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Research paper



Financial Decision-Making Efficiency and Computerized Accounting Systems: A Study of SMES In Ghana

Lewi Amanor Agbozo [1] *, Dr. Purvi Dipen Derashri [2]

[1] PhD Scholar, Parul Institute of Commerce, Faculty of Commerce, Parul University, Waghodia, Vadodara, Gujarat, India.
[2] Associate Professor, Parul Institute of Management and Research, Parul University, Waghodia, Vadodara, Gujarat, India.
**Corresponding author E-mail: lewiso25@yahoo.com*

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Abstract

This research examines how computerized accounting systems (CASs) are adopted and used by SMEs in Ghana, in a bid to understand their influence on the efficiency of financial decision-making and overall performance. The research adopted a quantitative method; 625 SMEs were sampled through questionnaires. Correlation and regression analyses were performed for the quantitative data. From the analysis, there is a positive correlation of statistical significance between the adoption of CAS and financial decision-making efficiency and performance. Technical expertise, financial resources, and government support were found to be the most influential factors in determining its adoption. The research identifies the critical role of CAS within SMEs in Ghana and addresses supportive policies and adequate resources necessary for its adoption. This study adds to the body of knowledge by providing an insight into the unique context of the adoption of CAS by Ghanaian SMEs and puts forward some recommendations for policy and stakeholders to better integrate technologies for well-structured financial management practices.

Keywords: *Computerized Accounting Systems (CAS); Financial Decision-Making; Ghana; SMEs; Adoption and Utilization of (CAD).*

1. Introduction

In the past few years, awareness of the role of SMEs has grown worldwide (Gherghina et al., 2020). At one time, SMEs were overlooked in economic and public policy, but today they are seen as essential to the development and economic growth strategies of many countries. As a result, there is a global surge in interest in and support for SMEs (Radzi & Yaacob, 2022). SMEs are acknowledged as a vehicle for fostering private company ownership and fostering entrepreneurial abilities. In many nations, these companies have also been credited with generating jobs, promoting trade and exports, and helping to diversify the economy (Ramsuraj, 2023). It is thought that SMEs, not big multinational corporations, employ most of the workers in developed industrial countries, with a high concentration of multinational corporations (Abdullah, 2022). According to World Bank data from 2020, up to 40% of GDP in emerging nations is generated by SME-owned enterprises, which employ over 50% of the global labor force (Chaudhry & Tariq, 2022). Experts acknowledge that SMEs play an important part in the country's development and transition to a middle-income nation. SMEs comprise over 92% of all firms and provide roughly 70% of the nation's GDP (Akomea et al., 2023). Recognized as having a critical role in creating jobs, the industry employs over 85% of the nation's manufacturing subsector. Financing is one of the major problems that SMEs in the nation face, notwithstanding their role and contributions (Manzoor et al., 2021; Noor, 2022).

In the modern business environment, financial decision-making efficiency crucial to the success and continuity of SMEs (Indumathi et al., 2025). SMEs are considered one of the most important sectors in economic growth, innovation, and job creation, especially in developing countries like Ghana (Indumathi et al., 2025). But SMEs often face giant challenges in financial management, which may hamper business (Weerasekara & Bhanugopan, 2023). Financial decision-making is an important function in SMEs since it involves all the processes by which business owners and managers make decisions that relate to the allocation of resources, investment, budgeting, and financial planning (Iyengar & Joshi, 2024). These decisions are of utmost importance in SMEs due to their resource constraint and other high risks attached to SME operations. Optimized use of resources, improved cash flow management, and strategic investment propel growth and competitive advantage, while poor financial decisions can result in severe financial difficulties (Zada et al., 2021).

In this context, the computerized accounting systems introduced and adopted are a force to reckon with, promising to raise the efficiency of making financial decisions and overall business performance (Sihare, 2024; Nicolas, 2022). Accounting systems are crucial for organizations, and their operations have gradually changed from manual to automated use (Nguyen & Nguyen, 2020). A computerised accounting system uses user requirements to produce reports, following GAAP by handling and processing financial transactions and events (Kathirvel et al., 2023). All accounting systems include computerized and manual parts (Olufemi et al., 2021). It must initially function according to a specific set of concepts termed the principles of accounting. A customized framework for record-keeping and creation of reports is an extra feature (Shah & Bansalm, 2023). The operational environment of a CAS is the foundation for data processing and storage and consists of both hardware and software (Chen & Metawa, 2020). The kind of accounting system in use dictates the operating environment. Hardware

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and software are interdependent (Shyshatskyi et al., 2020). The primary benefits of these systems over manual ones are the capacity of CAS to perform the different finance cycle duties on its own and the presence of built-in internal auditing features to increase financial data security & accuracy, as well as safeguard assets against fraud (Narayanan & Rajan, 2024). The use of CAS has drawn the interest of scholars and practitioners recently. Nevertheless, there is a lack of studies on this area of accounting (Coman et al., 2022; Tarek & Abood, 2014).

Since SMEs are essential to economic expansion, most firms in Ghana and throughout the world need to maintain accurate systems for internal controls and financial data (Mintah et al., 2022). Therefore, in order to improve internal controls and protect their assets from fraud, SMEs, like bigger businesses, may make use of the internal control elements included in CAS (Nuri et al., 2024). But for a variety of reasons, businesses could overlook the internal control tools that are already included in their accounting software (Ikechukwu et al., 2019).

1.1 Objectives

- To see how many SMEs in Ghana are using computerized accounting systems and how well they use them.
- To explore how CAS changes the efficiency of making financial decisions in SMEs in Ghana
- To identify the challenges and barriers faced by SMEs in Ghana in adopting and implementing CAS.
- To give suggestions for boosting the use of computerized accounting systems in Ghana's SMEs.

The study's framework is split into seven distinct parts. The second section's primary focus is the literature review. Subsequently, the third section delineates the proposed methodology, encompassing the research design and techniques employed. Section Four presents the findings. The fifth section is devoted to a detailed discussion. The sixth section continues with an examination of the study's ramifications. Concluding observations, an overview of the study, and a summary are included in the seventh and last section.

2. Literature Review

Aboagye-Otchere & Abdulai (2022). examines the factors influencing SMEs in Ghana's rural north that intend to implement Computerized Accounting Information Systems (CAIS). In order to collect data from 800 SME owners in Ghana's Savanah area was used. Partial least squares structural equation modeling (PLSSEM) was used to analyze the data, and the results indicate that SME owner innovativeness significantly influences CAIS adoption both directly and indirectly.

Mbilla et al. (2020) analyzed the impact of CAS on the quality of financial disclosure by Ghanaian banks. The researchers chose to use a quantitative research design. The survey was the main way data was gathered. When other independent factors are held constant, raising the quality of Bank finance reports by one unit results in a rise of about 0.50 points because of automated CAS.

Mahama & Dahlan (2022) investigate the factors that affect the adoption of AIS (Accounting Information System) by SMEs firms in Northern Ghana, a region with limited knowledge of the technology. Summative content analysis was employed to provide study conclusions after direct content analysis was utilized to gather data. The focus of the study was on the variables influencing Ghanaian SMEs' adoption of AIS. Credibility was ensured by gathering data from earlier research utilizing well-known educational databases. Research on Ghana's implementation of AIS has shown that it is ineffective.

Gyamera et al. (2023) investigated how accounting for managerial services influences the capital outcomes of the SMEs in Ghana's industrial, service, and commerce sectors. Using a methodical sampling procedure, managers of SMEs were selected, contacted, and sent questionnaires to fill up. The Technology Acceptance Model (TAM) and agency theory were employed in this investigation. The information gathered from the respondents was examined using the PLSSEM software. The study discovered a connection between management accounting techniques and the success of SMEs.

Itang (2020) investigated the impact of organizational structure on Nigerian small and medium-sized businesses' computerized accounting system quality. The study's research methodology was a survey approach, with the financial and accounting staff members from a sample of 370 companies in Nigeria, completing self-completed questionnaires. Frequencies and the Pearson Product-Moment Correlation, which underwent a t-transformation test, were used to examine the study data. The study's findings show that, among SMEs, organizational structure and the caliber of their CAS are positively correlated.

Mohamed & Ramli (2022) explored what affects Somali small- and medium-sized businesses in adopting CAS. Information was collected from 110 people working in the finance, accounting, and general business areas of small and medium-sized businesses in Mogadishu. Researchers used stratified sampling when collecting the data. The findings showed that SMEs in the Bakara Market are influenced by how efficient their human capital is, their ability to control costs, how much their users know about business, and how committed their management is to CAS. Besides, the use of CAS made reports more detailed, boosted trust in the decisions, and simplified preparing them.

Itang (2020) was to develop a standard tool for assessing CAS, using systems theory, by analyzing its structure or functions. The results show that the CAS measurement tool developed for the study is both reliable and valid. Therefore, it is believed that the instrument will properly and reliably evaluate CAS.

Sumarna (2023) looked at two elements: why Indonesian MSEs use the CAS and how well they understand SAK EMKM. Only educational level was found to have a strong direct impact on CAS usage; motivation did not moderate the relationship between CAS usage and independent factors.

Ahinful et al. (2023) examined the factors that affect Ghanaian SMEs' financial performance, or FP. Multiple regression analysis was used using a survey data set of 238 SMEs to ascertain the degree to which each industry and firm-specific feature affects FP. The results demonstrate a strong correlation between FP and the ownership type of the organization. Additionally, there is a significant correlation between FP, business size, and firm age. The service sector is heavily impacted by the industry. The findings also demonstrate that the effects of industry and firm-specific traits vary throughout the manufacturing and service sectors and FP subcomponents.

Frimpong et al. (2022) further discuss how SMEs perform in Ghana's Central Region, financial literacy, and the use of digital financing. First, the research looked at how SMEs use and understand digital platforms. It examined how SMEs' success, digital finance access, and financial literacy are related. It looked at how access to digital financing affects SMEs' finances and their understanding of finance. Studies revealed that knowing about money matters helps people use digital banking services. The availability of digital financing made performances better.

3. Methodology

The adapted methodology in this research quantifies attempts to quantifiably reflects on the adoption and impact of CAS within SMEs in Ghana.

3.1 Sample Size and Sampling Technique

Stratified random sampling will be used so that industries and regions in Ghana are adequately represented. The study sample was 625 SMEs that were involved in Ghana. The sample will include SMEs that are currently operating in Ghana, and the determination of sample size will rely on statistical power analysis for sufficient representation and generalization of results.

3.2 Research Design

For this purpose, a cross-sectional research approach will be applied, collecting information only at the current time to observe the current situation and effects of CAS on SMEs' financial performance. At the same time, quantitative data will be gathered to ensure the research objectives are fully understood.

3.3 Data Collection Methodology

Quantitative data will be gathered from structured questionnaires to be given to SMEs in relation to their degree of CAS adoption, efficiency in financial decision-making, financial performance measures, technical expertise, financial resources, and perceived government support.`

3.4 Data Analysis

Quantitative data is analysed using descriptive and inferential statistical techniques. The features of the sample and the variables will be described using descriptive statistics; links, associations, and differences between the variables will be established using inferential statistics such as correlation analysis, regression analysis, and ANOVA.

3.5 Hypotheses used in this Study

H1: SMEs in Ghana with higher levels of CAS adoption will demonstrate greater efficiency in financial decision-making.
H2: CAS is linked to improving financial results for SMEs in Ghana
H3: Inadequate technical knowledge and money are major reasons why CAS are not widely used among SMEs in Ghana.
H4: Government support and incentives positively influence the adoption and integration of CAS among SMEs in Ghana.

4. Results

4.1 Demographic Profile of Responders

Table 1 illustrates the age distribution of respondents involved. The most dominant is 209 or 33.4% within the age brackets of 25-34 years, followed by 35-44 years of age with 180 respondents (28.8%) and 45-54 years with 156 respondents, comprising 25.0%. The under-25 category accounted for 25 respondents (4.0%). Respondents aged 55-64 and those aged 65 and above accounted for small shares, with 20 respondents (3.2%) and 35 respondents (5.6%), respectively. This distribution shows that the perspectives of this study are mostly from individuals in their productive years, especially between the ages of 25 and 54.

Table 1: Age of Responders

Category	Frequency	Percentage
Under 25	25	4.0
25-34	209	33.4
35-44	180	28.8
45-54	156	25.0
55-64	20	3.2
65 and above	35	5.6

Table 2 shows the gender distribution in the study. A large number of respondents are male, with 450 respondents at 72.0% of the sample. On the contrary, female respondents make up 175, constituting 28.0% of the sample. This is a huge difference, which means that most of the participants are male, which may indicate some gender-related occurrences concerning SMEs and their adoption of CAS in Ghana.

Table 2: Gender of Responders

Category	Frequency	Percentage
Male	450	72.0
Female	175	28.0

Table 3 reports the distribution of the educational qualifications of respondents. A maximum of 395, representing 63.2% have a bachelor's degree, denoting that the standard of formal education among the participants is generally high. Those holding a master's degree follow with 52, which is 8.3%, while those with secondary education come third, being 43. A smaller number of the respondents are those holding a doctorate, specifically a Ph.D., numbering 40 people at 6.4%, and the number completing primary education is 37, forming 5.9%. Also, 36 respondents, 5.8%, fall under the "Other" category, which may include technical training or professional certificates, while those with no formal education are 22, making 3.5%. This distribution sets out that the sample is dominated by highly educated people, mostly at the bachelor's and graduate degree levels.

Table 3: Education Qualification of Responders

Category	Frequency	Percentage
No formal education	22	3.5
Primary education	37	5.9
Secondary education	43	6.9
Bachelor's Degree	395	63.2
Master's Degree	52	8.3
Doctorate (Ph.D.)	40	6.4
Other	36	5.8

In Table 4, the following data depict the respondents' positions in the companies. The biggest group is that of managers, with 254 respondents, or 40.6 percent of the total. Owners come next, with 196 or 31.4 percent of the respondents. 80 accountants answered the survey, or 12.8 percent of the sample. Administrative staff account for 78 respondents or 12.5 percent. In the "Other" category, which may include a wide range of positions not mentioned, were 17 respondents, or 2.7 percent.

Table 4: Responder's Position in the Company

Category	Frequency	Percentage
Owner	196	31.4
Manager	254	40.6
Accountant	80	12.8
Administrative Staff	78	12.5
Other	17	2.7

Years of experience of the respondents are presented in Table 5. The majority have considerable experience, with 261 persons, 41.8%, having between 4-6 years of experience, and 254, 40.6%, having between 7-10 years. More than 10 years of experience was represented by 51 people, 8.2%, in the sample. Representing those with between 1-3 years of experience were 31, 5.0%, while the least experienced group, less than 1 year, was represented by 28, 4.5%.

Table 5: Responder's Years of Experience

Category	Frequency	Percentage
<1 year	28	4.5
1 to 3 years	31	5.0
4 to 6 years	261	41.8
7 to 10 years	254	40.6
>10 years	51	8.2

As shown in Table 6, most of the respondents fall under the retail category with 199 (31.8%), followed by services with 169 respondents (27.0%), then manufacturing with 155 respondents (24.8%), agriculture with 33 respondents (5.3%), and technology with 24 respondents (3.8%). The construction sector has 23 respondents, amounting to 3.7%, while other industries have 22, comprising 3.5%.

Table 6: Responder's Business Sector

Category	Frequency	Percentage
Manufacturing	155	24.8
Retail	199	31.8
Services	169	27.0
Agriculture	33	5.3
Construction	23	3.7
Technology	24	3.8
Other	22	3.5

Table 7 shows the income levels of the respondents. The highest percentage, 207 respondents at 33.1 percent, falls in the range of 50,000 to 100,000. Closely, at 32.6 percent, are 204 respondents whose income ranges between 100,001 and 500,000. Those in the 500,001 to 1,000,000 income bracket total 108 respondents at 17.3 percent. Respondents in the less than 50,000 income category total 79 at 12.6 percent, and the smallest category at 4.3 percent earns more than 1,000,000.

Table 7: Responder's Income Level

Category	Frequency	Percentage
Less than 50,000	79	12.6
50,000 - 100,000	207	33.1
100,001 - 500,000	204	32.6
500,001 - 1,000,000	108	17.3
More than 1,000,000	27	4.3

4.2 Validity and Reliability of Data

In both original and standardized items, Cronbach's Alpha coefficients are 0.960, showing excellent internal consistency reliability. The scale consists of 30 items that are highly reliable in the measurement of the construct under investigation.

4.3 Descriptive Statistics

This section describes the results of the examination on SME financing amongst SMEs. The responses were analyzed by describing the data and using mainly the mean and standard deviation (SD). All the SMEs' staff and owners answered questions using a 5-point Likert scale, from 1 strongly disagree to 5 strongly agree. The mean scores show the total of all the responses to the items, and the SD demonstrates how spread out the responses are. If responses are close to the mean, the standard deviation is low; if they are spread out, the standard deviation is higher. Hence, the general argument is based on the high/low mean score and standard deviation.

Table 8 provides the descriptive analysis of EFDM as rated by the respondents. The respondents rated their perceived level of efficiency in financial decision-making by using the following items that assess different components of this efficiency. The mean scores of the items ranged from 4.03 to 4.10, suggesting a high level of agreement with statements relating to the efficiency of their CAS. In fact, the highest mean score was posted by EFDM5 with a mean of 4.10 and an SD of 0.895, indicating that respondents in general felt that CAS has enhanced their efficiency in making decisions. The mean score for all items was 4.0643 with an SD of 0.70875, indicating a constant and positive assessment of CAS for financial decision-making among the respondents.

Table 8: Descriptive Analysis on Efficiency of Financial Decision-Making (EFDM)

	Items	Mean	SD
EFDM1	The financial reports provided by our accounting system are accurate and timely.	4.03	.999
EFDM2	Our business effectively uses financial data to make strategic decisions.	4.09	.868
EFDM3	The CAS has improved our ability to forecast financial outcomes.	4.04	.919
EFDM4	We are able to quickly identify financial issues and address them using our current accounting tools.	4.05	.882
EFDM5	The implementation of computerized accounting has streamlined our financial decision-making processes.	4.10	.895
Overall mean and standard deviation		4.0643	.70875

Table 9 summarizes the descriptive analysis of the monetary results of SMEs on several measured items. These items range from a minimum of 3.97 to a maximum of 4.06, both of which assess the generally positive perception of financial performance by the respondents. The highest mean for the items is FPSME1 with 4.06 and an SD of 0.930, which suggests that most SMEs have recorded revenue growth. Following this closely is FPSME2 with a mean of 4.05 and SD of 0.933, indicating that most respondents believe the profitability has been enhanced by CAS. In general, the mean score for all the items was 4.0266, while the SD was 0.70174; this reflects a consistent and positive assessment of the financial outcomes of SMEs.

Table 9: Descriptive Analysis on Financial Performance of SMEs (FPSME)

	Items	Mean	SD
FPSME 1	Our SME has experienced consistent revenue growth over the past year.	4.06	.930
FPSME 2	The profitability of our SME has improved since implementing a computerized accounting system.	4.05	.933
FPSME 3	Cash flow management in our SME has been effective and stable.	4.03	.904
FPSME 4	Our SME has been successful in maintaining a healthy balance between assets and liabilities.	3.97	.857
FPSME 5	The financial health of our SME is strong compared to industry benchmarks.	4.02	.947
Overall mean and standard deviation		4.0266	.70174

Table 10 presents the descriptive analysis of technical expertise and financial resources within SMEs. The mean scores for the items range from 3.96 to 4.01, indicating a generally positive perception of the technical expertise and financial resources of the respondents. Specifically, the highest mean score is from TEFR3 with a mean of 4.01 and an SD of 0.868, representing that the respondents felt that their SME prioritizes financial resources for technological infrastructure. This is followed closely by TEFR1 and TEFR4, with a mean of 4.00. The overall mean score of the items is 3.9885, and the SD of 0.69152, indicating a consistent positive assessment of the technical expertise and financial resources in SMEs.

Table 10: Descriptive Analysis on Technical Expertise and Financial Resources (TEFR)

	Items	Mean	SD
TEFR 1	Our SME possesses the technical expertise required to effectively utilize computerized accounting systems.	4.00	.970
TEFR 2	The staff in our SME receive adequate training and support to leverage advanced financial tools.	3.96	.936
TEFR 3	Our SME allocates sufficient financial resources towards upgrading and maintaining our accounting technology infrastructure.	4.01	.868
TEFR 4	We have access to external financial support, such as loans or investment capital, to invest in technological advancements.	4.00	.919
TEFR 5	The management in our SME prioritizes investment in technological solutions to improve financial management practices.	4.00	.937
Overall mean and standard deviation		3.9885	.69152

Table 11 shows the Respondents' view of Incentives and Government support. The mean scores of the items range from 3.95 to 4.03, which indicates that the perception regarding the government support and incentives is generally high among SMEs. Specifically, the highest mean score is for GSI2 with a mean of 4.03 and SD of 0.947, and that is the extent to which the respondents perceive themselves well-informed on government support available. This is closely followed by GSI4 with a mean of 4.00 and SD of 0.911, which implies that respondents find the regulatory environment supportive of the growth of SMEs. The overall mean score from all items is 3.9885 and the SD of 0.69152, indicating a generally positive assessment of government support and incentives.

Descriptive analysis of CAS within SMEs is illustrated in Table 12. The mean scores ranged between 3.98 and 4.02, an indication of the relatively positive opinion of ACAS adoption among the respondents. More precisely, the highest mean scores are for ACAS1 and ACAS3, which average 4.02 in rating, representing the respondents ' high view of the level of integration and capability in using CAS for their SMEs. The overall mean for all the items was 4.0042, and the SD was 0.71785, indicating consistency in a positive evaluation of the adoption of ACAS.

Table 11: Descriptive Analysis on Government Support and Incentives (GSI)

	Items	Mean	SD
GSI 1	Government policies and programs adequately support SMEs in accessing financial resources and funding opportunities.	3.98	.919
GSI 2	SMEs receive sufficient information and guidance from government agencies on available incentives and support programs.	4.03	.947
GSI 3	Government initiatives effectively promote technological innovation and adoption among SMEs.	3.95	.950
GSI 4	The regulatory environment created by the government is conducive to SME growth and development.	4.00	.911
GSI 5	SMEs benefit from government-sponsored training and capacity-building programs aimed at enhancing financial management skills.	3.99	.923
Overall mean and standard deviation		3.9885	.69152

Table 12: Descriptive Analysis on Adoption of Computerized Accounting System (ACAS)

	Items	Mean	SD
ACAS1	Our SME has fully integrated a computerized accounting system into its financial management processes.	4.02	.905
ACAS2	A CAS has made it easier and more accurate to keep our financial records in the company.	3.98	.902
ACAS3	Staff members in our SME are trained and competent in using the features and functionalities of the CAS.	4.02	.930
ACAS4	Our SME regularly updates and upgrades its computerized accounting software to ensure compatibility with evolving business needs and technological advancements.	4.00	.965
ACAS5	The implementation of a CAS has positively impacted the overall financial performance and decision-making capabilities of our SME	4.01	.933
Overall mean and standard deviation		4.0042	.71785

Descriptive statistics for the items measuring UCAS in SMEs are presented in Table 13. The means range from 4.01 to 4.10 and suggest the active use and effectiveness of CAS features, integration with other business software applications, timely and accurate financial data input, the utilization of reporting and analysis tools, and perceived efficiency, accuracy, and productivity for SME finance departments. Mean score across all items was 4.0525 with SD of 0.73323, showing positive effects of the utilisation of CAS in SME financial operations. Such findings emphasize the importance and effectiveness of CAS in the betterment of financial management practice and overall operational efficiency within SMEs.

Table 13: Descriptive Analysis on Utilization of Computerized Accounting Systems (UCAS)

	Items	Mean	SD
UCAS1	Our SME actively utilizes the features and functionalities of the CAS in daily financial operations.	4.05	.880
UCAS2	The CAS is effectively implemented with other business software applications to streamline data management and reporting processes.	4.10	.878
UCAS3	Staff members in our SME regularly input and update financial data into the CAS in a timely and accurate manner.	4.07	.918
UCAS4	Using the CAS's reporting and analysis tools, our SME finds out how it is performing financially and makes smart choices.	4.01	.951
UCAS5	The utilization of the CAS leads to gaining better efficiency, accuracy, and productivity within our SME's finance department.	4.03	.907
Overall mean and standard deviation		4.0525	.73323

4.4 Correlation analysis

Table 14 shows the Pearson correlation (PC) analysis of the various variables: EFDM, FPSME, TEFR, GSI, ACAS, and UCAS. These results concluded that the variables are strongly related to each other.

Table 14: Correlation Analysis

		EFDM	FPSME	TEFR	GSI	ACAS	UCAS
EFDM	PC	1					
	Sig.						
FPSME	PC	.755**	1				
	Sig.	.000					
TEFR	PC	.752**	.788**	1			
	Sig.	.000	.000				
GSI	PC	.714**	.718**	.746**	1		
	Sig.	.000	.000	.000			
ACAS	PC	.756**	.738**	.722**	.750**	1	
	Sig.	.000	.000	.000	.000		
UCAS	PC	.774**	.829**	.715**	.635**	.665**	1
	Sig.	.000	.000	.000	.000	.000	

4.5 T-test

Table 15 presents the results of the t-test analysis carried out for each variable. For each variable, the test value is fixed at 0. The t-value is the computed t-statistic for every variable; the extent to which the sample mean deviates from the supposed population mean of 0 is shown. The number of cases overall, less one, is the df. For a given null hypothesis, the chance of obtaining the observed t-value is given by the 2-tailed significance test (Sig.). The mean differences are all significant at the 0.05 level in each of these cases since the p-value is less than 0.001. The discrepancy between the test result of 0 and the sample mean is known as the mean difference.

Table 15: T-Test Analysis

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
EFDM	143.362	624	0.000	4.06432	4.0086	4.1200
FPSME	143.450	624	0.000	4.02656	3.9714	4.0817
TEFR	142.433	624	0.000	3.99424	3.9392	4.0493
GSI	144.192	624	0.000	3.98848	3.9342	4.0428
ACAS	139.450	624	0.000	4.00416	3.9478	4.0605
UCAS	**138.172**	**624**	**0.000**	**4.05248**	**3.9949**	**4.1101**

4.6 Inferential statistics

4.6.1 Inferential statistics on H1

Table 16 shows the model summary for Hypothesis 1. The hypothesis led the authors to observe that using CAS is moderately connected to making financial decisions more efficiently. R Square explains the percentage of financial decision-making efficiency that is explained by the independent variables. So, over half of the variability in financial decision-making efficiency can be explained by the model variables. After the number of predictors is adjusted, the ARS remains at 57.1%, so the values are still very important in explaining the results. The model's ability to predict financial decision-making efficiency is measured by the standard error of the estimate (SEE), which is 0.46414.

Table 16: Model Summary on H1

Model	R	R Square	ARS	SEE
1	.756	.572	.571	.46414

Table 17 shows the ANOVA result for Hypothesis 1. From the results, the regression analysis demonstrates that using CAS is strongly linked to their adoption and financial decision-making efficiency: $F = 832.017$, $p < 0.001$. That is, the variance in the financial variable is largely described by the regression, as indicated by a high F-value with a low significance level.

Table 17: ANOVA on H1

Model		SS	df	MS	F	Sig.
1	Regression	179.241	1	179.241	832.017	.000[b]
	Residual	134.213	623	.215		
	Total	313.454	624			

SS- Sum of Squares, MS- Mean Square

Table 18 shows coefficients for the first hypothesis. The ACAS coefficient is significant at $\beta = 0.756$ and $p < 0.001$, which states that if the ACAS increases by one unit, then the financial decision-making efficiency will correspondingly increase by approximately 0.756 units. The constant term of 1.075 reflects the estimated financial decision-making efficiency at zero adoption and usage of CAS.

Table 18: Coefficients on H1

Model		UC		SC	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.075	.105		10.207	.000
	ACAS	.747	.026	.756	28.845	.000

UC-Unstandardized Coefficients, SC- Standardized Coefficients

4.6.2 Inferential Statistics on H2

The model for Hypothesis 2 is summarized in Table 19. The R is 0.829, showing a very positive correlation of financial outcomes in SMEs. For the R Square value, about 68.8% of the variation in financial performance is explained by the predictors. Adjusted R Square holds constant at 68.7% after adjusting for the number of predictors in the model.

Table 19: Model Summary on H2

Model	R	R Square	ARS	SEE
1	.829	.688	.687	.39236

Table 20 shows the ANOVA for Hypothesis 2. The hypothesis indicates a highly significant relationship between the adoption and usage of CAS and the financial performance of SMEs ($F = 1372.980$, $p < 0.001$). The F-value is quite high, and the significance level is very low, suggesting that the regression model explained much of the variance in the financial performance variable.

Table 20: ANOVA on H2

Model		SS	df	MS	F	Sig.
1	Regression	211.369	1	211.369	1372.980	.000[b]
	Residual	95.910	623	.154		
	Total	307.279	624			

The coefficients for Hypothesis 2 are shown in Table 21. The result for UCAS ($\beta = 0.829$, $p < 0.001$) suggests that for every unit rise in UCAS, SMEs' financial performance rises by 0.794 units. At zero use of CAS, the estimated financial performance is represented by the constant term 0.810.

Table 21: Coefficients on H2

Model		UC		SC	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.810	.088		9.180	.000
	UCAS	.794	.021	.829	37.054	.000

4.6.3 Inferential Statistics on H3

Table 22 outlines the model for Hypothesis 3. From the coefficient of determination, R = 0.788, there is a very strong and positive relationship existing among technical expertise, financial resources, and the adoption and utilization of CAS in SMEs. This suggests that about 62.0% of the variance can be explained by technical expertise and financial resources. Adjusted R Square remains the same at 61.9%. The SEE is 0.43264. It suggests a relatively low level of error in predicting the adoption and utilization of CAS by SMEs, given technical expertise and financial resources.

Table 22: Model Summary on H3

Model	R	R Square	ARS	SEE
1	.788[a]	.620	.619	.43264

Results for the ANOVA in Hypothesis 3 are given in Table 23. This regression model shows that the relationship between technical expertise and financial resources with the adoption and utilization of CAS among SMEs is highly significant, with F = 508.270 and p < 0.001. The high F-value and low significance level are indicators that the regression model explains a substantial proportion of variance in the adoption and utilization of CAS.

Table 23: ANOVA on H3

Model		SS	df	MS	F	Sig.
1	Regression	190.274	2	95.137	508.270	.000[b]
	Residual	116.425	622	.187		
	Total	306.699	624			

Table 24 displays the Hypothesis 3 coefficients. The coefficients for both the ACAS and UCAS of computerized accounting systems are significant, p < 0.001, and have a standardized coefficient of 0.442 and 0.421, respectively. This means that technical expertise, as well as financial resources, positively influence the adoption and utilization of CAS in SMEs. In other words, as the technical expertise and financial resources increase by one unit, there will be approximately an additional 0.432 and 0.403 unit increase in integration and application of the digital accounting tool, respectively.

Table 24: Coefficients on H3

Model		UC		SC	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.634	.107		5.933	.000
	UCAS	.403	.032	.421	12.731	.000
	ACAS	.432	.032	.442	13.363	.000

4.6.4 Inferential Statistics on H4

Table 25 outlines the model of Hypothesis 4. This evidences a very good positive relationship between government support and incentives and adoption and use of CAS among SMEs, as evidenced in the correlation coefficient value of 0.772. The value of R Square implies that the explained variation in integration and application of digital accounting from government support and incentives is 59.6%. The Adjusted R Square, on the other hand, remains the same at 59.4%. The SEE is 0.44048 would mean that, trying to predict the adoption and utilization of CAS, there would not be that large an error based on government support and incentives.

Table 25: Model Summary on H4

Model	R	R Square	ARS	SEE
1	.772[a]	.596	.594	.44048

Table 26: Results of ANOVA for Hypothesis 4. As reflected in the above table, the regression model shows a highly significant relationship between the variables Government Support and Incentives and Adoption and Utilization of CAS within SMEs since F = 457.987, p < 0.001. The high F-value and low significance level of the regression model explain a large proportion of the variance.

Table 26: ANOVA on H4

Model		SS	df	MS	F	Sig.
1	Regression	177.717	2	88.858	457.987	.000[b]
	Residual	120.680	622	.194		
	Total	298.397	624			

Table 27 indicates the coefficients of Hypothesis 4. Both the ACAS and UCAS of the CAS have significant coefficients, p < 0.001, with standardized coefficients of 0.587 and 0.244. It infers that both aspects of the government support and incentives positively influence, whereby every unit increase in adoption and use is bound to about a 0.566-unit and 0.230-unit increase, respectively, increase.

Table 27: Coefficients on H4

Model		UC		SC	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.789	.109		7.255	.000
	UCAS	.230	.032	.244	7.157	.000
	ACAS	.566	.033	.587	17.202	.000

5. Discussion

The results from testing the hypotheses came out with an insightful revelation on various aspects of computerized accounting systems, efficiency in financial decision-making, financial performance, technical expertise, financial resources, and government support intertwine

for SMEs in Ghana. First, the findings reported a strong support for Hypothesis 1: that there is a significantly positive relationship between the adoption and use of CAS and financial decision-making efficiency. This means that SMEs that adopt CAS are likely to show more precision, timeliness, and effectiveness in their financial decision-making. Again, the strong positive association of CAS adoption with financial performance, as hypothesized under Hypothesis 2, would indicate that CAS could play a very critical role in improving SMEs' financial health and profitability. Under Hypothesis 3, the strong and significant effect of technical expertise and financial resources on CAS adoption and utilization underlines the paramount need for training and financial investment to enhance technological integration by SMEs. Lastly, under Hypothesis 4, government support and incentives were found to have a positive relationship with CAS adoption, noting that supportive policies and programs are needed to catalyze technological adoption and innovation in the SME sector. This confirms that CAS adoption within SMEs is complex, going beyond organizational factors and considering external support mechanisms that may affect the financial operation and performance of an SME.

6. Conclusion

This research demonstrates that the CAS helps SMEs make better financial decisions and perform well overall. The findings underline some important positive relationships between CAS adoption and financial decision-making efficiency and performance, respectively, and indicate that technology integration is crucial for driving financial success within SMEs. Secondly, the research elaborates on the influential factors in CAS adoption, such as technical expertise, financial resources, and government support. The present study sheds more light on the intricate dynamics surrounding CAS adoption by SMEs in the Ghanaian context, based on the adopted mixed-method approach. This way, it provides material for informed decisions and strategic actions to be made for increasing the financial capacity and growth of this all-important sector.

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