Key Drivers of Cloud Accounting Utilization by Small and Medium Enterprises in Zimbabwe

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ABSTRACT

This paper investigated the factors influencing the utilisation of cloud accounting among Small and Medium Enterprises (SMEs) in Zimbabwe. The study adopted a mixed-research approach. The study used stratified simple random sampling techniques, stratifying according to firm size. Data was collected using 141 questionnaires and 10 semi-structured interviews. Quantitative data was analysed using SPSS version 22.0, and qualitative data was thematically analysed using content analysis. The study found that the adoption and utilization of cloud accounting among SMEs in Zimbabwe are significantly influenced by lack of knowledge on cloud accounting, top management support, security concerns, data privacy, organizational readiness, availability of resources, legal compliance, government support, and vendor support. The study recommends that SMEs should allocate resources to upgrade necessary IT infrastructure, including reliable internet access and secure hardware, to support cloud accounting systems. The Zimbabwean government should offer grants, subsidies, or tax incentives to encourage SMEs to adopt cloud accounting and financial support can help mitigate initial investment costs. Moreover, the government as the major stakeholder should conduct workshops, seminars, and training programs to educate SMEs about the benefits and functionalities of cloud accounting.

Keywords: Factors, Key Drivers, Utilisation, Cloud Accounting, Small and Medium Enterprises, Zimbabwe
JEL Classifications: L86, M15, O33

1. INTRODUCTION

In recent years, cloud accounting technology has emerged as a transformative tool for small and medium enterprises (SMEs) worldwide, offering cost-effective, scalable, and accessible solutions for financial management (Skafi et al., 2020). Shoniwa (2021) stated that in general cloud accounting has revolutionised the way organisations operate as it has ushered in a new era of business in the accounting field. The digital transformation has given SMEs new opportunities to streamline their operations, enhance efficiency, and improve competitiveness (Senarathna et al., 2018). Cloud accounting technology has emerged as a promising solution for SMEs to modernize their financial management processes and adapt to the evolving business landscape. Shetty and Panda (2021) as well as Ma, Fisher and Nesbit (2021) asserted that the adoption of cloud accounting holds great potential for driving growth, enhancing efficiency, and improving competitiveness.

Moreover, prior studies have demonstrated that cloud accounting is a requisite tool for the success and survival of small businesses in a globalized, constantly changing business environment because it has a significant impact on achieving cost efficiency and efficacy in business activities as well as enhancing returns on investments (Ma et al., 2021; Yunis et al., 2017; Miller, 2008). Additionally, cloud accounting offers unrestricted data archiving, information backup, system recovery, and online access for improved transaction analysis and financial reporting (Skafi et al., 2020). Hence, adopting cloud accounting systems has significantly transformed the accounting practices of businesses worldwide, offering enhanced flexibility, cost efficiency, and real-time access to financial data.

In Zimbabwe, where SMEs constitute a significant portion of the economy as they play a pivotal role in driving economic growth, employment generation, and innovation. Dlamini and Schutte (2024) asserted that understanding the adoption and utilization of innovative financial technologies, particularly cloud accounting, becomes imperative. Rawashdeh and Rawashdeh (2023) postulated that before one understands the utilization of innovative financial technologies, there is a need to identify internal and external factors influencing their adoption. In their study, Dlamini and Schutte (2024) observed that despite the numerous benefits offered by cloud accounting, its uptake among SMEs in Zimbabwe remains relatively low. Hence, understanding the factors influencing the use of cloud accounting by SMEs in Zimbabwe is crucial for identifying barriers to adoption and formulating effective strategies to promote its uptake.

The objective of this paper is to explore the factors influencing the use of cloud accounting by SMEs in Zimbabwe to provide valuable insights and recommendations for fostering the uptake of cloud accounting technology among SMEs in the country. The paper envisages that with a comprehensive understanding of the factors influencing cloud accounting, stakeholders can develop tailored initiatives, policies, and support mechanisms to overcome barriers, capitalize on opportunities, and enable SMEs to leverage cloud accounting technology effectively. Furthermore, the understanding of these factors enhances the creation of supportive environments that facilitate the adoption and effective use of cloud accounting systems. Ultimately, promoting the use of cloud accounting among SMEs in Zimbabwe can contribute to enhancing productivity, promoting innovation, and fostering sustainable economic growth in the digital age. This paper is organised as follows: The next section discusses the literature on cloud accounting, especially as it relates to SMEs. The third section describes the methodological path that was followed in this study. The results of the surveys and interviews are presented and discussed in the penultimate portion of this study. The study is finally concluded in the paper with a section that summarises the main conclusions and offers practical suggestions for SMEs, decision-makers, and other interested parties.

2. LITERATURE REVIEW

2.1. Historical Development of Cloud Accounting

One of the most inventive and revolutionary developments in the history of accounting software is cloud accounting. The historical development of cloud accounting is a fascinating journey that reflects broader technological advancements and the evolution of business practices (Kircher, 1955). In the 1960s and 70s, businesses used mainframe computers for accounting, relying on centralized, costly, and complex systems (Metya et al., 2023). The first spreadsheet program developed by visicalc in the late 1970s marked the beginning of the widespread and user-friendly development of bookkeeping software and this allowed financial simulation to be done on a computer (Grad, 2007; Jennings, 1979). An accounting software program for early personal computers was created by Peachtree Software in 1978. Subsequently, numerous companies began to realise how beneficial it was to purchase computers and computerise their accounting operations (Brand,

1989). Peachtree introduced the first online bookkeeping software for the public at large in 1981, the software integrated an office suite that included a spreadsheet and a regular word processor (Campbell-Kelly, 2007).

The 1980s saw the rise of personal computers, leading to the development of early accounting software like QuickBooks which was founded by Scott Cook and Tom Proulx in 1983 (Intuit Inc, 2000). According to Grad (2007), Peachtree introduced the first online bookkeeping software for the public in 1981, it was an integrated office suite that included a spreadsheet and a regular word processor making accounting more accessible for small businesses (Drazen, 2024; Kratzke, 2018). By the mid-1990s, client-server architecture allowed businesses to have their accounting software installed on local servers, accessed via client computers and this setup offered more power and flexibility but still required significant in-house IT resources (Astuty, 2015). In the late 1990s and early 2000s, web-based accounting solutions began to emerge, and the concept of cloud computing began to gain traction, marking a paradigm shift from traditional on-premises software to web-based services (Kratzke, 2018). The wide spread of the internet laid a sound foundation for the emergence of cloud-based applications. In the early 2000s, companies like NetSuite (founded in 1998) and Intacct (founded in 1999) began offering cloud-based financial management solutions, marking the start of true cloud accounting (Roof, 2017; Cox, 2000).

By the 2010s, cloud computing had become mainstream, with significant improvements in internet speed, security, and reliability. Companies like Xero (founded in 2006) and FreshBooks (founded in 2003) gained popularity by offering user-friendly, scalable, and feature-rich cloud accounting solutions. Cloud accounting systems began integrating with other cloud-based business applications, such as CRM, payroll, and inventory management systems, providing a seamless business management experience. Today's cloud accounting solutions are highly customizable and scalable, catering to the unique needs of various industries, from small start-ups to large enterprises. Continuous advancements in cybersecurity and regulatory compliance ensure that cloud accounting systems meet the highest standards of data protection. The integration of blockchain technology could further revolutionize accounting by enhancing transparency and reducing fraud. More sophisticated AI tools will likely continue to improve the accuracy and efficiency of accounting processes. As internet penetration increases globally, cloud accounting will become more accessible to businesses in emerging markets, fostering global economic growth.

2.2. Factors Affecting Usage of Cloud Accounting

This section synthesizes existing literature to identify and analyse factors influencing the adoption of cloud accounting among SMEs. The findings provide a comprehensive understanding of the current state and challenges of cloud accounting adoption in the Zimbabwean SME context.

2.2.1. Technological factors
Technology takes a leading role in the 21st century, which is marked by rapid changes in business environments, cutting-edge technological breakthroughs, and complex automated industrial

processes (Dlamini, 2022a). The effectiveness of cloud accounting systems depends heavily on reliable internet connectivity. Numerous studies have observed that best business practices for the success of small businesses are hindered by technological factors (Nagahawatta et al., 2024; Dlamini, 2022a; Low et al., 2011). Extant literature indicates that many SMEs in developing countries face challenges due to poor connectivity, which can lead to disruptions in accessing cloud services, thereby reducing the reliability and attractiveness of these systems (Kapurubandara and Lawson, 2007). According to Oliveira and Martins (2010), the technological readiness of an SME, including the availability of skilled IT personnel, is critical for the adoption and effective use of cloud accounting systems. Wang et al. (2010) posit that the expertise needed to implement cloud accounting-related IT applications is provided by IT human resources. In that regard, a lack of IT expertise among employees can significantly hinder adoption and businesses that are technologically savvy are better suited to use cloud accounting. The absence of data protection and electronic commerce governing framework in most of the countries in Africa hampers the usage of cloud computing (Gillwald et al., 2014). For the adoption of cloud-based software, SMEs are more concerned with the adequate security of their data, to that effect there is a need to advance data security measures to build the confidence of the users (Nagahawatta et al., 2021; Bhuiyan et al., 2019; Doherty et al., 2015). Odufuwa (2013) highlighted that in Nigeria, the adoption and penetration of the cloud are significantly by inadequate data security.

2.2.2. Organizational factors

Organisational factors include the organization's size, internal communication, technological capacity, skills of workers, support from management, and overall culture (Shoniwa, 2021). According to Rajendran (2013), the adoption of cloud computing changes the business model, business processes, organisational structure, organisational culture, and governance model. Changing the business model, processes and structure in an organisation is based on the appetite for change of top management (Nagahawatta et al., 2024). According to Hassan et al. (2017), the attitudes of SME leaders towards technology adoption are critical and its adoption rate is influenced by the awareness and proactive attitudes of business owners and managers towards technological innovation.

Alkhater, Walters and Wills (2018) stated that the commitment and support from top management are crucial for the adoption of cloud computing, when leaders prioritize technological advancement and provide the necessary resources, the adoption process becomes smoother and more effective. Gavrila and de Lucas Ancillo (2021) cited that when top management understands the benefits of cloud accounting, they are more likely to drive its implementation. Hence, the migration from traditional accounting to cloud accounting is only feasible with the top management buy in and leaders who recognize the strategic value of cloud accounting are more likely to invest in such systems (Hsu and Lin, 2016; Oliveira et al., 2014). Furthermore, Nagahawatta et al. (2024) posit that the readiness of employees to embrace new technologies is crucial as successful adoption of cloud computing systems requires that employees are adequately trained and comfortable with the new technology. Consequently, insufficient training and resistance to change among staff can impede the adoption process. Shoniwa (2021) and Zhang et al. (2021) also stated that organizations with a culture that embraces innovation and change are more likely to successfully adopt cloud accounting solutions and this involves fostering an environment where employees are encouraged to use new technologies.

2.2.3. Environmental factors

Environmental factors are external elements that affect the usage of cloud accounting, and they play a crucial role in its adoption (Lutfi et al., 2016). Tawfik et al. (2023) asserted that environmental factors include regulatory environment, market competition, and technological infrastructure. These factors are often beyond the direct control of the business but play a crucial role in shaping the business environment (Lutfi et al., 2016). The regulatory framework governing the use of cloud services and digital technologies can either facilitate or hinder their adoption (Lynn et al., 2018). Supportive policies, such as tax incentives for technology investments and clear regulations regarding data protection and privacy, can encourage SMEs to adopt cloud accounting (Shoniwa, 2021; Al-Hujran et al., 2018). Moreover, supportive government policies that promote digital transformation can encourage SMEs to adopt cloud accounting. Al-Hujran et al. (2018) asserted that incentives, subsidies, or tax benefits for technology adoption can make cloud solutions more attractive.

Skafi et al. (2017) postulated that high levels of competition within the industry can drive SMEs to adopt advanced technologies like cloud accounting to gain a competitive edge through improved efficiency, better financial management, and enhanced customer service. The adoption of cloud accounting by peers and competitors can influence other SMEs to follow suit, driven by the need to keep up with industry standards and innovations (Alshamaila et al., 2013). Hamzah et al. (2023) asserted that as customers and business partners increasingly expect real-time financial data and transparency, SMEs adopt cloud accounting to meet these expectations and improve their service offerings. The integration of SMEs into global markets drives the adoption of cloud accounting, as it facilitates better financial management, compliance with international standards, and seamless operations across borders (Hamzah et al., 2023; Gavrila and de Lucas Ancillo, 2021). Furthermore, SMEs with more access to funding grow fast and have an appetite to adopt innovation as well as advanced technological advancements (Dlamini, 2022b; Skafi et al., 2017). Shoniwa (2021) stated that the availability of financial resources and access to credit or funding is crucial for technology adoption and SMEs with better access to capital are more likely to invest in cloud accounting solutions. From the discussion of literature, the study formulated the following conceptual framework depicted in Figure 1 below.

H_1: Technological factors have a positive significant relationship with cloud accounting adoption among SMEs

H_2: Organisational factors have a positive significant relationship with cloud accounting adoption among SMEs

H_3: Environmental factors have a positive significant relationship with cloud accounting adoption among SMEs.

Figure 1: Conceptual framework
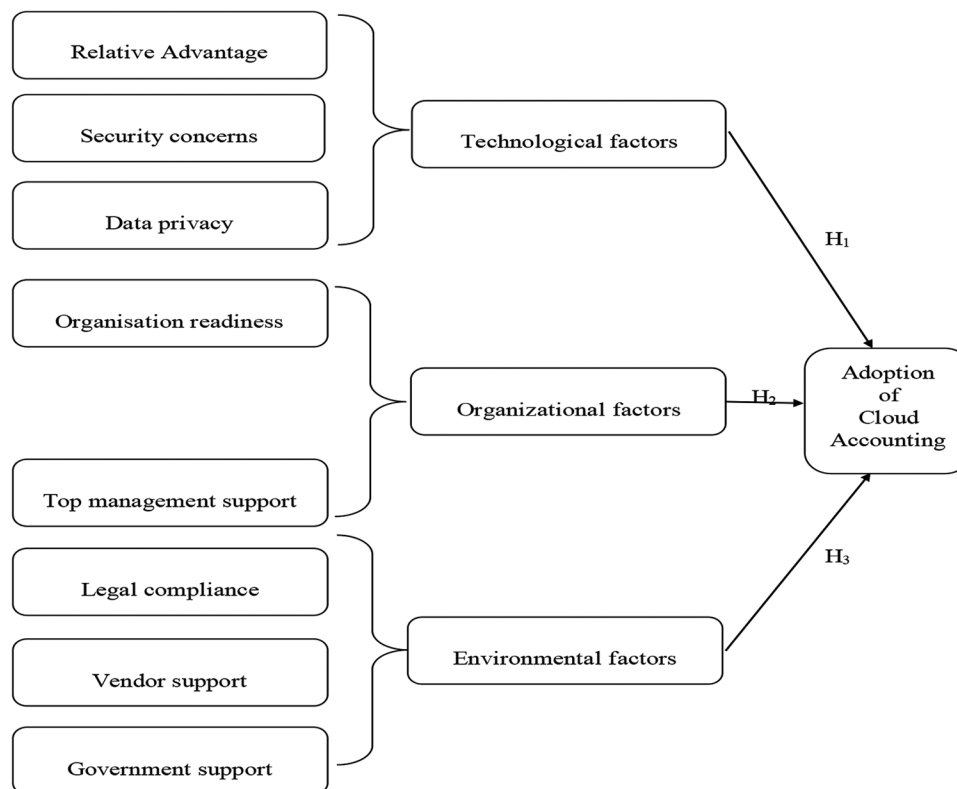
Source: Own formulation

3. METHODOLOGY

The study adopted a mixed-methods research design. This research design allowed the researcher to understand the factors influencing the use of cloud accounting among SMEs in Zimbabwe. The mixed-methods research approach combined quantitative and qualitative methods to provide a comprehensive understanding of the factors at play. The population are registered SMEs in the 10 provinces of Zimbabwe. There are 1,954,202 MSMEs in Zimbabwe, of which 74,260 are registered SMEs (Reserve Bank of Zimbabwe, 2022). Of the registered SMEs, 7,817 are medium-sized and 66,443 are small businesses. Stratified simple random sample procedures were used. The study stratified the sample using the size of the firm (small-sized or medium-sized). Survey Monkey sample calculator was used to determine the quantitative sample size, and the saturation level technique was applied for qualitative data collection. Previous studies on cloud accounting among SMEs have collected data using 156 survey questionnaires (Saad et al., 2022), 16 semi-structured interviews (Yau-Yeung, 2017), 12 semi-structured interviews (Ma et al., 2017), and 11 in-depth interviews (Nyberg and Kemski, 2014). Hence, this study distributed 240 questionnaires and conducted 12 semi-structured interviews with entities in various sectors.

The study comprised entities with six to seventy-five permanent employees and five hundred thousand to three million dollars in yearly turnover and an asset base of two hundred and fifty thousand to three million dollars. Questionnaires and interview guides were used as data collection tools. A cover letter for the research instruments was sent with the research tools. Data was collected in two stages: in the first phase, quantitative data was collected using questionnaires, and in the second phase, qualitative data was collected using face-to-face, semi-structured interviews. Quantitative data was analysed using SPSS version 22.0, and qualitative data was thematically analysed using content analysis. To assess internal consistency, Cronbach's alpha was computed. The management of the company approved the study's request for participants' participation, and the SMEs had to grant authorization for access to the participants. The participants were told by the researcher that they were allowed to decline participation in the study and that it was entirely optional. The researcher had no conflicts of interest with this work and completed ethical training at North-West University (NWU). On November 6, 2023, the NWU ethical clearance committee (NWU-01934-24-A4) approved the study protocol. Table 1 presents empirical evidence from prior studies that have been conducted on the factors influencing the adoption of cloud accounting.

4. RESULTS

The study evaluated the reliability and validity of the research instruments. The study used the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The KMO technique is employed to verify if the sample size is sufficient for carrying out factor analysis (Goud and Puranik, 2016). Pallant (2020) stated that a score of 0.7-0.8 is deemed great, hence, the KMO score of 0.731 in this study is enough for the factor analysis. The existence of significant correlations between the variables is tested using the Bartlett test of sphericity (Pallant, 2020). A statistically significant ($P < 0.05$) result suggests that there are sufficient correlations

Table 1: Findings from reviewed related studies

Author(s)	Year	Method	Sample size	Country	Findings of the study
Tawfik et al.	2023	Structural equation modelling	159 questionnaires	Oman	The study found that compatibility has a big impact on cloud accounting adoption.
Saad et al.	2022	Descriptive method	156 questionnaires	Jordan	The study found that technological factors, environmental factors and organisational factors influenced the adoption of cloud accounting among SMEs.
Skafi et al.	2020	Descriptive analysis	139 questionnaires	Lebanon	The findings show that the decision to use cloud computing services is positively correlated with organisational (such as top management support and prior IT experience) and technological (such as complexity and security) aspects.
Senarathna et al.	2018	Descriptive analysis	149 questionnaires (online survey)	Australia	Findings demonstrating that, as opposed to risk-related variables (such as security, privacy, and flexibility), SMEs were impacted by factors linked to leveraging their organisational capabilities (i.e., relative advantage, quality of service, and awareness).
Soni et al.	2018	Quantitative research methodology	110 Structured survey	India	The study reported that organisational size was the major factor on the adoption of cloud accounting
Salum and Abd Rozan	2016	Qualitative method	6 semi-structured interviews	Malaysia	The survey identified that SMEs' hesitation to adopt cloud computing is a result of knowledge gaps, security of data, manufacturer and technology trust, system accessibility, and functionality compatibility of the cloud system.

between the statements on the Likert scale to proceed with factor analysis (Awabil and Anane, 2018; Bartlett, 1954). As shown in Table 2 Bartlett's test is significant at 0.001 (Hair et al., 2014).

4.1. Measurement Model

The model was assessed using convergent validity and discriminant validity criteria (Hair et al., 2021). Gliem and Gliem (2003) suggested that when the research instrument is a Linkert scale-type questionnaire for reliability evaluating the constructs Cronbach's alpha is preferable. This study used Cronbach's alpha to evaluate the reliability of the variables. Table 3 shows the reliability values which are above the 0.70 threshold (Pallant, 2020; Hair et al., 2021). Composite reliability which is above 0.70 is acceptable, in this study, the score value above 70% is deemed satisfactory (Hair et al., 2014).

Convergent validity refers to the extent to which different measures of the same construct are correlated and it indicates that items that are supposed to measure the same construct do indeed show a high degree of correlation (Cheah et al., 2018). The average variance extracted (AVE) is a commonly used metric to assess convergent validity (Gio, 2022). AVE measures the amount of variance captured by a construct about the amount of variance due to measurement error. An AVE value of 0.600 or higher suggests that the construct explains more than 60% of the variance in its indicators, which is considered a good indication of convergent validity. Based on the AVE which is above 60% as shown in Table 3 indicates that the construct has strong convergent validity suggesting that the construct measures are both reliable and valid (Gio, 2022).

The first part of the questionnaire collected data on the demographic information of the participants, table 4 show that male respondents made up 61.0% of the sample, compared to female respondents 39.0%. Most participants (44.0%) were between the ages of 41 and 50, followed by those between the ages of 21 and 30 (33.3%) and 31 and 40 (22.7%). No participants were under the age of 21 or older than 51.

Table 2: KMO and Bartlett's test

Kaiser-Meyer-Olkin measure		0.731
Bartlett's test	Approx. Chi-square	2436.86
	Sig.	<0.0001

Source: Fieldwork

Most respondents (56.7%) had a bachelor's degree as their highest level of education, followed by diplomas (33.3%) and master's degrees (12.1%). The respondents' high percentage of bachelor's and master's degrees suggests that they have a broad grasp of business concepts, which is necessary for successfully integrating and overseeing cloud accounting systems within SME operations. Data was collected from 93 small-sized firms (66.0%) and 48 medium-sized firms (34.0%). Table 5 presents the descriptive statistics factors influencing the use of cloud accounting among SMEs in Zimbabwe.

5. DISCUSSION

5.1. Technological Factors

Zimbabwean SMEs, in general, lacked awareness of the usefulness and benefits of cloud accounting systems, relative advantage had a mean value of 3.08. The result concurs with the findings obtained by Saad et al. (2022) who reported that Jordanian SMEs were unaware of cloud-based systems, however, contrary to the findings by Khayer et al. (2020) who stated that SMEs are aware of cloud accounting and its usefulness. SMEs are highly concerned about the security of their financial data when considering cloud solutions (mean value of 4.75), this high score indicates that SMEs perceive security on their data as a critical factor influencing their decision-making process. Moreover, data privacy is also one of the most critical technological factor for SMEs in Zimbabwe, there is a strong concern for the security and confidentiality of financial data stored and processed in the cloud. High-security standards and assurances from cloud service providers could potentially accelerate adoption rates among SMEs (Nagahawatta et al., 2021; Doherty et al., 2015). Scalability and flexibility appear to be less critical factors for

Table 3: Reliability analysis

Latent variables	Number of items	Cronbach's alpha	Composite reliability	Average variance extracted
Rel_Adv.	4	0.913	0.835	0.761
Sec_Con.	5	0.834	0.817	0.732
Scal_Flex.	5	0.827	0.784	0.858
Top_Mgt.Sup.	4	0.780	0.790	0.724
Org_Rdness.	4	0.761	0.762	0.754
Vendor_Supp.	5	0.867	0.714	0.801
Data_Prv	5	0.905	0.846	0.750
Legal_Compl.	4	0.813	0.711	0.724
Gov_Supp.	5	0.737	0.819	0.623
Avail_Resour.	4	0.872	0.768	0.697
CA_Usag.	5	0.801	0.798	0.724

Rel_Adv: Relevative advantage, Sec_Con: Security concerns, Scal_Flex: Scalability and flexibility, Top_Mgt.Sup: Top management support, Org_Rdness: Organisation readiness, Vendor_Supp: Vendor support, Data_Prv: Data privacy, Legal_Compl: Legal compliance, Gov_Supp: Government support, Avail_Resour: Availability resource, CA_Usag: Usage of cloud accounting
Source: Fieldwork

Table 4: Profile of respondents

Details	Frequency	Percent	Cumulative percent
Gender			
Male	86	61.0	61.0
Female	55	39.0	100.0
Total	141	100.0	
Age			
21-30 years	47	33.3	33.3
31-40 years	32	22.7	56.0
41-50 years	62	44.0	100.0
Total	141	100.0	
Qualifications			
Diploma	44	31.2	31.2
Bachelor's degree	80	56.7	87.9
Master's degree	17	12.1	100.0
Total	141	100.0	
Position			
Bookkeeper	44	31.2	31.2
Accountant	63	44.7	75.9
Manager	17	12.1	87.9
Owner	17	12.1	100.0
Total	141	100.0	
Firm size			
Small	93	66.0	66.0
Medium	48	34.0	100
Total	141	100	

Source: Fieldwork

Table 5: Descriptive statistics

Details	Mean	Std. deviation
Relative advantage	3.08	0.873
Security concerns	4.75	0.452
Top management support	4.58	0.928
Government support	4.27	0.498
Organisation readiness	3.97	0.918
Data privacy	4.19	0.925
Legal compliance	3.73	0.502
Availability resource	3.49	0.997
Scalability and flexibility	2.83	0.756
Vendor support	4.38	0.947

Source: Fieldwork

these SMEs although they remain relevant as shown by a mean value of 2.83.

Through the semi-structured interviews, the respondents also cited in Zimbabwe, inadequate internet infrastructure, access to advanced technological training is limited and limited access to high-speed internet poses a significant barrier to implement and maintain cloud accounting systems effectively. These findings are in harmony with the results obtained by Masocha and Dzomonda (2018) who stated that Zimbabwean SMEs struggle to adopt effective technological systems due to limited access to internet. Literature also assert that the level of broadband penetration directly affects the feasibility of adopting cloud-based solutions and limited access to high-speed internet deter SMEs from utilising cloud accounting systems that require stable and fast connections for optimal performance (Nagahawatta et al., 2024; WBBA, 2023). Nyoni and Bonga (2018) also cited that in Zimbabwe, despite efforts to improve internet access, broadband penetration remains relatively low compared to more developed regions. The statistical analysis supports the hypothesis that technological factors have a positive and significant relationship with the adoption of cloud accounting among SMEs. Table 6 shows the beta coefficient of 0.178 suggests a positive association, where improvements in technological factors lead to increased adoption of cloud accounting. The $t = 4.041$ and the $P = 0.001$ provide strong evidence that this relationship is statistically significant. Therefore, the study findings reveal that technological factors positively influence the adoption of cloud accounting among SMEs in Zimbabwe, thus H1 is supported. These results validate prior studies that have shown technological factors significantly influence the utilisation of cloud-based systems among SMEs (Baiod and Hussain, 2024; Shetty and Panda, 2023; Lutfi et al., 2023).

5.2. Organisational Factors

The high mean value indicates that, on average, SMEs in Zimbabwe perceive top management support as very high in driving the utilization of cloud accounting. This emphasizes the crucial role of top management in driving cloud accounting adoption. When top management is supportive, it likely facilitates the allocation of resources, provides strategic direction, and fosters a culture that is open to technological innovations. SMEs that lack strong support from top management might struggle with adopting cloud accounting, highlighting the need for leadership engagement and commitment to technology adoption. These results agree with the findings reported by Alsyouf et al. (2022) and Idris and Mohamad (2017) who revealed that the attitude of top management on technology affects the application of cloud-based

Table 6: Hypothesis path testing

Hypothesis No.	Path	β	t-value	P-value	Decision
H$_1$	Tech_factors→Adp_CA	0.178	4.041	0.001	Accepted
H$_2$	Orgz_factors→Adp_CA	0.254	4.122	0.000	Accepted
H$_3$	Env_factors→Adp_CA	0.219	3.845	0.012	Accepted

Significant at P<0.05, and P<0.01 (one-tailed test). Tech_factors: Technological factors, Orgz_factors: Organisational factors, Env_factors: Environmental factors, Adp_CA: Adoption of cloud accounting

systems. Baiod and Hussain (2024) asserted that top management usually has the final word over what technology an organisation can use, can allocate all the resources needed for adoption, and can reduce resistance to any organisational changes that may emerge from this adoption.

The low mean value of 2.05 on organisation readiness suggests that SMEs in Zimbabwe generally feel unprepared for adopting cloud accounting. This indicates significant challenges in terms of resources, infrastructure, and employee skills. The results on organisation readiness agree with the findings on technological factors which that a lack of necessary IT infrastructure, insufficient employee training, and a general unpreparedness affects the integration of new technologies (Baiod and Hussain, 2024; Lutfi et al., 2023). Literature asserts that improving organizational readiness is critical and might involve investing in infrastructure, enhancing employee skills through training programs, and developing clear implementation strategies (Gavrila and de Lucas Ancillo, 2021; Hsu and Lin, 2016).

Lack of knowledge about cloud accounting was also highlighted by the respondents as a key driver for non-adoption of cloud accounting. Some of the respondents had this to say:

> "We have not explored cloud accounting options. I do not think our team is aware of its capabilities or how it differs from traditional methods." [R4]
> "Cloud accounting? I am not familiar with that term. Is it something new in accounting software?" [R9]
> "We are currently using traditional accounting methods. I have not looked into cloud accounting because I am not sure what it involves or how it could benefit us." [R2]

This suggests that while resources are somewhat available, there may be limitations on the utilisation of cloud accounting among SMEs due to lack of knowledge into the new technological system and that impact the use of adoption of cloud accounting among SMEs in Zimbabwe. However, there are some SMEs that need to ensure that adequate financial, technological, and human resources are in place to support the transition to cloud accounting (Nagahawatta et al., 2024).

The statistical analysis strongly supports the hypothesis that organizational factors have a positive and significant relationship with the adoption of cloud accounting among SMEs. Table 6 depicts the beta coefficient of 0.254 suggests a moderate positive association, where improvements in organizational factors lead to increased adoption of cloud accounting. The high t = 4.122 and the extremely low P = 0.000 provide very strong evidence that this relationship is statistically significant, this is in line with prior studies (Saad et al., 2022; Alshirah et al., 2021). Literature states

that focusing on organizational improvements, such as enhancing management support, fostering a culture of innovation, and ensuring employee readiness, can significantly boost the adoption of cloud accounting (Lutfi, 2022; Alkhater et al., 2018; Awa et al., 2016).

5.3. Environmental Factors

SMEs in Zimbabwe perceive legal compliance as moderately important for cloud accounting adoption and while legal considerations are recognized, they may not be seen as the most critical factor influencing adoption as shown by a mean value of 3.73. The mean value of 4.27 indicates that SMEs perceive government support as relatively important for cloud accounting adoption and it indicates that supportive policies or initiatives from the government can significantly influence SMEs' decisions to adopt cloud accounting technologies. Government support may include subsidies, tax incentives, or policies that promote the use of cloud technologies (Saad et al., 2022; Dlamini, 2022a). The findings also indicates that SMEs place significant importance on vendor support in the adoption of cloud accounting and robust support from vendors, such as training, technical assistance, and customer service, is crucial for SMEs considering or implementing cloud accounting solutions as shown by the mean value of 4.38. The results support the hypothesis on the significant relationship that environmental factors have on cloud accounting utilisation. However, these findings are contrary to the results obtained by Ifinedo (2011) but in agreement with Baiod and Hussain (2024) and Lutfi (2022) who found that vendor support and government support influence the adoption of cloud-based systems.

6. CONCLUSION

The study examined the key drivers influencing the utilisation of cloud accounting by SMEs in Zimbabwe. Through quantitative analysis of survey data and qualitative insights from interviews, several critical factors emerged as significant determinants of cloud accounting adoption. The study found that the adoption and utilization of cloud accounting among SMEs in Zimbabwe are significantly influenced by lack of knowledge on cloud accounting, top management support, security concerns, data privacy, organizational readiness, availability of resources, legal compliance, government support, and vendor support. The study recommends that SMEs should allocate resources to upgrade necessary IT infrastructure, including reliable internet access and secure hardware, to support cloud accounting systems. SMEs should develop and implement training programs to enhance employees' technical skills and familiarity with cloud accounting tools. This can help build internal capacity and reduce resistance to change.

Furthermore, SMEs should formulate detailed plans for adopting cloud accounting, including timelines, resource allocation, and

risk management strategies, to ensure a smooth transition. The Zimbabwean government should offer grants, subsidies, or tax incentives to encourage SMEs to adopt cloud accounting and financial support can help mitigate initial investment costs. Moreover, the government as the major stakeholder should conduct workshops, seminars, and training programs to educate SMEs about the benefits and functionalities of cloud accounting. Policymakers and support organizations can play a pivotal role by providing financial incentives, training, and fostering collaborations, while vendors can ensure that SMEs receive the necessary technical support and affordable solutions. These collective efforts will drive the successful adoption of cloud accounting, leading to improved operational efficiencies, better financial management, and enhanced competitiveness for SMEs in Zimbabwe.

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