

Do Firm Size, Stakeholder Environment, and Internal Environmental Management Influence Small Medium Sized Accounting Firms to Adopt Computerised Accounting Systems?

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Abstract

Background: In the modern business world, many companies rely on information technology, such as computerised accounting systems, to streamline the preparation of these financial statements. Despite the numerous benefits these systems offer, some organisations still choose to prepare their financial statements manually, exposing themselves to risks such as errors, inefficiencies, a lack of scalability, and limited real-time visibility. *Aim:* This study examines the influence of firm size, stakeholder involvement, and internal environmental management on the decision of small and medium-sized accounting firms (SMAs) in KwaZulu-Natal, South Africa, to adopt computerised accounting systems. The study uses agency theory to explain the dynamics between the SMAs, who act as agents, and their clients, the principals, who rely on their services to prepare financial statements. *Setting:* SMAs officially registered with the Durban Chamber of Commerce make up the population frame. Therefore, organisation forms the unit of analysis, which consists of the SMAs located in KwaZulu-Natal, South Africa. *Method:* This study used a questionnaire survey on 200 SMAs in KwaZulu-Natal, South Africa. *Results:* This study shows all three factors—firm size, stakeholder involvement, and internal environmental management—significantly and positively influence the decision to adopt computerised accounting systems. Stakeholder involvement, in particular, proves to be the most influential predictor. *Conclusion:* The introduction of these systems ensures the fast and accurate production of financial information, thus meeting the needs of all stakeholders. *Contribution:* This study contributes to the existing literature on the factors driving the adoption of computerised accounting systems, with particular focus on the context of KwaZulu-Natal, South Africa.

Keywords: Firm size; stakeholder involvement; internal environmental management; agency theory; SMAs.

Introduction

The rise of worldwide economic progress, marked by advancements in information technology, swift transformations in production methods, and intense customer and market rivalry, is altering the prerequisites for attaining profitable management, a sustainable competitive edge in the markets, and enhanced financial performance in the business organisation (Atkinson, Banker, Kaplan, & Young, 2001). With the expansion of company prospects and operations in a broader market, there is a need for improved accounting procedures to handle massive transactions and reduce accounting mistakes. The calibre of accounting information is therefore a key determinant of organisational success, presenting risks from both inside and outside the organisation. Nevertheless, global records document numerous instances of fraud. One example: In South Africa alone, the number of fraud incidents reported by the Southern African Fraud Prevention Service, increased by 600% in 2022 compared to 2018 (Modise, 2023).

In 2002, the United Kingdom adopted the Consolidated Code of Corporate Administration. In the same year, the United States also introduced the Sarbanes-Oxley Act (SOX) to regulate financial reporting among the companies (Anaeli, 2018). Following the example of the United Kingdom and the United States, South Africa introduced the Public Entities Corporate Governance Bill (Wu, 2014). Such action is attributed to the existence of poor corporate governance practices among the companies in South Africa (Sibindi & Aren, 2015). This is also attributed to the realisation that accountability and transparency are the foundations of any organisation. The small and medium-sized accounting firms SMAs are not an exception to this. To achieve effective governance within the small, medium and micro enterprises (SMMEs),

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particularly the SMAs, it is essential that they prioritize accountability and openness, since these factors are critical for the company's success. To assist them with this, they need to be familiar with the technologies available (Musarurwa, 2017). This is consistent with the SOX Act, which stated the importance of information and technology, such as computerised accounting systems, in the governance section.

A body of the accounting literature has investigated the perceptions of SMMEs on regulation of computerised accounting systems in South Africa. These surveys show that, although there is no official need, a clear majority of SMMEs (69.6%) tend to continue using their computerised accounting systems (Motta, 2017). In their study, Mthimkhulu and Aziakpono (2015) discovered that 75% of SMMEs expressed a willingness to continue using computerised accounting systems due to their cost-saving benefits. Similarly, Jayabalan, Dorasamy, Raman, and Ching (2009) posited that computerised accounting systems are necessary for monitoring management's financial activities and ensuring oversight of both assets and personnel (Jayabalan et al., 2009). In an environment where there are no regulations, computerised accounting systems also increase trust and send a positive message to stakeholders. However, despite the availability of computerised accounting systems, there are SMAs in Africa chose not to implement them.

This study examines the factors influencing the decision SMAs in KwaZulu-Natal, South Africa, to adopt computerised accounting systems. In particular, this study examines the influence of firm size, stakeholder involvement, and internal environmental management on these decisions. The findings of this study can contribute to the existing literature on the factors driving the adoption of computerised accounting systems, with particular focus on the context of KwaZulu-Natal, South Africa. The next section, Section 2 presents the literature review. This is followed by Section 3 that provides the research design and then the results and discussion in Section 4. The final section, Section 5 concludes this study.

Literature Review

Computerised Accounting and SMAs

In general, computerised accounting refers to the use of computers and accounting systems for the purpose of documenting, storing, and analysing financial transactions and information. It can also refer to situations where organisations have the opportunity or need to seek a competent and impartial expert assessment of their accounting practices, even if there is no legal requirement to do so (Radu & Marius, 2012). According to Choe (2004), computerised accounting systems may provide a number of important management reports, such as variance analysis and budget analysis. The speed and quality of data processing and analysis have significantly increased, successfully meeting managers' needs for accurate and timely information that is suited for decision-making. Therefore, organisations that meet the necessary criteria for exemption from computerised accounting show a willingness to undergo computerised accounting for their financial statements (Aljarallah, 2020).

The concept of the need for computerised accounting systems can be seen as the inherent value that arises when organisations express their desire to undergo accounting systems, even in the absence of regulatory oversight (Kanyanga, 2023). According to the study by Ștefănescu, Comanescu, Buhusi, and Bilcan (2019), a significant proportion of managers in small companies, namely 41%, are still in favour of computerised accounting of company finances. According to Ilić and Anđelić (2017), 69% of SMAs are willing to undergo computerised financial accounting, even if there are no legal obligations. The assumption that the majority of SMAs choose to continue to computerise their financial reporting is supported by Gelinas, Dull, and Wheeler (2018). Lin, Li, and Guo (2021) opined that SMAs that adopt computerised accounting systems may see improvements in their ability to mitigate financial risk. Conducting computerised accounting contributes to the company's value by offering a decent level of confidence in its creditworthiness (Bhatt, 2021). It is akin to cultivating a positive reputation and enhancing the company's standing.

According to Gelinas et al. (2018), 71% of SMAs will continue to require accounting systems, regardless of whether they are no longer mandatory. This is because the vast majority of boards believe that computerised accounting is essential for businesses and should continue to be mandatory for SMAs (Arsenie-Samoil, 2010). Companies believe that computerised accounting system financial statements have more value and benefits for the company than unaudited financial statements (Rani, 2013). Computerised accounting systems serve as a control mechanism that provides confidence to external stakeholders and is consistent with management's attempts to improve internal control and record-keeping practices (Abad-Segura, 2023). Furthermore, the use of computerised accounting systems helps reduce possible conflicts of interest that may occur between customers and contractors as a result of agency problems (Moid, 2018), which might enhance reliability and protection of financial statements, thereby possibly improving the performance of SMMEs (Romney, Steinbart, Mula, McNamara & Tonkin, 2012). However, according to Utama and Pratama (2021), most SMMEs choose computerised accounting over accounting systems due to concerns about the expensive, complex, and time-consuming nature of the latter. These SMMEs also see computerised accounting as offering limited advantages to their company.

Firm Size and Computerised Accounting Systems

The link between firm size and computerised accounting systems has been the subject of much debate and controversy. Previous studies have shown that firm size is the most important and predominant factor influencing the decision of SMEs to adopt computerised accounting systems. Firm size is often measured by its total turnover and number of workers, directly correlates with the level of need for computerised accounting systems. For example, Collis, Jarvis and Skerratt (2004) discovered that firm size has a significant influence, which lends additional legitimacy to this assertion. They confirmed their hypothesis that there is a positive correlation between firm size and the adoption of computerised accounting systems. Moshi and Kiowi (2021) state that large companies with multiple branches, costly inventories, and a high turnover rate are seeing a significant need for computerised accounting systems.

A group of studies has examined the correlation between firm size and adoption of computerised accounting systems. For example: Bulatovic and Treis (2016) found in Sweden that firm size, measured in terms of total turnover, significantly and positively influence on adoption of computerised accounting systems. However, in Montero, Lopez and Guzman (2020), they found that accounting system financial statements is of significant value to companies that want to grow. Their findings suggest that firm size significantly but negatively influence adoption of computerised accounting, as smaller companies are more likely to use these services. Their findings contradict the findings of Nworie, Anaike, and Onyeka (2023), who found that companies require accounting systems for their financial statements if their turnover exceeds specified thresholds; otherwise, they opt for exemption from computerised accounting. This shows that computerised accounting systems are a motivator for business sustainability, regardless of size, indicating that even with the exemption, smaller companies favour the practice.

Nworie and Okafor (2023), on the other hand, argue that firm size does not sufficiently explain the motivation to adopt computerised accounting. This is supported by the minimal negative connection and the lowest effect of firm size on adoption of computerised accounting systems. In their study, Nworie, OKafor, and John-Akamelu (2022) investigated family-owned firms in Australia and specifically focused on adoption of computerised accounting systems. Interestingly, their findings did not provide enough evidence to support their prediction that firm size would be associated with an inclination towards computerised accounting. Johnson and Adegbe (2021) argue that firm size alone may not accurately predict the demand for accounting systems. They suggest that considering directors' motivation to adopt computerised accounting systems as a more thorough and suitable alternative is crucial to getting meaningful results. Therefore, the first research hypothesis is developed:

H1: Firm size has a significant influence on the decision of SMAs in KwaZulu-Natal, South Africa, to adopt the computerised accounting systems.

Stakeholder Involvement and Computerised Accounting Systems

Another group of studies has shown that there is a link between stakeholder involvement and SMAs' decision to adopt a computerised accounting system (Chalu, 2019). The stakeholders acknowledge the benefits of computerised accounting systems and the confidence they instil. The stakeholders then demand that linkages be established and maintained with both internal and external financial reporting recipients (Itang, 2021). As a result, computerised accounting systems are critical for SMAs because they facilitate contact with stakeholders who are not directly involved in managerial tasks (Ware, 2015). Computerised accounting systems may help boost trust and give proof that the agent is operating in the best interests of the principal.

In the study by Mustapha and Yaen (2013), they have shown that this outcome significantly affects the interaction between relevant stakeholders and adoption of computerised accounting systems. Such findings align with the findings of Jayabalan et al. (2019), who discovered a notable and favourable correlation between the drive to utilise computerised accounting systems and the associated stakeholder connection. This relationship stems from the accounting system ability to provide assurance and boost external parties' confidence. Nguyen and Nguyen (2020) discovered that Vietnamese directors are more inclined to choose accounting systems when they perceive that several stakeholders have a significant positive impact on them.

A group of studies has shown that computerised accounting offers a significant level of confidence to many parties involved, including owners, executives, investors, financiers, suppliers, unsecured creditors, and tax authorities (Oladipupo & Ajape, 2013). Oladipupo and Ajape (2013) conducted compelling research that establishes a robust and significant correlation between adoption for computerised accounting systems and expectations and preferences of the concerned parties. Their results contradict the findings of Chong and Nizam (2018), who showed no significant association between computerised accounting and stakeholder status for suppliers and creditors in small enterprises in the United Kingdom and Denmark. Thus, the second research hypothesis is formulated:

H2: Stakeholder involvement has a significant influence on the decision of SMAs in KwaZulu-Natal, South Africa, to adopt the computerised accounting systems.

Internal Environment and Computerised Accounting Systems

Another body of the accounting literature has examined the link between the internal environment and organisations' decision to adopt computerised accounting systems (Altamuro & Beatty, 2020). The internal environment of an organisation is critical because it guarantees the integrity of the financial reports it generates (Monteiro, Vale, Leite., & Lis, 2024). To effectively mitigate risk and address agency problems, the company's management establishes an internal framework of environmental management. This highlights the effect of the internal environment management on the process of decision-making. For example, Deumes and Knechel (2008) found that there is a direct correlation between the inclination to adopt computerised accounting systems and the need for an internal environment management. The capacity of the systems to mitigate risk may further enhance this connection through the implementation of computerised accounting (Varici, 2013).

According to Knechel and Willekens (2006), internal environmental management increases the demand for computerised accounting systems. When Collis et al. (2004) researched the link between internal environmental management and computerised accounting systems, they likewise came to the same conclusion. Their findings indicate a positive correlation between internal environmental management and computerised accounting systems. Furthermore, internal environmental management improves accounting's capacity to provide high-quality financial reporting with accurate and dependable data. Mustapha and Yaen (2013) discovered that control of accounting records and the reliability of financial statements had a substantial impact on management and other users' choices to embrace computerised accounting.

In contrast, Ndekwa (2015) demonstrates that the requirement to improve the credibility of financial statements for SMAs has no bearing on the need to adopt a computerised accounting system. His results show that there is no link between internal environmental management and SMAs' choice to adopt computerised accounting systems, implying that the variance between this factor is not statistically significant. Similar results were reported by Abdulle, Zainol, and Mutalib (2019). As a result of the divergent outcomes from prior investigations, this study proposes the third research hypothesis.

H3: Internal environmental management has a significant influence on the decision of SMAs in KwaZulu-Natal, South Africa, to adopt the computerised accounting systems.

Research Framework

An effective approach to addressing and counteracting the agency hypothesis is to use computerised accounting. The monitoring role can become more challenging and intricate as the organisation expands in scale. The transaction volume of a larger organisation will exceed that of a SMA. Expanding the number of employees also increases the process's complexity and the risk of losing control. Computerised accounting serves as a monitoring mechanism (Gowri & Padma, 2018). Organisations may benefit from the unbiased evaluation of experts who have the knowledge and skills required to understand the transactional and accounting systems of SMAs (Panda & Leepsa, 2017). The foundation of this is established by the agreements made between the individuals in authority and the agents (Bendickson, Muldoon, Liguori, & Davis, 2016). The leader possesses the power to control the company's resources, while the principals keep a certain amount of distance from management choices and avoid becoming involved in daily operations (Ballwieser et al., 2012). The agency will face the challenge of information risk by restricting the ability of the principals to evaluate the financial data (Shogren, et al., 2015).

Figure 1 presents the study's research framework. This study investigates factors that influence SMAs' decisions to adopt computerised accounting systems in KwaZulu-Natal, South Africa. The study selects three factors that serve as the independent variables namely, firm size, stakeholder involvement, and internal environmental management. The dependent variable in this study is the SMAs' decision to adopt computerised accounting systems. This study relies on the relevant perspectives of agency theory.

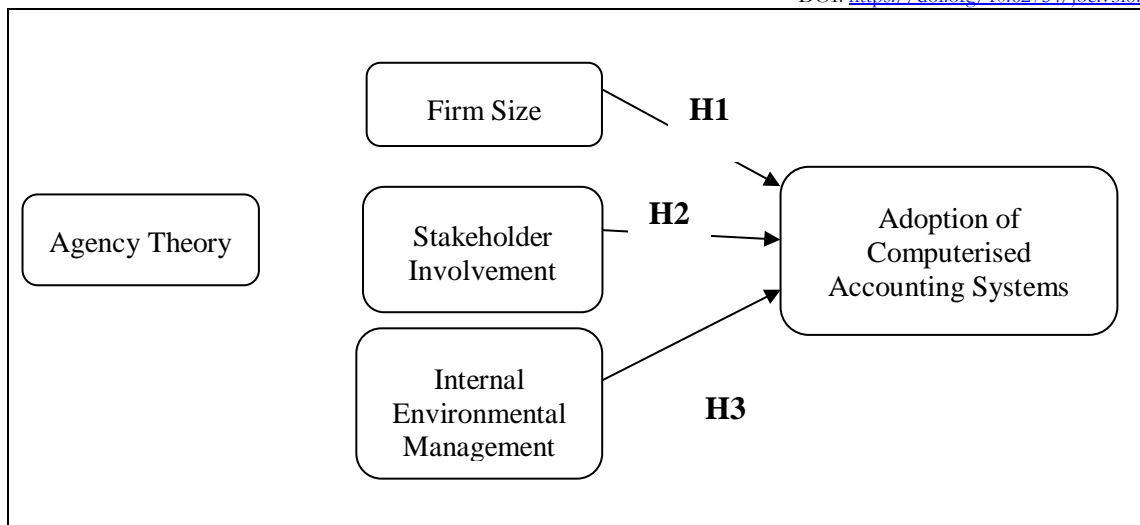


Figure 1: Research Framework

Research Design

Sample Selection

SMA's officially registered with the Durban Chamber of Commerce make up the population frame. Therefore, organisation forms the unit of analysis, which consists of the SMA's located in KwaZulu-Natal, South Africa. This study chose SMA's because the qualification criteria for computerised accounting apply to SMA companies. According to the 2021-2022 SMA Annual Report, the Durban Chamber of Commerce has a total of more than 300 SMA's. The Chamber supports the SMA's through various initiatives, including business development services, access to markets, and policy advocacy. In this study, the management professionals from SMA's become the representatives of their SMA's.

According to Greiner (2015), research must have a sufficient sample size in order to provide more accurate and dependable findings. In view of this, this study uses Green's (1991) way of determining sample size, which entails using the following formula:

$N \geq 50 + 8m$ where m is the number of predictors (independent variables)

With three independent variables, a sample size of at least 74 respondents is necessary. According to Delice (2010), sample sizes of more than 30 but less than 500 are appropriate for a study, making them ideal for this study. Respondents in this study are employees who have important responsibilities in the organisation and have a basic awareness of computerised accounting systems. To attain the desired number of participants for this study, a total of 230 possible respondents is targeted.

Research Instrument

The questionnaire survey is used as a research instrument in this study. The questionnaire development is based on reviewing the literature. Specifically, this study adapts the questions from Mahadea and Piilay (2008), Ismail (2011), Mubonderi (2015), and Vilakazi (2019) with some modifications. There are four sections in this questionnaire. In Section A, respondents are asked to complete their demographic profile. There are seven questions in this section with regards to the respondents, including gender, age, educational background, current job position, years of service, years of firm establishment, and type of firm. Respondents then have to answer two questions about the size of the SMA's. Firm size was assessed using a common scale that includes two items, namely, total turnover and the number of employees. Respondents were asked to select options corresponding to certain categories or groupings that directly represent firm size. The highest values for turnover and number of employees are categorised as a large company (5), and the lowest values for turnover and number of employees are categorised as a small company (1).

Section B requests respondents to complete a series of questions related to stakeholder involvement. This section assesses the significance of preserving the firm's connection with its financial statement consumers, which has a substantial influence on the requirement for statutory accounts (Breen, Sciulli, & Calvert, 2004). There are eleven statements that comprise the stakeholder measurement, such as 'stakeholders can have confidence in computerised accounting', 'suppliers and trade creditors might have trust in computerised accounting', and 'my company's image has an important idea for computerised accounting systems'. The respondents are requested to complete this section using a 5-point Likert scale of '1' as strongly disagree to '5' as strongly agree.

Section C consists of statements on internal environmental management. In this section, the respondents are requested to complete a series of questions related to internal environmental management. The internal environmental management includes eight statements, such as 'computerised accounting has improved my firm's record-keeping and accounting system', 'computerised accounting has aided in the prevention of money laundering and fraud', and 'computerised accounting has given me more confidence in the financial statements' reported figures'. The respondents are requested to complete this section using a 5-point Likert scale of '1' as strongly disagree to '5' as strongly agree.

The last section, Section D, requests the respondents to complete a series of questions on SMAs' decision to adopt computerised accounting systems. There are six questions in this section, such as 'my firm benefits greatly from computerised accounting systems', 'despite the fact that my company is legally required to use computerised accounting systems, I would continue to choose it', and 'the value generated by computerised accounting systems is more than the accountant fees paid'. The respondents are requested to complete this section using a 5-point Likert scale of '1' as strongly disagree to '5' as strongly agree.

Data Collection

Durban University of Technology provides a comprehensive set of ethical criteria before conducting a study. The researcher obtains ethical approval from both Faculty of Accounting and Informatics and Durban University of Technology. The collected data for the research is stored in a protected and confidential manner. Once the sample need was determined, the questionnaire was circulated to the SMAs in KwaZulu-Natal, South Africa. The SMAs were acquired from the directory and reached out to via email and WhatsApp. They were formally invited to participate in the questionnaire survey and provided with a link to access a self-administered online questionnaire tool called Google Form. Given that respondents are prone to having demanding schedules due to their daily obligations, the use of Google Form enables them to react to the enquiries at their convenience.

Google Form provides unrestricted access at any location and time, as long as there is internet connectivity. It is considered the optimal option due to its time-saving capabilities (Callegaro, 2013). The online questionnaire survey allows the researcher to adapt to technological advancements by transitioning from traditional paper-based methodologies to digital platforms (Peruchi, Pacheco, Todeschini, & Caten, 2022). Furthermore, the outcomes of the internet survey are accessible for examination and may be promptly imported into other analytic applications for assessment. Out of the 230 survey questionnaires sent, 200 were returned and usable, resulting in a response rate of 87%.

Results and Discussion

Descriptive Analysis of SMA Profile

Table 1 shows that most responses come from SMAs that have been in operation for 6 to 10 years (40%, or 80 SMAs). This is followed by SMAs that have been in existence for more than 20 years with 33.5%, or 67 SMAs, and then SMAs that have been in existence for 11 to 15 years with 19.5%, or 39 SMAs. The fewest SMAs that participated in this study were those that had been in existence for 16 to 20 years, with 14 SMAs, or 7%.

Table 1 also shows majority of SMAs in KwaZulu, South Africa, are predominantly limited liability companies, accounting for 132, or 66%, of the sample. The remaining portion consists of sole proprietorships, which account for 54 SMAs, or 27% of the respondents, while the minority consists of partnerships, totalling 14 SMAs, or 7%. The descriptive findings of this study align with the SMA definition, which requires all SMAs to register with SMEs or other comparable entities like sole proprietorships, partnerships, and limited liability corporations.

Table 1: SMAs' Profile

Items		n	%
Years of Establishment	6 to 10 years	80	40.0
	11 to 15 years	39	19.5
	16 to 20 years	14	7.0
	More than 20 years	67	33.5
Total		200	100.0
Business formation	Sole Proprietorship	54	27.0
	Partnership	14	7.0
	Private Limited companies	132	66.0
Total		200	100.0

Normality Test

The normality test results for all items are presented in Table 2, which is based on skewness and kurtosis. Researchers have argued that a distribution is considered considerably normal if the skewness is between -1 and 1 and the kurtosis is between -3 and 3 (Muslim, Habidin. & Latip, 2020). The data in this study demonstrates that the majority of items are skewed, with a significant number of them being negatively skewed. This suggests that there is a greater amount of data on the right side of the distribution. Kurtosis values vary, with some items showing flatter distributions (negative kurtosis) and others showing sharper peaks (positive kurtosis). However, based on the overall results for skewness and kurtosis, the data can be considered approximately normally distributed.

Table 2: Normality Test

Items	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
A8	0.242	0.172	-1.436	0.342
A9	-0.107	0.172	-0.710	0.342
B1	-1.473	0.172	0.170	0.342
B2	-1.511	0.172	0.287	0.342
B3	0.308	0.172	-0.925	0.342
B4	-0.390	0.172	-1.867	0.342
B5	-0.739	0.172	-0.435	0.342
B6	1.103	0.172	-0.792	0.342
B7	0.729	0.172	-1.484	0.342
B8	0.141	0.172	-2.000	0.342
C1	0.390	0.172	-1.867	0.342
C2	-1.551	0.172	0.410	0.342

C3	0.121	0.172	-1.005	0.342
C4	-1.152	0.172	0.659	0.342
C5	-1.073	0.172	-0.857	0.342
C6	-1.511	0.172	0.287	0.342
C7	-1.551	0.172	0.410	0.342
C8	-0.433	0.172	-1.831	0.342
D1	-1.556	0.172	1.751	0.342
D2	-0.610	0.172	0.425	0.342
D3	-0.727	0.172	-0.440	0.342
D4	-0.739	0.172	-0.435	0.342
D5	-1.511	0.172	0.287	0.342

Pearson Correlation Coefficients

Table 3 shows the Pearson correlation coefficients for four variables: business size, stakeholder participation, internal environmental management, and the usage of computerised accounting systems. A substantial association ($r = 0.533$, $p < 0.01$) suggests that larger companies use computerised accounting systems more often. There is a minor positive correlation between stakeholder involvement ($r = 0.200$, $p < 0.01$) and internal environmental management ($r = 0.192$, $p < 0.01$).

Adoption of computerised accounting systems is positively connected with stakeholder involvement ($r = 0.590$, $p < 0.01$), indicating that higher adoption rates lead to more stakeholder involvement. The findings show a somewhat positive link with internal environmental management ($r = 0.241$, $p < 0.01$). This study found a substantial positive correlation ($r = 0.674$, $p < 0.01$) between computerised accounting system adoption and internal environmental management practices. This implies that firms with stronger internal environmental management are more likely to see greater adoption rates. Stakeholder involvement has a somewhat positive connection ($r = 0.241$, $p < 0.01$) with firm size ($r = 0.192$, $p < 0.01$). The adoption of computerised accounting systems is significantly correlated with all three variables, with the strongest correlation being with internal environmental management ($r = 0.674$, $p < 0.01$). The results demonstrate that all correlations are statistically significant at the 0.01 level, suggesting a statistically significant relationship between these variables.

Table 3: Correlations Coefficient

		Firm Size	Stakeholders Involvement	Internal environmental management	Adoption of computerised accounting systems
Firm Size	Pearson Correlation	1	.200**	.192**	.533**
	Sig. (2-tailed)		0.004	0.007	0.000
Stakeholders Involvement	Pearson Correlation	.200**	1	.241**	.590**
	Sig. (2-tailed)	0.004		0.001	0.000
Internal environmental management	Pearson Correlation	.192**	.241**	1	.674**
	Sig. (2-tailed)	0.007	0.001		0.000
Adoption of computerised accounting systems	Pearson Correlation	.533**	.590**	.674**	1
	Sig. (2-tailed)	0.000	0.000	0.000	

***. Correlation is significant at the 0.01 level (2-tailed).*

Measurement Model

The measurement model of this study, which was implemented with SmartPLS software's PLS algorithm, is illustrated in Figure 2.

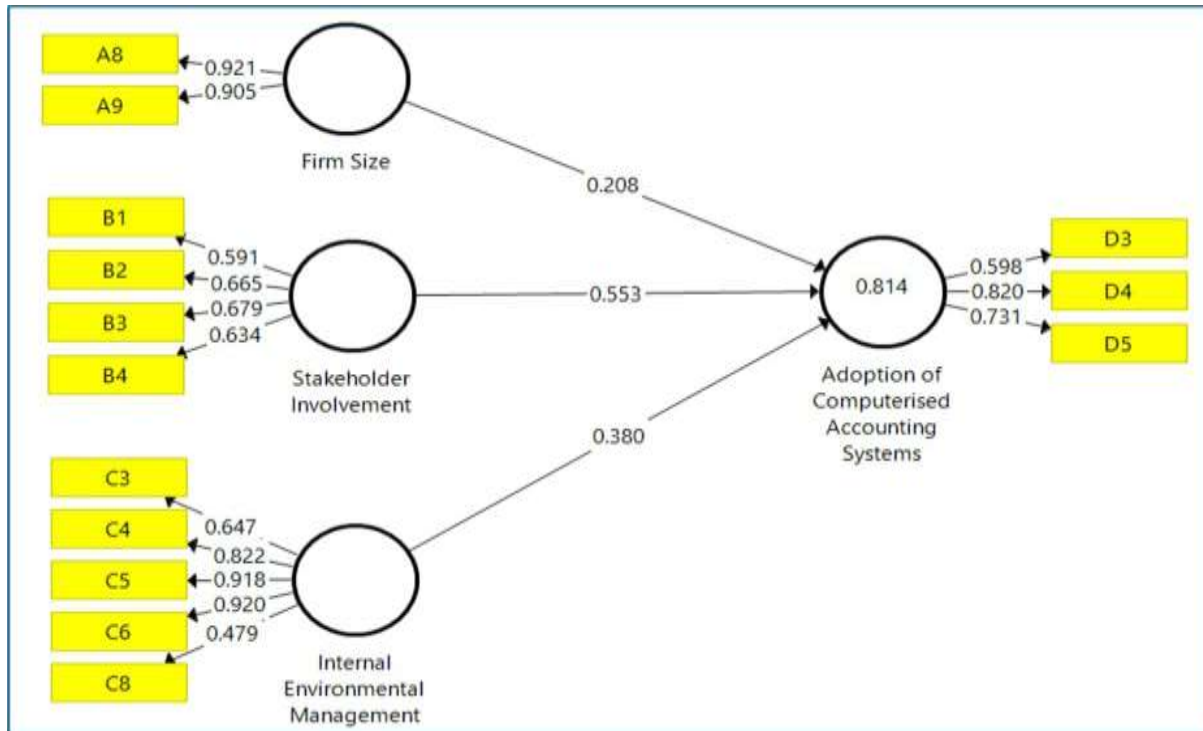


Figure 2: Measurement model of the study

Individual Item Reliability

Table 4 displays the outer loading findings from a SmartPLS measurement model study. Using the rule of thumb, the total number of items was decreased from 23 to 14, with 9 items discarded since their values were less than 0.40. As seen in the table, components A8 and A9 have extremely significant loadings of 0.921 and 0.905, respectively, showing that they are highly reflective of the firm size. With regard to stakeholder involvement, items B1 to B4 have moderate loadings of between 0.591 and 0.679. These values indicate an appropriate, but not extremely strong, representation of the construct of stakeholder involvement. In connection with the construct of internal environmental management, items C3, C4, C5, and C6 have loadings in the range of 0.479 to 0.920. In particular, C5 (0.918) and C6 (0.920) have very strong loadings, while C8 has a relatively low loading of 0.479, which indicates that it is a weaker indicator for the construct. Finally, items D3, D4, and D5 have loadings between 0.598 and 0.820, indicating that these items moderately to strongly represent the adoption of computerised accounting systems.

Table 4: Outer Loading Results

Items	Firm Size	Stakeholder Involvement	Internal Environmental Management	Adoption of Computerised Accounting Systems
A8	0.921			
A9	0.905			
B1		0.591		
B2		0.665		
B3		0.679		
B4		0.634		

C3			0.647	
C4			0.822	
C5			0.918	
C6			0.920	
C8			0.479	
D3				0.598
D4				0.820
D5				0.731

Convergent Validity

Table 5 shows that the AVE value of all variables exceeds the 0.50 criterion (except for stakeholder involvement, which has an AVE value of 0.414), indicating that the construct captures more than half of the indicator variation. The composite dependability value for all variables is likewise greater than the criterion of 0.70. The stakeholder involvement variable was retained in the model even though its AVE value is low (less than 0.5), as the variable has a composite reliability value of over 0.70 (i.e. 0.738). It indicates that the variable still measures the construct consistently. A high composite reliability value indicates that the indicators have an internal consistency that can compensate for a lower AVE. Overall, all variables exhibit adequate convergent validity, as both AVE and composite reliability generally are above their respective threshold values, which means the indicators measure the underlying variables consistently and accurately.

Table 5: Convergent Validity

Variables	Composite Reliability	AVE
Adoption of Computerised Accounting Systems	0.763	0.522
Firm Size	0.909	0.834
Internal Environmental Management	0.878	0.602
Stakeholder Involvement	0.738	0.414

Discriminant Validity

Table 6 shows the findings for discriminant validity. Table 6 demonstrates that discriminant validity is confirmed in this study when the square root of the AVE for each construct (adoption of computerised accounting systems: 0.722, firm size: 0.913, internal environmental management: 0.776, and stakeholder involvement: 0.643) is greater than the highest correlation with any of the other constructs.

Table 6: Discriminant Validity

	Adoption of Computerised Accounting Systems	Firm Size	Internal Environmental Management	Stakeholder Involvement
Adoption of Computerised Accounting Systems	0.722			
Firm Size	0.500	0.913		
Internal Environmental Management	0.699	0.272	0.776	
Stakeholder Involvement	0.604	0.342	0.475	0.643

Structural Model

This study examined the structural model after confirming the validity and reliability of the measurement model. The structural model is used to determine the degree to which it explains the links between the latent constructs. This shift is crucial because it requires validating the hypothesised connections between the latent components. The structural model includes (i) testing the hypotheses, (ii) evaluating the explained variance in the dependent variable(s), (iii) evaluating the effect magnitude, and (iv) evaluating Q-squared.

In this study, the bootstrapping process, using 5000 bootstrap samples, assessed the significance of the route coefficients for the association between the variables (Hair, Sarstedt, Hopkins, & Kuppelweiser, 2014). The model's predictive power was assessed using the coefficient of determination, and the magnitude was established by calculating the effect size. The structural model for this study is shown in Figure 3.

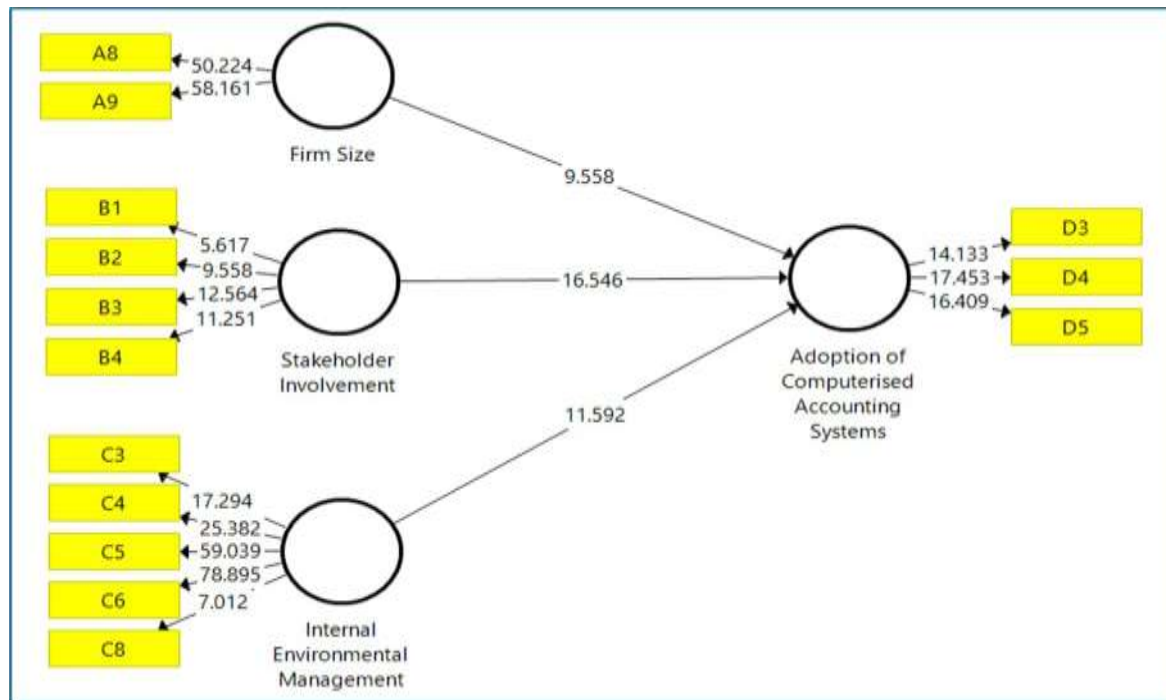


Figure 3: Structural Model of this study

As shown in Figure 3, the structural model analysis shows that firm size significantly positively influences SMA's decision to adopt computerized accounting systems in KwaZulu-Natal, South Africa (Beta = 0.208, $t = 9.558$, $p = 0.000$). This supports Hypothesis H1. When examining the impact of stakeholder involvement, the result showed that stakeholder involvement had a significant positive influence on the decision of SMA in KwaZulu-Natal, South Africa, to adopt computerised accounting systems (beta = 0.553, $t = 16.546$, $p = 0.000$). As a result, hypothesis H2 is supported. Finally, the study found that internal environmental management had a substantial favourable effect on the choice of SMA in KwaZulu-Natal, South Africa, to adopt computerised accounting systems (Beta = 0.380, $t = 11.592$, $p = 0.000$). Therefore, hypothesis H3 is also supported.

Discussions

The first objective of this study is to examine whether firm size significantly influence on the decision of SMAs in KwaZulu-Natal, South Africa, to adopt computerised accounting systems. The associated hypothesis is H1 and states that firm size has a significant influence on the decision of SMA in KwaZulu-Natal, South Africa to adopt computerised accounting systems. The beta coefficient of 0.208 indicates a positive relationship, which means that as the firm size increases, the likelihood of adopting computerised accounting systems also increases. The T-value of 9.558 is well above the typical threshold value of 1.96, which means that the relationship is statistically significant. The P-value of 0.000 confirms that this result is highly significant, which leads to the conclusion that H1 is supported. This result is consistent with the

expectation that larger organisations that have more resources and are more likely to adopt computerized accounting systems for several reasons, primarily related to their need for efficiency, accuracy, and increased productivity. The computerized accounting systems offer increased computing power and automation, which can enhance the efficiency and effectiveness of management accounting techniques (Gnatiuk, Shkromyda, & Shkromyda, 2023; Sanchez-Rodrigues & Spraakman, 2012).

The results of this study suggested that firm size may have a significant influence on the adoption of computerised accounting systems by small and medium-sized accounting firms in a country like South Africa. Computerised accounting systems require substantial initial investment in software, hardware, and training. Understandably, larger companies have more financial resources to allocate towards these systems, whereas smaller organisations struggle to bear the associated expenses. Furthermore, larger companies are better equipped to handle the ongoing costs of maintenance, upgrades, and IT support. Smaller companies such as the SMAs may find these ongoing expenses to be onerous, possibly causing a delay in their decision to implement them. Typically, larger companies handle a greater number of transactions, clients, and data. Computerised systems enhance the effective management of this vast volume, making them more appealing to bigger corporations. Big companies often encounter the need to oversee intricate financial activities, which include handling diverse clients with varying requirements. Computerised accounting systems have the ability to automate and optimise these operations, making them indispensable for larger organisations. In contrast, smaller companies such as the SMAs may not have the same level of urgency to adopt such technologies unless they are undergoing significant expansion.

The second objective of this study is to investigate the extent to which stakeholder involvement significantly influences the decision of SMAs in KwaZulu-Natal, South Africa, to adopt computerised accounting systems. H2 is the associated hypothesis, which posits that the decision of SMAs in KwaZulu-Natal, South Africa, to adopt computerised accounting systems is significantly influenced by stakeholder involvement. The beta value of 0.553 indicates a substantial positive link between more stakeholder involvement and a greater chance of using these solutions. The T-value of 16.546, which is much higher than the normal threshold, and the P-value of 0.000 show that this association is statistically significant. As a result, this study supports the premise that stakeholder involvement has a significant and positive influence on SMAs' choice to use computerised accounting systems in KwaZulu-Natal, South Africa. This study suggests that there is a considerable link between stakeholder involvement and SMAs' choice to adopt computerised accounting systems. This also implies that there is a significant link between the effectiveness of internal environmental management and SMAs' choice to adopt computerised accounting systems.

The involvement of stakeholders in the adoption and evaluation of computerised accounting systems indicates a responsive approach to adoption, possibly influenced by external validation rather than internal efforts. The frequent recognition of the computerised accounting system as a means of improving credibility and trust suggests that SMAs may view it as an asset in their interactions with stakeholders. The significance level (0.01, two-tailed test) indicates that the probability that these relationships are a result of chance is less than 1%. Therefore, it is likely that these correlations are significant and warrant further investigation. These findings could have multiple and far-reaching consequences. Before building and implementing computerised accounting systems, SMAs should carefully consider stakeholder requirements and interests because there is a significant relationship between stakeholder influence and SMAs' decision to implement computerised accounting systems.

The third objective of this study is to examine whether internal environmental management significantly influences the decision of SMAs in KwaZulu-Natal, South Africa, to adopt computerised accounting systems. The related hypothesis H3 states that internal environmental management has a significant influence on the decision of SMA in KwaZulu-Natal, South Africa, to adopt computerised accounting systems. The beta coefficient of 0.380 indicates a positive relationship, suggesting that better internal environmental management practices are associated with a higher adoption rate. The T-value of 11.592, together with a P-value of 0.000, confirms the statistical significance of this relationship. The support for H3 highlights the critical role that internal management practices play in the adoption of new accounting technologies, likely through better organisation, resource allocation, and overall readiness for change.

Effective internal environmental management measures necessitate that SMAs ensure the accuracy and integrity of their financial reporting. Computerised accounting systems must be capable of precisely documenting activities in order to appropriately depict the nature of operations in financial statements. The analysis yields a p-value of 0.000. Internal environmental management influences the deployment of computerised accounting systems at SMAs in KwaZulu-Natal, South Africa. This study found a considerable positive association between internal environmental management and SMAs' choice to use computerised accounting systems. As a result, this research confirms hypothesis 3, which states that internal environmental management has a large and beneficial effect on the choice of SMAs in KwaZulu-Natal, South Africa, to implement computerised accounting systems.

In sum, all three hypotheses are supported by the data, indicating that firm size, stakeholder involvement, and internal environmental management have significant positive effects on adoption of computerised accounting systems. Stakeholder involvement has the strongest influence, followed by internal environmental management and firm size. These findings provide valuable insights for organisations looking to adopt computerised accounting systems and highlight the importance of firm size, stakeholder engagement, and internal environmental management. Accounting professionals in KwaZulu-Natal generally agree that the use of computerised accounting systems is a key factor in improving the competitiveness and long-term sustainability of their organisation. Although they are an exception, smaller SMAs often opt for computerised accounting systems.

Conclusions

This study aims to examine the factors influencing the adoption of computerised accounting systems among the SMAs in KwaZulu-Natal, South Africa. This study selected three specific factors: firm size, stakeholder involvement, and internal environmental management. This study used agency theory to corroborate the notion that independent factors influence the SMAs' decision to adopt computerised accounting systems. This study revealed that the majority of SMAs have private ownership, which means the financial statements are a valuable tool for SMAs seeking to expand. The accountants believe that computerised accounting systems can increase competitiveness and sustainability. Though rare, smaller SMAs use computerised accounting systems. This analysis shows a high inclination, regardless of size. The use of computerised accounting systems by SMAs in Kwazulu-Natal, South Africa, exhibits a negative correlation with firm size. This study also shows that computerised accounting system may be sensitive to external validation rather than internal efforts if stakeholders are involved in its commencement and review. The frequent use of computerised accounting systems to build credibility and confidence suggests that SMAs may use them to connect with stakeholders. Since stakeholder impact strongly influences SMAs' adoption of computerised accounting systems, SMAs should carefully assess stakeholder needs and interests before creating and implementing them. Finally, this study shows that external environmental management influences SMAs' decisions to adopt computerised accounting systems.

This study is not without limitations. First, the sample collected in this study may not be a true representation of the whole population of SMAs in KwaZulu-Natal, South Africa. This study restricted the respondents' reach to a few specific locations. Due to time limitations, this study only includes samples collected and chosen from KwaZulu-Natal, South Africa. Therefore, the findings of this study may not make broad generalisations about the whole South African SMA population. In addition, the relatively low number of circulated questionnaires implies a restricted number of respondents for this study, resulting in a scarcity of information gathered from the major data sources in the South African SMA directory. This study limits the sample size to 120 participants. The SMA directory might not fully represent the entire South African SMA population, as it might not encompass all unregistered or non-maintained SMAs. The current data on the firms is unavailable due to the prevalence of incorrect, unnoticed, or defunct email addresses associated with the majority of them.

The findings of this study provide valuable insights for scholars in the academic community, since the results and discussions on each of the elements are relevant to those studying the specific issue. Since this study provides a comprehensive analysis, other researchers can integrate the information from this study

into their existing knowledge base for future research. In addition, this study is highly beneficial for individuals conducting content analysis research. Researchers can incorporate the findings of this study into their existing literature, as they show that the three factors significantly influence SMA's decision to adopt computerised accounting systems. This study offers valuable insights and has several practical implications, particularly for SMAs. This study offers valuable insights for SMAs to determine whether they should opt for computerised accounting. SMAs have the capacity to make optimal decisions for their firms and seize every opportunity that might help propel their organisation's development and growth.

Acknowledgment

Competing Interests: The authors have declared that no competing interest exists.

Authors' Contributions: M.G.B, K.M., and F.M. contributed equally to this work.

Ethical Considerations: This article does not report on studies involving human participants performed by any of the authors.

Funding Information: This study received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Data Availability: Data are available from the corresponding author, K.M. under reasonable request.

Disclaimer: The views and opinions expressed in our article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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