CHAPTER I
INTRODUCTION

1.1 Background of the Research

Digitalization acts as a fundamental element and strategic catalyst that drives crucial transformations in business success and the evolution of the modern economy (Jarvenpaa & Ives Edwin, 1991). The significant development of information technology trends has brought great expansion to new business models globally (Dimitriu & Matei, 2015). Cloud computing has become one of the growing trends in the information technology industry in recent years (Vaskovich, 2015). Based on data from Precedencer Research (2025), the global cloud computing market is estimated to reach USD 912.77 billion in 2025 and is expected to reach USD 5,150.92 billion by 2034, showing a Compound Annual Growth Rate (CAGR) of 21.20% from 2025 to 2034. This growth dynamic not only reflects the accelerated adoption of cloud technology globally, but also confirms the implications for modern accounting paradigms and functions (Abdullah & Almaqtari, 2024).

Recent information technology trends in innovative digital strategies focus on cloud-based systems, where this adaptation process accelerates the transition from traditional accounting to cloud-based accounting (Moudud-Ul-Huq et al., 2020). Cloud-based accounting is an innovative technological evolution that optimizes cloud computing to modernize accounting practices (Khanom, 2017). Cloud-based accounting is the modernization of accounting in the dynamics of technology that is able to process data with a decentralized platform to distribute information and applications in a cloud information framework without involving a comprehensive understanding of the system structure for users (Armbrust et al., 2010). Setiadi (2024) revealed that cloud-based accounting systems offer efficiency advantages through real-time data access, superior data security through regular backups and data encryption with high security standards supported by cloud storage in mitigating the risk of data loss or theft, and digital collaboration capabilities. Cloud-based accounting facilitates real-time access to financial reports for stakeholders, thereby increasing transparency and accelerating digital

transformation in accounting systems (Mohanty, 2017). Kumalo (2018) revealed that Micro, Small, and Medium Enterprises (MSMEs) need to integrate cloud-based services to improve efficiency and effectiveness in business functions and processes. However, in addition to the potential benefits, the urgency of mitigating security risks is a crucial aspect in the implementation of cloud-based accounting for adopting entities (Stergiou et al., 2018).

Adopting cloud-based accounting systems for business entities needs to be balanced with strict supervision of data integrity and comprehensive technology risk management (Setiadi, 2024). The effectiveness of cloud-based accounting system integration requires a strong infrastructure and adequate organizational resource support (Al-Sharafi et al., 2023). Mujalli et al. (2024) emphasize that cloud service providers support the adoption of cloud-based accounting through reliable technology infrastructure. In contrast, consideration of user support, and security risks in access, data transfer, and backup remain crucial. Tawfik et al. (2022) revealed that specialized human resources with sufficient capacity and skills are essential factors in the effectiveness of cloud-based accounting adoption. However, empirically, limited infrastructure and technical knowledge are fundamental obstacles in accelerating the adoption of efficient cloud-based accounting for MSMEs (Setiadi, 2024). Mujalli et al. (2024) emphasized that cloud service providers are fundamental determinants supporting intention to adopt cloud-based accounting.

Although cloud-based accounting represents a significant technological advancement, its adoption in Indonesia remains early. Despite this, it is anticipated to play a critical role in supporting the future transformation of Go Digital MSMEs and supporting the initiation of Bank Indonesia's e-Financing initiatives (Banda Saputri, 2024). Sistem Informasi Aplikasi Pencatatan Informasi Keuangan (SIAPIK) as a cloud-based accounting system developed by Bank Indonesia together with the Ikatan Akuntan Indonesia (IAI) since 2017 aims to improve access to finance, encourage MSMEs to upgrade, and boost MSME productivity (Haryono, 2022; Banda Saputri, 2024). SIAPIK has been strengthened with strict data integrity controls, supported by reliable infrastructure, and enhanced by user engagement to ensure data security (Bank Indonesia, 2024). This is confirmed by Regulation of

the Board of Governors Bank Indonesia number 23/19/PADG/2021, that Bank Indonesia is responsible for implementing data security principles in the Bank Indonesia Service System, while users are responsible for configuration, credential security, and management of two-factor authentication. This is reinforced through Regulations of Bank Indonesia number 23/15/PBI/2021, that Bank Indonesia guarantees data security in the Bank Indonesia Service System including confidentiality, authorization, accountability, integrity, authenticity, and non-repudiation, which forms a strategic framework to mitigate security challenges in the adoption of Bank Indonesia's cloud-based accounting system SIAPIK. However, factually, the intention to adopt cloud-based accounting in the MSME sector in developing countries, especially Indonesia, is still experiencing substantial challenges due to low adoption rate (Aligarh et al., 2023; Fardani & Surendro, 2011).

Numerous studies have been conducted to examine the various dimensions of digital adoption, with scholars investigating a broad spectrum of factors that shape its integration and implementation across different sectors. For instance, Mujalli et al. (2024) investigated the determinants of cloud accounting adoption in Saudi Arabian MSMEs, focusing on factors such as relative advantage, compatibility, complexity, organizational resources, employee capabilities, top management support, mimetic pressure, normative pressure, perceived usefulness, perceived ease of use, and intention to adopt cloud-based accounting. Al-Okaily et al. (2023) analyzed the impact of cloud-based accounting systems on the performance of Jordanian MSMEs in the post-COVID-19 era, focusing on variables such as performance expectancy, effort expectancy, social motivation, trust, covid-19 risk, actual usage behavior, communication quality, and decision quality. Further, Lutfi (2022) also explored the intention to adopt cloud-based accounting systems in Jordanian MSMEs, identifying key factors including perceived usefulness, security concern, top management support, organizational readiness, competitive pressure, supplier computing support, and intention to adopt cloud-based accounting information system. Additionally, a study by Tawfik et al. (2023) examined the factors influencing the implementation of cloud accounting in SMEs in Oman, focusing on elements such as top management support, firm size,

infrastructure, security and privacy, competitive pressure, relative advantage, and cloud accounting adoption. Moreover, Hafezi & Zolait (2019) examined the influence of national culture and information system quality on the adoption of cloud computing in SMEs, exploring variables such as relative advantage, compatibility, complexity, security, top management support, human readiness, organizational readiness, power distance, uncertainty avoidance, individualism-collectivism, masculinity-femininity, competitive pressure, and vendor support. Furthermore, Alkhater et al. (2018) conducted an empirical study on the factors influencing cloud adoption among private sector organizations, focusing on quality of sevice, trust, security, privacy, relative advantage, compatibility, trialability, top management support, technology readiness, culture, physical location, compliance with regulation, external support, industry, and intention to adopt cloud. Sanguineti & Maran (2024) investigated cultural influences on technology acceptance in the workplace, focusing on individualism, uncertainty avoidance, perceived usefulness, and cloud usage. In line with this, Mauricette et al. (2022) explored user perceptions of cloud-based small business accounting software, focusing on factors such as perceived usefulness, perceived ease of use, user satisfaction, trust, service quality, customer support, and user perceptions of cloud-based accounting software. Mohamad (2017) investigated the factors influencing accounting information system (AIS) usage among Jordanian SMEs, such as relative advantage, compatibility, organizational readiness, owner/management commitment, competitive pressure, government support, AIS usage, environmental uncertainty, and AIS effectiveness. Lastly, the study by Gangwar et al. (2015) integrated the TAM and TOE frameworks to understand the underlying determinants of cloud computing adoption, perceived usefulness, perceived ease of use, relative advantage, compatibility, complexity, organizational competency, training and education, top management support, competitive pressure, trading partner support, and adoption intention.

The adoption of cloud-based accounting offers significant advantages over traditional accounting (Mujalli et al., 2024). Compatibility refers to the ability to adjust procedures to improve information quality, reduce errors, and increase efficiency (Mujalli et al., 2024; Tawfik et al., 2022). The complexity of cloud

adoption is determined by tech integration, IT expert availability, and data security challenges in shared environments (Oliveira et al., 2014). The complexity of cloud services demands employee training prior to implementation (Gangwar et al., 2015). Organizational resources serve as a reflection of awareness, commitment, and governance of an organization in adopting information technology (Tawfik et al., 2022). Work outcomes are significantly influenced by employee contributions in the professional environment (Chatterjee et al., 2021). Top management as key agents in work environment transformation and organizational support for the adoption of cloud technology (Tawfik et al., 2022). The exertion of coercive coercion has the potential to exert influence over the technology adoption within businesses (Adjei et al., 2021; Alshirah et al., 2021; Mujalli et al., 2024). Mimetic pressure reflects the tendency to adopt cloud technologies by aligning with industry norms or imitating successful competitors (Mujalli et al., 2024). Normative pressure shows how professional norms and culture demand that organizations comply with applicable standards and procedures (Alshirah et al., 2021; Mujalli et al., 2024). Trust is one of the main determinants that influence users decisions to adopt cloud technology (Al-Okaily et al. 2023 and Lallmahomed et al. 2017). Performance Expectancy in the application of cloud technology is related to user confidence that the system will experience improved quality, performance, and work efficiency (Al-Okaily et al., 2023). Effort Expectancy is a key indicator in investigating technology adoption by individuals based on the UTAUT literature (Al-Okaily et al., 2023; Alkhwaldi, 2022). Social motivation as a global construct derived from two dimensions, namely social image and social influence with adapted indicators (Al-Okaily et al., 2023). Behavioral Intention refers to the level of individual desire to adopt a particular technology (Ajzen, 1991; Al-Okaily et al., 2023). Actual Use refers to the level of technology use including duration, frequency, and characteristics of use (Al-Okaily et al., 2023). Competitive pressure indicates the level of pressure that provides incentives for businesses to adopt innovations and prevent competitive failure (Al-Okaily et al., 2020a; Lutfi, 2022). Supplier support an important determinant of cloud technology acceptance/adoption among organizations (Khayer et al., 2020; Lutfi, 2022). The firm size and the response of partners and beneficiaries within and outside the organization are key factors at the

organizational level (Tawfik et al., 2022). Data security is the main focus of organizations in adopting cloud applications (Bello et al., 2021; Gandhi et al., 2018; Tawfik et al., 2022). Government support is essential for MSMEs with limited financial resources through targeted incentives in adopting cloud computing services (Al-Sharafi et al., 2023). Human readiness is a concern for technology staff involved in the adoption of innovative technologies (Hafezi & Zolait, 2019). Trialability refers to an organization's ability to test cloud services on a limited basis before adoption (Alkhater et al., 2018). Compliance with regulation can hinder cloud technology adoption factoring in a lack of IT standards and government regulatory support (Alkhater et al., 2018).

Cloud adoption provides value chain support services with sufficient infrastructure capacity and technical competence (AL-Shboul, 2019a). The AIS competency knowledge refers to the number of personnel with relevant and sufficient competencies (Mahama & Mohamed Dahlan, 2022a). Service quality significantly affects the use of online services in an organization (Khayer et al., 2020). The service provider is responsible for ensuring the data is always available when needed (Gangwar et al., 2015). The influence of cloud providers influence plays a crucial role in the adoption process of emergent and disruptive technologies (Khayer et al., 2020). A cloud service provider may operate a number of servers in different locations in different countries (Khayer et al., 2020). The flow of information and information technology are closely related to cultural values, where cultural value considerations not only drive adoption intentions but also shape the intensity and dynamics of cloud usage (Alkhater et al., 2018; Lin & Chen, 2012; Low et al., 2011a; Oliveira et al., 2014). Societies may be classified according to individuals' predominant form of social attachment, namely individualism or collectivism (Bollinger, 1987). An orientation towards uncertainty avoidance may hinder the adoption of emerging technologies (Al-Okaily et al., 2020a; Sanguineti & Maran, 2024a). Power distance reflects the shifting distribution of control across countries (Hafezi & Zolait, 2019). Masculine focus on achievement and confidence, while feminine emphasizes collaboration and well-being (Hafezi & Zolait, 2019). Environmental Uncertainty can be perceived as unexpected changes in customers, competitors, and technology (Mohamad, 2017).

This research will discuss determinants of adopting cloud-based accounting in Indonesia's MSMEs. This research is crucial for several reasons. First, the scope of this study focuses on implementing SIAPIK, a cloud-based accounting system managed by Bank Indonesia, the central bank of Indonesia. Second, although SIAPIK offers significant benefits, the low intention to adopt it raises crucial questions about the underlying factors hindering its widespread implementation. The adoption of cloud-based accounting has been proven to produce operational and strategic advantages and process efficiencies, however, the projected adoption rates of cloud-based accounting stand in sharp contrast to actual implementation, revealing a gap too significant to ignore (Tawfik et al., 2022). There is still limited awareness of the determinants and crucial factors that influence cloud-based accounting adoption decisions among MSMEs in developing countries (Lutfi, 2022; Ma et al., 2021). Lastly, the low intention to adopt cloud-based accounting in MSMEs is strongly influenced by cultural factors, with limited awareness of its benefits undermining competitiveness (Alshirah et al., 2021; Lutfi, 2022). Based on Hofstede's cultural dimensions, Indonesia's scores highlight the significant role of cultural values in shaping technology acceptance and adoption (Hofstede et al., 2010). Thus, sector-specific aspects that influence the intention to adopt cloud-based accounting in Indonesia need to be comprehensively identified and evaluated.

1.2 Problem Statement

Researchers believe that it is important to understand the factors that influence the adoption intention of Sistem Informasi Aplikasi Pencatatan Informasi Keuangan (SIAPIK), one of the cloud-based accounting systems adopted by MSMEs in Indonesia, mediated by Perceived Ease of Use (PEU) and Perceived Usefulness (PU).

Based on the background, several research questions emerge to guide the investigation. which are as follows:

1. How does relative advantage influence the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU)?
2. How does relative influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?

3. How does compatibility influence the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU)?
4. How does compatibility influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?
5. How does complexity influence the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU)?
6. How does complexity influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?
7. How do security and privacy influence the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU)?
8. How do security and privacy influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?
9. How does organizational resource influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?
10. How does employee capability influence the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU)?
11. How does employee capability influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?
12. How does top management support influence the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU)?
13. How does top management support influence the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU)?
14. How does trust influence the intention to adopt cloud-based accounting?
15. How does the social motivation factor influence the intention to adopt cloud-based accounting?
16. How does the cultural value of collectivism (low individualism) influence the intention to adopt cloud-based accounting?

17. How does the cultural value of uncertainty avoidance influence the intention to adopt cloud-based accounting?
18. How does the Perceived Usefulness (PU) influence the intention to adopt cloud-based accounting?
19. How does the Perceived Ease of Use (PEU) influence the intention to adopt cloud-based accounting?

1.3 Objective of the Research

Based on the identification of the problem, the objectives of this study are:

1. To analyze and examine the impact of relative advantage on the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU).
2. To analyze and examine the impact of relative advantage on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
3. To analyze and examine the impact of compatibility on the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU).
4. To analyze and examine the impact of compatibility on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
5. To analyze and examine the impact of complexity on the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU).
6. To analyze and examine the impact of complexity on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
7. To analyze and examine the impact of security and privacy on the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU).

8. To analyze and examine the impact of security and privacy on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
9. To analyze and examine the impact of organizational resource on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
10. To analyze and examine the impact of employee capability on the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU).
11. To analyze and examine the impact of employee capability on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
12. To analyze and examine the impact of top management support on the intention to adopt cloud-based accounting mediated by Perceived Ease of Use (PEU).
13. To analyze and examine the impact of top management support on the intention to adopt cloud-based accounting mediated by Perceived Usefulness (PU).
14. To analyze and examine the impact of trust factors on the intention to adopt cloud-based accounting.
15. To analyze and examine the impact of social motivation factors on the intention to adopt cloud-based accounting.
16. To analyze and examine the impact of collectivism (low individualism) on the intention to adopt cloud-based accounting.
17. To analyze and examine the impact of uncertainty avoidance on the intention to adopt cloud-based accounting.
18. To analyze and examine the impact of Perceived Usefulness (PU) on the intention to adopt cloud-based accounting.

19. To analyze and examine the impact of Perceived Ease of Use (PEU) on the intention to adopt cloud-based accounting.

1.4 Contribution of the Research

1.4.1 Theoretical Contribution

This research aims to provide information about the factors that influence the intention to adopt cloud-based accounting using the Technology Acceptance Model (TAM), specifically strengthening understanding of the role of Perceived Usefulness (PU) and Perceived Ease of Use (PEU) as mediating variables as well as key factors that influence the acceptance of cloud-based accounting technology adoption in the MSME sector. In addition, this research also contributes to the understanding of the influence of trust factors, social motivation, and cultural values so as to enrich the theory of technology adoption on cloud-based accounting adoption intentions.

1.4.2 Practical Contribution

The results of this study are expected to have a significant impact on both providers and MSMEs. For providers, the findings will provide valuable knowledge regarding the importance of SIAPIK development, offering deeper insights into how continuous improvement can align with market needs, enhance system capabilities, and drive sustainable innovation. For MSMEs, this study aims to increase confidence in adopting SIAPIK, by demonstrating its practical benefits and encouraging its wider integration as a key tool to improve financial management and operational efficiency.

1.5 Research Outline

The structure of this study is systematically organized in five main chapters as follows:

Chapter I : Introduction

The first chapter of this research will explain the research background, problem formulation, research objectives, research benefits, research scope and writing systematics. This section becomes the main foundation of the research by

outlining the urgency of topic selection and the methodology used in conducting the research.

Chapter II : Literature Review

The second chapter is a theoretical foundation, where this section is based on previous empirical studies that are relevant to the topics raised in this study. This section explains the research variables, integrates findings from previous studies, develops hypotheses, and presents a conceptual framework related to this research.

Chapter III : Research Method

The third chapter describes the methodological design used in the research. This chapter also identifies the sample and population, types of data sources, data measurement methods, and data analysis methods designed to effectively measure the influence of independent variables on dependent variables.

Chapter IV : Result and Discussion

The fourth chapter presents the results of the analysis and discussion of research findings, respondent characteristics, and descriptive analysis.

Chapter V : Conclusion and Suggestion

The fifth chapter presents conclusions from the analysis and research that has been done. This chapter also describes the positive or negative influence between variables, discusses research limitations, and provides suggestions for further research.