

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Background

2.1.1 The Unified Theory of Acceptance and Use of Technology (UTAUT)

Cloud-based accounting solutions have emerged thanks to rapid technological advances. The unified theory of acceptance and use of technology (UTAUT) is a framework used by organizations to accept technology including cloud-based accounting. This theory was developed by Venkatesh, Morris and Davis based on previous theories such as the Technology Acceptance Model (TAM) (Al-Okaily et al., 2022; Pramuka & Pinasti, 2020). In the Unified Acceptance Theory, there are four variables that make up the theory, such as performance expectations, effort expectations, social influence, and facilitating conditions (Abbad, 2021). Research on the use of cloud-based accounting in the company focuses on performance and effort expectations. Performance expectations have been used as a metric to influence an organization's willingness to use the technology to see the benefits of using cloud-based accounting, such as increased accounting process efficiency, facilitating easier and real-time communication, and providing access to up-to-date information, training, and knowledge. Meanwhile, effort expectations are expectations that the ease of use of an information system will increase user satisfaction.

2.1.2 Resource-Based View (RBV)

The Resource-Based View is a theory that supports this intellectual capital variable. Where intellectual capital is divided into three namely structural capital, relational capital, and human capital (Hatane & Kurniawan, 2022). Resource-Based View theory argues that organizations that utilize resources that enable them to lead the business toward sustainability can gain a competitive advantage. In this research, structural capital, relational capital, and human capital are considered resources that cannot be imitated or valuable to an organization (Dalwai et al., 2021).

This theory argues that valuable or irreplaceable resources, such as tangible and intangible assets, can make an organization superior and competitive compared to other organizations (Heriyanto, 2023). According to the resource-based view theory, resources can be grouped into three types: physical resources, human resources, and organizational resources. Structural capital, relational capital and human capital are considered as human resources

because they include knowledge and information that individuals have in the organization. These resources are considered valuable, cannot be imitated, and there is no substitute. With the presence of structural capital, relational capital, and human capital in an organization, innovation can be developed, operations can be improved and adjusted to customer needs. Managing these resources provides a competitive advantage and improves business performance (Vo & Tran, 2022).

2.2 Argument from Previous Studies

Organizations can take advantage of the advanced technologies that have emerged with the beginning of the digitalization era to enhance their company performance and capabilities. The existence of the digitalization era makes it easier for organizations to obtain information and knowledge that can make it easier for organizations to enter the market and trends desired by customers. All five of these variables, especially for the company, have a strong connection to one another and contribute to the success of firms. Therefore, this study wants to further examine the influence and impact of cloud-based accounting on intellectual capital and the business performance of the company in Indonesia.

2.2.1 Cloud-Based Accounting

The era of digitalization makes everything evolve, one of which can be found in the business world is the digitalization of finance in business. Cloud computing is rapidly establishing the place of traditional accounting software in the accounting software industry. Cloud-based accounting is among the most significant developments in business accounting. Cloud-based Accounting is an online accounting system which is a combination of utilizing computer technology in a network with internet-based development to process data (Al-Okaily et al., 2022). Cloud-based accounting serves to run programs or applications through connected devices. Cloud-based accounting data is kept and accessed via an Internet-accessible central server. The company can store and access its financial information through remote servers. Additionally, cloud-based accounting software providers handle all program updates, saving customers from having to worry about keeping their software up to date (Le & Cao, 2020; Ria, 2023). Some cloud-based accounting is used by the company such as Accurate Online, mekari journal, SAP software, deskera MRP, QuickBooks, Xero, and many others.

2.2.2 Structural Capital

structural capital is part of intellectual capital which includes internal structures in the organization (Hatane & Kurniawan, 2022). Where intellectual capital is a resource that can improve the business performance of an organization such as innovation, knowledge, progress, and skills (Wang, 2021; Luca et al., 2020). Structural capital is the knowledge contained in an organization, which can be in the form of systems, procedures, or routine activities in an organization. Structural capital can make the value of an organization greater than its physical value. Structural capital can be considered as the foundation to support the operation of an organization because it includes information systems and operating instructions. With structural capital consisting of knowledge, it is possible to develop new ideas, create new products and increase the competitiveness of the company in order to compete with other organizations. Well-structured organizational systems and processes can improve operational efficiency so that organizations can better manage resources and identify areas that need improvement.

2.2.3 Human Capital

Human capital as an intangible asset contained in individuals within an organization includes the accumulated knowledge, skills, and experience of staff that embodies the ability to work effectively and efficiently in the organization (Wang, 2021). Human capital refers to the collective knowledge, skills, abilities, and motivation of individuals in the organization which is reflected in their capacity to effectively collaborate, make the right decisions, generate and transfer knowledge, and maintain high motivation and retention. Investing and managing human resources (HR) with cloud technology includes training and development, performance evaluation, employee data management, and everything related to workforce management. The use of cloud-based accounting has become a valuable tool to improve human capabilities in organizations (Cleary & Quinn, 2016). Companies can track, manage and optimize their investment in HR with cloud-based accounting solutions. HR is the most valuable asset in a company.

2.2.4 Relational Capital

Relational capital represents the potential owned by the organization in the form of intangible assets consisting of knowledge embedded in customers, suppliers, and government or industry associations (Gross-Golacka et al., 2020). Relational capital is a

resource associated with external relationships with the organization (Hatane & Kurniawan, 2022; Wang, 2021). Relationships built with customers or others are very important to the company such as reputation, brand, distribution network, customer contracts, and others. Good relationships between organizations or entities can facilitate better cooperation and collaboration that can help to solve complex problems. With these relationships, organizations can access information or resources that might not otherwise be available, which can help business development and knowledge sharing. Relational capital can open doors to profitable business opportunities.

2.2.5 Business Performance

Business performance is the result of work done by an organization in accordance with its responsibilities to achieve organizational goals. Business performance is a measure of performance levels such as sales, number of buyers, profits, and sales growth rates. Business performance can be considered an indicator of success in achieving organizational goals, where good business performance represents the success and effectiveness of organizational behavior (Direktorat Jenderal Kekayaan Negara, 2017). Business performance is the result of organizational goals achieved through strategies and techniques that help the business grow. Through business performance, an organization can know the profits that can be used to fund its operations and develop its organization. Business performance can help maintain competitiveness because it can improve capabilities and increase innovation to increase customer satisfaction and meet community needs (Kristoffersen et al., 2021; Moradi et al., 2021).

Table 2.1 Summary of the Current Previous Studies in Emerging Markets

Authors	Summary
Al-Okaily et al (2022)	A study in Jordan examined how cloud-based accounting information systems affected SMEs' post-COVID-19 performance. Data was gathered using an online survey of 438 users. Using Unified Theory of Acceptance and Use of Technology (UTAUT). The study discovered that user's behavioural intentions were highly impacted by performance expectations.
Le & Cao (2020)	The study looked at 112 Vietnamese SMEs company performance affected by cloud-based accounting software by using an online survey. The technology Acceptance Model (TAM) was employed in

	the study to examine user behaviour and acceptance of technology. The result demonstrated a strong positive influence between the use of cloud-based accounting and enhanced financial data accessibility, accuracy, and efficiency demonstrating the role of technology adoption plays in creating organizational success.
Lutfi (2022)	The research looked at Jordanian SMEs' intentions to use cloud-based accounting information systems. The adoption of these systems was examined using the Unified Theory of Acceptance and Use of Technology (UTAUT) model or the Technology Organization Environment (TOE) framework. the result may show positive benefits like enhanced efficiency, cost savings, and improved decision-making capacities.
Pramuka & Pinasti (2020)	The research was conducted in Purwokerto, Central Java, Indonesia. The research observed 175 SMEs using online questionnaires who work as financial officers. In this research, the theoretical framework was the Technology Acceptance Model (TAM). In the context of this research, structural capital is knowledge, systems, procedures, and policies that support business operation and growth. In this case, structural capital includes intangible assets that affect business performance and efficiency which are influenced by SMEs' adoption of cloud-based accounting. The result indicated a positive relationship between cloud-based accounting to structural capital.
Tian et al (2024)	The research explains the SMEs demonstrated a positive correlation between the adoption of cloud-based accounting technologies and improvements in human capital management, efficiency, and sustainability reporting practices. The study observed a diverse sample of small and medium-sized enterprises (SMEs) operating in China to understand their adoption behaviours towards cloud-based accounting technologies.
Chen et al (2023)	The research observed a total of 192 small and medium enterprises. The analysis showed a positive impact of cloud-based accounting on relational capital within small and medium enterprises. This suggests that the adoption of cloud-based accounting systems can enhance the relational capital of SMEs such as suppliers leading to potential benefits in terms of business relationships and network development.
Hanifah et al (2021)	The study examined the relationship between structural capital and business performance in 92 SMEs in the manufacturing sector. Based on The resource-based View Theory, it found a positive relationship between structural capital and business performance. SMEs with well-developed structural capital including problem-solving processes and information systems, showed improved performance outcomes.

Ali et al (2021)	The research analyzed the impact of green intellectual capital (GIC) on green innovation (GIA) in small and medium-sized enterprises in Pakistan's manufacturing sector. The research used a data sample of 235 in Pakistan's manufacturing sector from the textile, chemical, pharmaceutical, and steel sectors. The research employed the intellectual capital-based view theory which is derived from resource-based view theory. The result of the analysis showed that green structural capital had a positive but significant impact on innovation adoption.
Khalique et al (2020)	The research analyzed the impact of intellectual capital on innovation in pharmaceutical manufacturing SMEs operating in Karachi, Pakistan. The number of SMEs observed was 260 with 248 valid feedbacks used for analysis. The analysis result found that structural capital has a positive effect on innovation in pharmaceutical manufacturing SMEs.
Faeni et al (2022)	The study examines the impact of human capital on business performance in small and medium-sized enterprises (SMEs) in the tourism industry in Indonesia. Data was collected from 480 in Magelang using self-administered questionnaires. The result showed a positive influence of human capital on innovation to improve business performance.
Tran et al (2023)	The study examined the impact of green intellectual capital on green innovation in Vietnamese textile and garment enterprises. The research analyzed 382 enterprises across the North, Central, and South regions. The result showed a positive relationship between green human capital and business performance by enhancing Green human capital.
Malik et al (2020)	The study was conducted in the manufacturing firms in Pakistan, specifically focusing on SMEs in industries. The study utilized the Resource-Based View (RBV) theory to investigate the relationship between green human resource management practices, green intellectual capital, and sustainable performance. In the analysis, it was found that green human capital had a positive and significant impact on sustainable performance. It means that, in the context of SMEs in Pakistan's manufacturing sector, human skills and capacities connected to environmental commitment and sustainability positively affect business performance.
Bontis et al (2020)	The research was conducted in Karachi, Pakistan involving 150 SMEs in the pharmaceutical industry. The results of the analysis showed that customer capital, structural capital, social capital, and technological capital had a significant positive impact on innovation in SMEs.

Rahman et al (2020)	The research examined the effect of intellectual capital elements on performance from the perspective of lifecycle stages. Data was distributed from 1000 SMEs in Malaysia using online questionnaires. The research utilized the Resource-Based View (RBV) and Organizational Lifecycle theories to investigate the relationship between Intellectual Capital and business performance. The result showed a positive relationship between relational capital and business performance.
Nuryakin & Ardyan (2018)	The research was conducted on 142 SMEs in the furniture export sector in Central Java, Indonesia. The research utilized the Resource-Based View (RBV) framework of examining the relationship between relational capital, network competence, market entry capabilities, and marketing performance in SMEs. The result showed a positive relationship between relational capital on marketing performance.

2.3 Hypothesis Development

Therefore, this study further investigates whether cloud-based accounting and intellectual capital are important to the business performance of the company and tests the following null hypothesis:

2.3.1 The Direct Effect of Cloud-Based Accounting on Business Performance

The emergence of the digitalization era brings several major changes such as cloud-based accounting and new knowledge where each organization is required to adapt to follow its development. Keeping up with these developments can affect the business performance of each organization. Based on previous journals stated that cloud-based accounting on business performance shows the positive relationship that implementation can increase the effectiveness and efficiency of accounting processes and help companies to make better business decisions (Al-Okaily et al., 2022; Le & Cao, 2020; Lutfi, 2022). This can ultimately improve financial performance, company value, and customer satisfaction levels.

Based on the UTAUT theory of acceptance and use of cloud-based accounting technology (Al-Okaily et al, 2022). Organizations can take advantage of the use of cloud-based accounting technology to achieve benefits in business performance such as increasing the accuracy of financial reports so that it can speed up decision making and the ease of using the system which reduces the human workload so that accounting staff can focus on strategic

analysis. Companies can manage the cloud-based accounting system adoption process well so that it is used effectively to achieve business goals.

2.3.2 The Direct Effect of Cloud-Based Accounting on Structural Capital

Using cloud-based accounting could significantly increase structural capital by improving data processing flexibility, accounting process efficiency, and accounting data security. With the organization using cloud-based accounting, it can improve the efficiency of the accounting system and the management of organizational resources (Pramuka & Pinasti, 2020). This can help in managing structural capital such as operational systems and procedures related to accounting. Where the industry can manage financial data efficiently such as accessing financial data in real time and accelerating financial reports so that organizations can optimize the use of structural capital using good. Through cloud-based accounting, the industry can optimize the use of its structural capital because the use of cloud-based accounting can increase the transparency and accuracy of financial information.

Based on UTAUT theory, where cloud-based accounting, can speed up decision-making and improve cooperation between other departments to help organizations realize profits. This can help optimize the use of structural capital needed to support various projects. Through cloud-based accounting, the industry can integrate financial data using other systems such as inventory management and production that can help manage structural capital such as technology and production systems, and export information (Rahman et al., 2020). It can be concluded that cloud-based accounting to structural capital have a positive relationship.

2.3.3 The Direct Effect of Structural Capital on Business Performance

The availability of effective methods, procedures, and cultures for knowledge transfer that provide businesses the chance to perform better is referred to as structural capital. With structural capital in the organization, the organization can identify new opportunities, develop products or innovate, and improve business processes. A good information system can enable quick decision-making and increase the speed of information within the organization. Structural capital facilitates the flow of knowledge from tacit to explicit forms to enhance firm efficiency and improves many aspects of performance, such as via reductions in production and non-production costs (Rahman et al., 2020).

Based on the Resource-Based View theory emphasizes the importance of internal resources that support competitive advantage (Dalwai et al., 2021). In this study, structural

capital is one of the internal resources that can contribute to business success. By having strong structural capital, organizations can significantly increase productivity, reduce operational costs, and increase customer satisfaction by providing better products or services and rapid response to needs. By investing in the development of structural capital, companies can strengthen their internal capabilities and thus improve their operational performance, which in turn will improve their position in the market.

2.3.4 The Indirect Effect of Cloud-Based Accounting on Business Performance through Structural Capital

Based on previous journals, it is explained that cloud-based accounting has a significant relationship with business performance because there are supporting factors such as structural capital (Cleary & Quinn, 2016). The explanation of the theory above where the resource-based view theory explains that the existence of resources and capabilities owned by organizations such as structural capital can be a source of competitive advantage and improve business performance (Nuryakin & Ardyan, 2018). While UTAUT theory gives confidence that cloud-based accounting can help to get the job done better such as increasing the efficiency of accounting processes and structural capital by providing access to the latest information and knowledge (Al-Okaily et al., 2022).

It can be concluded that simply that structural capital mediates the positive effect of cloud-based accounting on business performance. With structural capital, it will affect business performance such as increasing productivity, reducing operational costs, and increasing customer satisfaction. Cloud-based accounting also has an influence on structural capital as through cloud-based accounting, industries can integrate financial data using other systems such as inventory and production management which can help manage structural capital such as technology and production systems, and export information (Rahman et al., 2020).

2.3.5 The Direct Effect of Cloud-Based Accounting on Human Capital

The use of cloud-based accounting can improve the human capital of an organization. Human resources, including employees and their knowledge and skills, can benefit from quality improvement through the application of this technology (Lutfi, 2022). Cloud-based accounting increases the transparency and accountability of human resource management procedures by making data and information easier to access for stakeholders including investors, management, and staff. The application of cloud-based accounting that provides incentives to

employees encourages organizations to adopt human resource management practices to be more innovative. Cloud-based accounting can help organizations innovate and adapt to change to improve the efficiency and effectiveness of human resource management processes (Le & Cao, 2020; Tian et al., 2024). Cloud accounting can store training and development data to increase training and development efficiency.

Based on the UTAUT theory can understand the factors that influence the adoption of cloud-based accounting technology (Al-Okaily et al, 2022). Cloud-based accounting can improve employee performance by providing real-time access to financial data. Cloud-based accounting helps companies to adapt to environmental changes thereby enabling increased efficiency and effectiveness of business processes. It can be concluded that human capital and the use of cloud-based accounting have a positive relationship (Cleary & Quinn, 2016).

2.3.6 The Direct Effect of Human Capital on Business Performance

Human capital has a significant influence on business performance in organizations. Human capital is instrumental in improving the quality, competence, and productivity of the workforce in the organization (Malik et al., 2020; Tarigan et al., 2019). Organizations that focus on human capital development tend to have an inclusive and innovative work culture that encourages individual growth. An organization that has quality human resources, can help employees overcome various challenges and adapt to changes that occur in the business environment. The existence of innovations and strategies carried out by employees in the process of managing the organization is a solution to facing organizational economic challenges. Organizations that have human capital with quality, competence, and productivity can encourage the development of business performance (Tran et al., 2023).

Organizations have quality resources that can help companies to face various challenges and adapt to changes in the business environment (Dalwai et al., 2021). Where human capital acts as an impetus to develop the dynamic capabilities of the organization which is one of the keys in the RBV theory to achieve competitive advantage. The existence of strategies carried out by employees in the process of managing the organization shows that investment in human capital not only improves individual performance but overall organizational performance. It can be concluded that there is a positive relationship between human capital and business performance.

2.3.7 The Indirect Effect of Cloud-Based Accounting on Business Performance through Human Capital

Based on previous journals, it is explained that cloud-based accounting has an insignificant relationship to business performance because there are other supporting factors such as human capital (Cleary & Quinn, 2016). The explanation of the theory above, where the resource-based view theory explains that the existence of resources and capabilities owned by organizations such as human capital can be a source of competitive advantage and improve business performance (Rahman et al., 2020; Nuryakin & Ardyan, 2018). while the UTAUT theory provides confidence that cloud-based accounting can help to get the job done better such as increasing the efficiency of the accounting process and human capital utilizing cloud-based accounting can increase human capital by providing access to better information and training.

It can be simply concluded that human capital mediates the positive effect of cloud-based accounting on business performance. Where the presence of strong human capital can strengthen the positive impact of using cloud-based technology on business performance. Where cloud-based accounting can provide good access to information so that it can improve the quality of human capital because with easy and fast access employees become more productive. This will create efficiency and innovation that support improved business performance (Cleary & Quinn, 2016).

2.3.8 The Direct Effect of Cloud-Based Accounting on Relational Capital

Cloud-based accounting can allow management, employees, and investors to collaborate and make excellent decisions for future business. With better access, relationships with external parties can be strengthened to implementing cloud-based accounting can help create strong relationships with suppliers, customers, or other partners. Cloud-based accounting can improve access to data and information, as well as trust and collaboration (Lutfi, 2022). Cloud-based accounting makes financial information accessible on the go so that you can use quick action and respond to market changes (Chen et al., 2023). Therefore, cloud-based accounting can help organizations communicate between the organization and its stakeholders (Al-Okaily et al., 2022). It can be concluded that relational capital and the use of cloud-based accounting have a positive relationship.

The UTAUT theory can be used to analyze how cloud-based accounting systems affect relational capital in organizations. Where adopting cloud-based accounting can strengthen

relational capital by increasing accessibility, transparency, and collaboration (Ou & Zhang, 2021). Where cloud-based accounting can provide real-time data on accurate and up-to-date financial data and is easy to implement where suppliers can see the status of payments or inventory directly while customers can check order invoices more easily so that improved performance can support strong relationships. It can be concluded that relational capital and the use of cloud-based accounting have a positive relationship (Wang, 2021).

2.3.9 The Direct Effect of Relational Capital on Business Performance

Relational capital has a significant influence on business performance in organizations. Relational capital includes intangible assets owned by an organization including relationships owned by a business, such as stakeholders, which are useful in increasing the added value of the business (Rahman et al., 2020). There is an assumption that having strong external relationships can help the organization to support business growth in the organization (Nuryakin & Ardyan, 2018; Malik et al., 2020). Organizations that have strong relational capital can help organizations gain wider access to important information or resources so that they can benefit from new business opportunities, collaborate using business partners, and have access to larger markets.

Based on RBV theory, it provides a strong conceptual framework where understanding relational capital can be a source of competitive advantage in organizations. Where relational capital can increase the ability to innovate and adapt to market changes. Collaborating with business partners or stakeholders can develop new solutions (Ramirez-Solis et al., 2021). This is in line with RBV theory where resources can provide a competitive advantage. To maximize the benefits of relational capital, organizations need to actively manage external relationships. It can be concluded that there is a positive influence of relational capital on business performance.

2.3.10 The Indirect Effect of Cloud-Based Accounting on Business Performance through Relational Capital

Based on previous journals, explain that cloud-based accounting has a significant relationship to business performance because there are other supporting factors such as relational capital (Cleary & Quinn, 2016). This explanation can be understood through two main theories, namely: The resource-based view (RBV) and the unified theory of acceptance and use of technology (UTAUT). The explanation of the theory above, where the resource-based view

theory explains that the existence of resources and capabilities owned by organizations such as relational capital can be a source of competitive advantage and improve business performance (Rahman et al., 2020; Nuryakin & Ardyan, 2018). With strong relational capital, organizations can access wider information and business opportunities that are not available to competitors, thus encouraging organizations to innovate and be more effective in achieving business goals.

While UTAUT theory provides confidence that cloud-based accounting can help to get the job done better such as increasing the efficiency of the accounting process and relational capital using cloud-based accounting can increase relational capital by facilitating easier and real-time communication between the company and its business partners so that it allows more effective collaboration (Al-Okaily et al., 2022). It can simply be concluded that relational capital mediates the positive effect of cloud-based accounting on business performance. Therefore, to maximize the benefits of cloud-based accounting, organizations need to focus on managing relational capital as it improves communication, which is key to improving overall business performance.