because the perception of the usefulness of technology will motivate users to use the technology. In the perception of usefulness, the usefulness perceived by the user refers to the user's belief in the effectiveness of technology to improve job performance. Perceived usefulness shows that the application system enhances company performance, including job relevance and results quality, which encourages the interpretation that individuals form an assessment of perceived usefulness. Users can compare what needs to be done and achieved. Thus, users will have the intention to adopt cloud accounting.

Perceived ease of use has a significant positive effect on the perception of usefulness (H16). This positive significant result is in line with research conducted by Chatterjee *et al.* (2021) [13], Na *et al.* (2022) [12], Eldalabeeh *et al.* (2021) [14] dan Mujalli *et al.* (2024) [4]. According to Mujalli *et al.* (2024) [4], perceived ease of use predicts user intention to use a new system or technology. If a system is easy to use, then users will find it easier to feel the usefulness of the system. Users will also have more intention to use the system as they think about the system's usefulness and to run their business; users will prefer a useful and easy-to-use system.

Perceived Ease of use significantly affects the intention to adopt cloud accounting (H17). Significant positive results were also found in studies conducted by Chatterjee *et al.* (2021) [13], Na *et al.* (2022) [12], Eldalabeeh *et al.* (2021) [14] dan Mujalli *et al.* (2024) [4]. According to Mujalli *et al.* (2024) [4], perceived ease of use predicts user intention to use a new system or technology where users will prefer to use a system that is easy to use rather than a complicated accounting system.

6. Conclusion

Start-up companies are small and flexible businesses that are easy for top management to pay attention to. They are also dominant in using technology. However, the adoption of cloud accounting is not growing as fast as expected due to a lack of resources, accessibility, and knowledge. The information technology used by the company will determine the increase in the company's competitiveness and profits. The use of cloud systems supports companies in competing in today's economic environment.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

Cloud systems eliminate the need for users on devices but allow use with access anywhere with a network connection. Start-ups are known as companies that predominantly use technology. In the context of technology, ERP systems, accountants, and management are involved in running the accounting process, especially in cloud-based accounting systems [6].

However, the adoption of cloud accounting is growing slower than expected. This can be due to technical problems such as flexibility, human resources, technology experience, and others. Technological and organizational factors influence the perception of the system's ease of use, providing convenience, efficiency, and improved job performance. This concept is the technology organization environment (TOE), which explains cloud-based accounting applications. According to Ma *et al.*, (2021) [8], perceived ease is the extent to which a person believes that using a system will be free from effort, and perceived usefulness is where a person believes that using a particular system will improve their job performance. These perceptions are elements of the technology acceptance model (TAM). This model has successfully predicted and explained user intentions in various contexts to take advantage of performance efficiency and productivity from cloud accounting if users have accumulated sufficient knowledge and resources. According to Mujalli *et al.*, (2024) [4], environmental factors such as availability, reliability, and security issues also influence the use of cloud-based accounting.

Viewed from the TOE framework, all technology context variables consisting of relative advantage, suitability, and complexity do not significantly affect the perception of usefulness but have a significant positive effect on the perception of ease of use except complexity. This is supported because ease of use is easily adapted by users related to the three variables. However, regarding the perception of usefulness, since the start-up business is a flexible pioneering business, there will continue to be changes that cause the technology context to occur uncertainly, so it will be challenging to obtain the expected perception of usefulness.

In the organizational context consisting of organizational resources, employee capabilities, and top management, all variables do not significantly affect the perceived usefulness, but they are positively impacting the perceived ease of use. The organizational context increases the perception of ease of use to reduce the uncertainty of system use, and employees are important company assets. If employees find it easy to use the system, the perception of ease of use will be easier to create. However, because start-ups are still flexible, there is a drive to innovate, which will drive change. Management also perceives that finding the right cloud service is difficult, and not all accountants understand cloud accounting. Thus, the organizational context has no significant effect on the perception of usefulness.

In an environment consisting of coercive, mimetic, and normative pressure, all variables do not significantly affect the intention to adopt cloud accounting because it will be financial pressure. This will be something that must be highlighted for businesspeople and companies; cloud accounting is not necessarily a strong pressure for them. In the TAM framework, the perception of usefulness significantly positively affects the intention to adopt cloud accounting as it will motivate users to use the technology. The same results are also shown by the perception of ease of use on the perception of usefulness and the intention to adopt cloud accounting because the perception of ease-of-use acts as a predictor of the user's intention to use a new system or technology where if a system is easy to use, then the greater the chance of being adopted will be easier. Likewise, with its usefulness, if the system is easier to use, the intention to use it will be greater.

7. Limitations

This study has limitations: the data collected is only in Indonesia, and start-up companies continue to grow. If the study is conducted in various countries, the differences in work culture will be increasingly apparent, affecting the study results. Future research is expected to be able to investigate further for a larger sample scale. In addition, this study only presents cross-sectional data because it was only collected in a certain period, so paying attention to the long-term impact is necessary, especially as cloud accounting continues to grow.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

References
[1] A. Adrianto and R. Hidayat, "Pengguna Bisnis Start up di Indonesia," *Pros. Semin. Nas. Sos. Humaniora, dan Teknol.* , pp. 858–861, 2022, [Online]. Available: https://journals.stimsukmamedan.ac.id/index.php/senashtek/article/view/283.
[2] startup ranking, "Indonesia Top Startups - Ruangguru, Uzone Indonesia, Alodokter.com | Startup Ranking," *2022*. [Online]. Available: https://www.startupranking.com/top/indonesia.
[3] A. Ghezzi, A. Cavallo, S. Sanasi, and A. Rangone, "Opening up to startup collaborations: open business models and value co-creation in SMEs," *Compet. Rev.*, vol. 32, no. 7, pp. 40–61, 2022, doi: 10.1108/CR-04-2020-0057.
[4] A. Mujalli, M. J. G. Wani, A. Almgrashi, T. Khormi, and M. Qahtani, "Investigating the factors affecting the adoption of cloud accounting in Saudi Arabia's small and medium-sized enterprises (SMEs)," *J. Open Innov. Technol. Mark. Complex.*, vol. 10, no. 2, p. 100314, 2024, doi: 10.1016/j.joitmc.2024.100314.
[5] O. I. Tawfik, O. Durrah, K. Hussainey, and H. E. Elmaasrawy, "Factors influencing the implementation of cloud accounting: evidence from small and medium enterprises in Oman," *J. Sci. Technol. Policy Manag.*, vol. 14, no. 5, pp. 859–884, 2023, doi: 10.1108/JSTPM-08-2021-0114.
[6] R. C. Robalo and J. A. Moreira, "The influence of power strategies in AIS implementation processes," *Int. J. Account. Inf. Syst.*, vol. 39, no. xxxx, p. 100487, 2020, doi: 10.1016/j.accinf.2020.100487.
[7] T. Kubota and S. Okuda, "Relationship between Top Managers' Interest in Accounting Information and Accounting Practices in Startups," *SSRN Electron. J.*, vol. 51, no. July, p. 100640, 2022, doi: 10.2139/ssrn.4083416.
[8] D. Ma, R. Fisher, and T. Nesbit, "Cloud-based client accounting and small and medium accounting practices: Adoption and impact," *Int. J. Account. Inf. Syst.*, vol. 41, no. 2021, p. 100513, 2021, doi: 10.1016/j.accinf.2021.100513.
[9] M. Bergmann, C. Brück, T. Knauer, and A. Schwering, "Digitization of the budgeting process: determinants of the use of business analytics and its effect on satisfaction with the budgeting process," *J. Manag. Control*, vol. 31, no. 1–2, pp. 25–54, 2020, doi: 10.1007/s00187-019-00291-y.
[10] M. Saad *et al.*, "Assessing the Intention to Adopt Cloud Accounting during COVID-19," *Electron.*, vol. 11, no. 24, pp. 1–19, 2022, doi: 10.3390/electronics11244092.
[11] F. Aligarh, B. Sutopo, and W. Widarjo, "The antecedents of cloud computing adoption and its consequences for MSMEs' performance: A model based on the Technology-Organization-Environment (TOE) framework," *Cogent Bus. Manag.*, vol. 10, no. 2, 2023, doi: 10.1080/23311975.2023.2220190.
[12] S. Na, S. Heo, S. Han, Y. Shin, and Y. Roh, "Acceptance Model of Artificial Intelligence (AI)-Based Technologies in Construction Firms: Applying the Technology Acceptance Model (TAM) in Combination with the Technology–Organisation–Environment (TOE) Framework," *Buildings*, vol. 12, no. 2, 2022, doi: 10.3390/buildings12020090.
[13] S. Chatterjee, N. P. Rana, Y. K. Dwivedi, and A. M. Baabdullah, "Understanding AI adoption in manufacturing and production firms using an integrated TAM-TOE model," *Technol. Forecast. Soc. Change*, vol. 170, no. May, p. 120880, 2021, doi: 10.1016/j.techfore.2021.120880.
[14] A. R. ELDALABEEH, M. O. AL-SHBAIL, M. Z. ALMUIET, M. B. BAKER, and D. E'LEIMAT, "Cloud-Based Accounting Adoption in Jordanian Financial Sector," *J. Asian Financ. Econ. Bus.*, vol. 8, no. 2, pp. 833–849, 2021, doi: 10.13106/jafeb.2021.vol8.no2.0833.
[15] A. Paula Monteiro, J. Vale, E. Leite, M. Lis, and J. Kurowska-Pysz, "The impact of information systems and non-financial information on company success," *Int. J. Account. Inf. Syst.*, vol. 45, no. March, p. 100557, 2022, doi: 10.1016/j.accinf.2022.100557.
[16] M. H. Alshirah, A. Lutfi, A. F. Alshira'h, M. Saad, N. M. E. S. Ibrahim, and F. M. Mohammed, "Influences of the environmental factors on the intention to adopt cloud based accounting information system among SMEs in Jordan," *Accounting*, vol. 7, no. 3, pp. 645–654, 2021, doi: 10.5267/j.ac.2020.12.013.
[17] J. K. Adjei, S. Adams, and L. Mamattah, "Cloud computing adoption in Ghana; accounting for institutional factors," *Technol. Soc.*, vol. 65, no. April 2021, p. 101583, 2021, doi: 10.1016/j.techsoc.2021.101583.
[18] C. Bertagnolli, "Delle vicende dell'agricoltura in Italia; studio e note di C. Bertagnolli.," *Delle vicende dell'agricoltura Ital. Stud. e note di C. Bertagnolli.*, vol. 13, no. 3, pp. 319–340, 2011, doi: 10.5962/bhl.title.33621.

Appendix 1
Questionnaire listing
1. Personal detail
a. Name
b. Gender
c. Perusahaan

d. Bidang perusahaan
e. Jabatan
2. In which age range you are now?
a. <36 years old
b. 36-40 years old
c. 41-45 years old
d. 51-55 years old
e. 56-60 years old
f. >60 years old
3. How long have you worked?
a. < 5 years
b. 5-10 years
c. 11-20 years
d. >21 years
4. Is the accounting information system used cloud-based? (1=Yes, 0=No)
5. For the indicators below, choose the most appropriate one on a scale of 1 (furthest) to 5 (closest).

Context	Variable	Measurement	Reference
Technology context	Relative advantages	When I use cloud accounting, I can improve my work whenever and as needed	[11, 4, 13]
		When I use cloud accounting, I can access information whenever and wherever	
		When I use cloud accounting, I can reduce operational costs	
		When I use cloud accounting, I don't need to maintain information technology infrastructure	
	Compatibility	If there is a problem of incompatibility, we ask the cloud service provider to offer integrated services	[4, 13]
		Cloud accounting is in accordance with the existing technology architecture in my company	
		Designing in cloud accounting is easy	
		Cloud accounting is in accordance with the existing information technology infrastructure	
	Complexity	Cloud accounting information systems is very flexible to use	[4, 13]
		Using cloud accounting informs me about the vulnerability of computer damage and data loss	
		When using cloud accounting, I find it difficult to integrate existing work with cloud-based services	
		When doing many tasks together, using cloud accounting takes up my time	
Organization context	Organizational resource	Our company has financial resources to support the use of cloud accounting	[11, 4, 13]

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 8, No. 4: 2202-2224, 2024
DOI: 10.55214/25768484.v8i4.1592

Context	Variable	Measurement	Reference
		Our company has information technology resources to support the use of cloud accounting	
		Our company is willing to provide training on cloud	
		Our company is ready to provide technical expertise to support the adoption of cloud accounting	
	Employe capability	Our employees understand information technology	[11, 4]
		Our employees' understanding of cloud accounting is very good	
		Our company has at least one employee who is an expert in cloud accounting	
		Our employees have sufficient knowledge to use the results produced by cloud accounting	
	Top management	Top management is aware of the benefits of cloud accounting	[11, 4, 13]
		Top management is very interested in cloud accounting	
		Top management provides strong support for the use of cloud accounting	
		Top management provides sufficient financial resources to implement cloud accounting	
Environtment context	Coercive preassure	Company partners pressure the company to adopt cloud accounting	[4, 16]
		Suppliers pressure companies to adopt cloud accounting	
		Financial institutions pressure the company to adopt cloud accounting	
	Mimetic preassure	Our company imitates competitors and adopts cloud accounting	[4, 16]
		Our company's pressure causes competitors to imitate and adopt cloud accounting	
		Our company's adoption of cloud accounting is influenced by what industry leaders have done	
	Normative preassure	Company partners pressure the company to adopt cloud accounting	[4, 16]
		Regulators pressure company to adopt cloud accounting	
		External auditors pressure company to adopt cloud accounting	
Perceived usefulness		I agree that using cloud accounting makes our company more efficient	([4, 13]
		I believe that using cloud accounting increases organizational productivity	
		I can achieve things faster with cloud accounting	
		Cloud accounting reduces labor costs	

Edelweiss Applied Science and Technology
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Context	Variable	Measurement	Reference
Perceived ease of use		The process of using cloud accounting is easy for me to understand	([4, 13]
		I will be able to use cloud accounting in my company	
		I agree that all employees can learn about using cloud accounting	
		It is very easy to use cloud accounting.	
Intention to adopt cloud accounting		Overall, I think using cloud accounting services is beneficial	[4, 13]
		Overall, I support the use of cloud accounting services	
		I want to use cloud accounting to its full potential	
		Overall, I think using cloud accounting will help increase our company's productivity.	

Edelweiss Applied Science and Technology
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