



## Effects of Computerized Accounting System on the Financial Management of Selected Small and Medium Enterprises (SMEs) in Santa Cruz Laguna

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### Abstract.

*This research was conducted to determine the effects of a computerized accounting system on the financial management of small and medium enterprises (SMEs) in Sta. Cruz, Laguna. The information gathered from this study could be beneficial to various people. To gather the necessary data, researchers used both primary and secondary sources. A survey questionnaire was distributed face-to-face to collect information from one hundred twenty-seven (127) Small and Medium Enterprises (SMEs) in Sta. Cruz, Laguna. The proponents of this study utilized a quantitative-descriptive research design and employed a multi-cluster sampling technique as a method to draw data. The gathered data was tallied, tabulated, and treated statistically using the appropriate statistical tools. The results of this study proved that there is a significant relationship between computerized accounting systems on the financial management of small and medium enterprises in Sta. Cruz, Laguna. Therefore, the researchers recommend that SMEs may employ the use of Microsoft Excel. It is imperative for these businesses to configure their computerized accounting system to align with their distinct financial management needs. This involves establishing robust financial reporting mechanisms, integrating the system with other corporate operations, and fine-tuning the chart of accounts. Maintaining a competitive edge is achievable by ensuring the continuous updating of their computerized accounting system. Furthermore, continuous research and development that facilitates adoption of computerized accounting systems for improved business management should be made, and it can be relevant if additional aspects such as arrangement of ownership, barriers in purchasing and maintaining costs, investment and security, and other variables that have the potential for affecting the usage of CAS should be taken into consideration.*

**Keywords:** *Computerized Accounting Systems, Financial Management, and Microsoft Excel*

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### I. Introduction

Computerized accounting systems (CAS) were widely used around the world, in both developed and developing countries. Some examples of CAS included Microsoft Excel, QuickBooks, and Xero Accounting software. In developed countries, the use of CAS was very common and was considered a standard practice in most businesses. In these countries, the adoption of CAS has been driven by the need for more efficient and

accurate financial management. In developing countries, the adoption of CAS has been slower due to various factors such as lack of awareness, lack of technical expertise, and insufficient infrastructure. However, the use of CAS increased in the developing countries, especially among small and medium-sized enterprises (SMEs), as they realized the benefits of automation and computerization of their accounting processes.

The use of Computerized Accounting Systems (CAS) continued to be widespread around the world. The global CAS market was valued at \$2.4 billion in 2018 and was expected to grow at a compound annual growth rate of 6.8% between 2019 and 2024. This growth was attributed to the increasing adoption of cloud-based CAS solutions as well as the growing demand for automation and efficiency in financial management processes. The use of CAS was positively related to firm size, age, and financial performance. It also indicated that the adoption of CAS led to improved financial reporting, internal control, and decision-making.

The increasing interest of numerous small and medium enterprises in Sta. Cruz, Laguna, to invest in the rapidly expanding business landscape has given rise to intense competition among these enterprises. Consequently, there is a heightened focus on enhancing financial management procedures and practices to mitigate potential business challenges. Traditionally reliant on manual accounting methods, the advent of computerized accounting systems offers a promising avenue to reduce redundancy and reconcile errors. The introduction of such systems holds great potential for increased productivity, streamlined workflows, and, notably, improved financial management.

This research delved into the effects of a computerized accounting system on financing, control, and organizational aspects of financial management. In light of these findings, the researchers aspired to provide insights to assist other businesses in making informed decisions about whether to adopt computerized accounting systems for managing their financials, taking into consideration the effects on small and medium enterprises.

## **II. Theoretical background**

A number of theories have been proposed to signify the effect of computerized accounting systems in the financial management of small business owners. This theory was introduced by Davis (1989) in the field of information systems with the intent of identifying the perceived utility and perceived convenience of use of a system to the individual. Olufemi (2021) applied this theory to the use of a computerized accounting system and assessed its efficacy in terms of speed, reliability, and accuracy. According to the theory proposed by Rogers (1962), outlined the manner in which technological advancements and new ideas were being adopted by society. Rogers (1962) defined diffusion as the process by which an innovative concept was communicated among members of a group using particular channels over time. He stated that concepts undergo phases of the decision-making procedure. Lastly, Systems Theory of Management proposed by Bertalanffy (1968), explains that a business is a system made up of interdependent components that work together to ensure the system's proper operation. Bertalanffy (1968) identified synergy as a crucial factor in the success of a business. It evaluated the effectiveness of the combined efforts of the subsystems.

## **III. Research question or Research hypothesis or Problem statement**

The purpose of this study was to determine the effects of a computerized accounting system on the financial management of small and medium enterprises (SMEs) in Sta. Cruz, Laguna. Specifically, it intended to answer the following questions: 1. What is the profile of the small and medium enterprises in terms of: 1.1. Type of Business Operation; 1.2. Number of Years in Operation; and 1.3. Software used?; What is the level of the performance of computerized accounting systems among small and medium enterprises in terms of: 2.1. Speed; 2.2. Accuracy; and 2.3. Reliability? To what extent are the effects of the computerized accounting system to financial management of small and medium enterprises at Sta. Cruz Laguna in terms of: 3.1. Financing; 3.2. Controlling; and 3.3. Organizing? Is there a significant difference in the performance of computerized accounting systems across business profiles? and Is there a significant relationship between computerized accounting systems and financial management of small and medium enterprises in Sta. Cruz Laguna?

## **IV. Data And Methods**

This study used a quantitative, and descriptive correlation to examine the effect of computerized accounting systems on the financial management of selected small and medium sized enterprises in Sta. Cruz, Laguna. The research collected numerical data and applied statistical, mathematical, or computational approaches for analysis. Descriptive research was also utilized to characterize the features of the population or phenomenon under study. The combination of quantitative and descriptive research methods will provide a comprehensive understanding of the effect of computerized accounting systems on financial management in small and medium-sized enterprises.

The study was conducted at Sta. Cruz Laguna, which is a first-class municipality in the Philippines'

Laguna province's eastern region. Sta. Cruz has a number of Small and Medium-sized Enterprises (SMEs) in fields such as manufacturing, merchandising, and service. The researchers have identified a total of 333 small-sized and medium-sized enterprises in the area. To ensure a representative sample with a 7% margin of error and a 93% level of confidence, the researchers utilized the Slovin's formula, resulting in the selection of 127 respondents. For this research, probability sampling was utilized to enhance the accuracy of the results. The researchers utilized a self-made survey questionnaire as a research instrument for data collection in this study. The self-made questionnaire was disseminated to the selected respondents. The questionnaire serves as a systematic tool for gathering and analyzing diverse perspectives within a specific population.

## V. Results

This chapter presents the findings, analysis, results, and interpretation of the data gathered whose objective was to determine the Effects of the Computerized Accounting System on the Financial Management of selected Small and Medium Enterprises (SMEs) in Sta. Cruz, Laguna.

### Profile of the Selected Small and Medium Enterprises

#### Type of Business Operation

The Computerized Accounting System has become an essential component for all types of businesses, in which it facilitates more efficient financial management by serving as a scientific tool in business operations (Maruschak 2021). The study by Oladipupo (2018), which concluded that Computerized Accounting Systems (CAS) are widely used in manufacturing, merchandising, and service businesses, was the source of the choices presented at the figure. The recognized business categories were determined to be the merchandising, manufacturing and service business.

**Table 3. Business Profile in Terms of Type of Business Operation**

TYPE OF BUSINESS OPERATION	FREQUENCY	PERCENTAGE
Manufacturing	19	15%
Merchandising	64	50%
Services	44	35%
<b>TOTAL</b>	<b>127</b>	<b>100%</b>

Table 3 presents the type of business operation of the 127 respondents in this study. It can be seen that 19 out of 127 (15%) has a manufacturing business, 64 out of 127 (50%) is in merchandising, while 44 out of 127 (35%) offers services. Based on the data gathered in this study, the researchers discovered that most types of business operations are merchandising. Because computerized accounting systems are generally more efficient than other methods of data filing, the researchers believe that using one is much less expensive especially in Manufacturing Business as they need to record inventories on a regular basis. There are numerous advantages to computerized accounting over traditional manual accounting. Accounting software and digital spreadsheets are commonly used to keep track of a company's or client's financial transactions. Everything is finished more quickly and will save a lot of time because the work is done automatically, and all reports are kept in one location. The result agrees with the study of Oladipupo (2018) that the adoption of Computerized Accounting System (CAS) is pervasive among Small and Medium Enterprises (SMEs). Notably, Merchandising emerged as the predominant sector employing CAS. It highlights the necessity for Small and Medium Enterprises (SMEs) to enhance their IT skills to remain relevant in the dynamic landscape of financial management. It also underscores the efficiency and ease of use associated with computerized accounting systems.

#### Number of Years in Operation of the Small and Medium Enterprises

The number of years in operation of the Small and Medium Enterprises (SMEs) is a significant factor that affects the adoption of computerized accounting systems, with newer businesses being more likely to adopt CAS than older ones. (Itang 2020). The presented options derive from the studies conducted by Doern et al. (2019), wherein an analysis was undertaken on the business development stages and their nexus with entrepreneurship challenges in the Philippines. The identified stages comprise the developmental stage (1 year below), second level of development (more than 1-4 years), stabilization stage (more than 4-7 years), expansion stage (more than 7-10 years), and maturation stage (above 10 years). The study meticulously aligns terminologies with their respective associated timeframes, thereby substantiating these developmental milestones within the realm of business.

**Table 4. Business Profile in Terms of Number of Years on Operation**

YEARS	FREQUENCY	PERCENTAGE
Development Stage (1 year below)	6	5%
Second Level of Development (more than 1 year to 4 years)	35	27%
Stabilization Stage (more than 4 years to 7 years)	32	25%
Expansion Stage (more than 7 years to 10 years)	2	19%
Maturation Stage (above 10 years)	30	24%
<b>TOTAL</b>	<b>127</b>	<b>100%</b>

Table 4 represents the years in operation of the 127 respondents in this study. It can be seen that 6 out of 127 (5%) is under the development stage, 35 out of 127 (27%) is under second level, 32 out of 127 (25%) is under stabilization, 2 out of 127 (19%) is under expansion, while 30 out of 127 (24%) is under maturation. The results of this study reveal a nuanced understanding of the developmental stages of businesses among the sampled respondents. Drawing from the study of Doern et al. (2019), businesses are shown to progress through distinct developmental stages, with the second level identified as a crucial period occurring within 2-4 years of operation. Remarkably, this aligns seamlessly with our study's findings, where 35 out of 127 (27%) respondents are positioned within this pivotal second level of development. Furthermore, contextualizing the findings within the framework of the Business Life Cycle, as articulated by Instantprint (2019), sheds light on the observed patterns. The Growth and Establishment Stage, corresponding to the second level of development, signifies a period characterized by active expansion.

**Software Used by the Small and Medium Enterprises**

The alternatives presented stem from the studies conducted by Rohaeni et al. (2022), who study the utilization of Microsoft Office Excel for cash flow recording in small and medium-sized enterprises (SMEs). Additionally, study of Ayungon Martinez (2020) emphasize the availability of diverse accounting software solutions tailored to the requirements of small businesses, including QuickBooks and Xero. These software applications are noted for streamlining accounting procedures, enhancing accuracy, bolstering financial control, and augmenting accessibility to financial information.

**Table 5. Business Profile in Terms of Software Used**

Software Used	FREQUENCY	PERCENTAGE
Quickbooks	17	13%
Microsoft Excel	105	83%
Xero	2	2%
Others (Personal Software)	3	2%
<b>TOTAL</b>	<b>127</b>	<b>100%</b>

The software used by the 127 respondents in this study can be seen in the figure above. It can be seen that 17 out of 127 (13%) are using Quickbooks, 105 out of 127 (83%) are using Microsoft Excel, 2 out of 127 (2%) are using Xero, while 3 out of 127 (2%) are using other software such as personal software. Excel has been available for a while now, and numerous professionals are already acquainted with its user interface and basic functions. As a result, it is a tool that a broad range of users may use. Excel can also be used for an extensive variety of functions other than accounting. Businesses frequently value the ability to build custom spreadsheets for a variety of objectives, such as financial analysis, budgeting, and data management. In terms of affordability, Excel is frequently more cost-effective than specific accounting software like QuickBooks and Xero. Excel, in example, may be a more cost-effective solution for smaller firms. Excel can be connected with other Microsoft Office products, including those used by many organizations. This connection has the potential to simplify tasks and increase overall efficiency.

Furthermore, while Excel has limits for huge corporations, it can effectively manage accounting demands for small to medium-sized firms. It is simple to expand as the firm expands. Finally, because Excel does not require a constant online connection, it is a dependable solution when internet connectivity is limited or inconsistent. Moreover, Rohaeni et al. (2022) supports the result that Microsoft Office Excel was a cost-effective and efficient way for SMEs to record their cash flow. The study also found that the use of Microsoft Office Excel provided greater flexibility, ease of use, and customization options compared to manual accounting methods. And emphasize that the adoption of Microsoft Office Excel for cash flow recording is a viable option for SMEs that cannot afford expensive accounting software.

### Performance of Computerized Accounting System in Terms of Speed

Table 6 shows the mean performance of a computerized accounting system in terms of speed. It can be seen that the capability of generating easily accessible and simplified reports gained a mean rating of 3.57 (with standard deviation of 0.53), which is interpreted as excellent. Managing a large volume of transactions obtained a mean rating of 3.39 (with standard deviation 0.73), interpreted as excellent. Reducing repetitive processes landed on a mean rating of 3.43 (with standard deviation 0.66), interpreted as excellent. Facilitating easy tracking of transactions in 58 the accounts was rated with a mean of 3.41 (standard deviation of 0.66), interpreted as excellent. The speed significantly enhancing productivity was given a mean rating of 3.38 (with standard deviation 0.73), interpreted as excellent. Overall, the average mean rating of the performance of computerized accounting systems in terms of speed is 3.44 (with standard deviation of 0.66), which is interpreted as excellent.

**Table 6. Performance of Computerized Accounting System in Terms of Speed**

Indicators	Mean	Standard Deviation	Interpretation
1. A computerized accounting system is capable of generating easily accessible and simplified reports using the data it generates.	3.57	0.53	Excellent
2. A computerized accounting system can manage a large volume of transactions without slowing down.	3.39	0.73	Excellent
3. The implementation of a computerized accounting system reduces repetitive processes, requiring less time and effort from users.	3.43	0.66	Excellent
4. A computerized accounting system facilitates easy tracking of transactions in the accounts.	3.41	0.66	Excellent
5. The speed of a computerized accounting system significantly enhances productivity by performing complex calculations and analysis quickly.	3.38	0.73	Excellent
<b>Average</b>	<b>3.44</b>	<b>0.66</b>	<b>Excellent</b>

#### Legend:

- 3.26 – 4.00 Excellent
- 2.51 – 3.25 Good
- 1.76 – 2.50 Fair
- 1.00 – 1.75 Poor

San Luis (2020) highlights Excel's importance in enhancing SME processes due to its speed and adaptability, enabling faster decision-making and efficient management of financial data, particularly for SMEs lacking expensive accounting software or large finance departments. Aroc et al. (2022) suggest that investing in financial reporting systems can improve the speed and accuracy of financial reporting, leading to better decision-making processes, which can directly impact the success and growth of SMEs.

### Performance of Computerized Accounting System in Terms of Accuracy

Table 7 shows the mean performance of computerized accounting system in terms of accuracy. It can be seen that eliminating clerical errors gained a mean rating of 3.22 (with standard deviation of 0.62), which is interpreted as good. Customizing templates for users which allows correct data entry obtained a mean rating of 3.42 (with standard deviation of 0.66), interpreted as excellent. Delivering consistent reports landed on a mean rating of 3.28 (with standard deviation of 0.66), interpreted as excellent. Assisting standardization was rated with a mean of 3.34 (with standard deviation of 0.73), interpreted as excellent. Reducing mathematical errors was given a mean rating of 3.25 (with standard deviation of 0.79), interpreted as good. Overall, the average mean rating of the performance of computerized accounting system in terms of accuracy is 3.30 (with standard deviation of 0.69), which is interpreted as excellent.

**Table 7. Performance of Computerized Accounting System in Terms of Accuracy**

Indicators	Mean	Standard Deviation	Interpretation
1. Computerized accounting system eliminates clerical errors and omissions in records.	3.22	0.62	Good
2. Computerized accounting system has customized templates for users which allows correct data entry. As a result, the information and reports are generated automatically.	3.42	0.66	Excellent



3.	Computerized accounting delivers consistent reports by minimizing mistakes, making the financial records more precise.	3.28	0.66	Excellent
4.	A computerized accounting system assists standardization, which results in uniform, neat, and dependable financial records.	3.34	0.73	Excellent
5.	Computerized accounting system reduces arithmetical/mathematical errors.	3.25	0.79	Good
<b>Average</b>		<b>3.30</b>	<b>0.69</b>	<b>Excellent</b>

**Legend:**

- 3.26 – 4.00 Excellent
- 2.51 – 3.25 Good
- 1.76 – 2.50 Fair
- 1.00 – 1.75 Poor

The values of standard deviation which are all less than 1 signifies harmony in the responses of the participants. Accuracy receives an overall mean rating of excellent since it is crucial for the credibility and validity. The significance of this research might be diminished by inaccurate information, which can also result in incorrect thinking and unreliable conclusions. According to Qne Software (2020), a business must select a software company that can consistently deliver long-term value in order to be competitive in its industry. Furthermore, a company's selection of business software should be consistent with its growth strategy. Therefore, their choice should be able to provide accurate calculations, as modern businesses must be able to provide accurate data to users and draw conclusions without error. By aiming for accuracy, the researchers respect moral standards, contribute to the progress of knowledge, and enable practical applications of their findings. Therefore, accuracy is highly valued and considered essential leading to an overall excellent rating.

**Performance of Computerized Accounting System in Terms of Reliability**

Table 8 shows the mean performance of a computerized accounting system in terms of reliability. Ensuring the quality of work gained a mean rating of 3.39 (standard deviation of 0.71), which is interpreted as excellent. Standardized procedures and routines obtained a mean rating of 3.35 (standard deviation of 0.67), interpreted as excellent. Offering control procedures landed on a mean rating of 3.24 (standard deviation of 0.68), interpreted as good. Generating reports with consistency was rated with mean of 3.14 (standard deviation of 0.78), interpreted as good. Producing reports for creating a clearer image was given a mean rating of 3.29 (standard deviation of 0.77), interpreted as excellent. Overall, the average mean rating of the performance of computerized accounting systems in terms of reliability is 3.28 (standard deviation of 0.72), which is interpreted as excellent.

**Table 8. Performance of Computerized Accounting System in Terms of Reliability**

Indicators	Mean	Standard Deviation	Interpretation
1. The computerized accounting system ensures the quality of work and data involved.	3.39	0.71	Excellent
2. Standardized procedures and routines are being observed in a computerized accounting system.	3.35	0.67	Excellent
3. The computerized accounting system offers control procedures for protecting the information against unauthorized personnel.	3.24	0.68	Good
4. The computerized accounting software generates reports with consistency and promptness.	3.14	0.78	Good
5. By using the system, producing reports for creating a clearer image and path of the financial health of the business is not complicated.	3.29	0.77	Excellent
<b>Average</b>	<b>3.28</b>	<b>0.72</b>	<b>Excellent</b>

**Legend:**

- 3.26 – 4.00 Excellent
- 2.51 – 3.25 Good
- 1.76 – 2.50 Fair
- 1.00 – 1.75 Poor

The values of standard deviation which are all less than 1 signifies harmony in the responses of the participants. Pertaining to the data presented above, computerized accounting systems could produce reliable data, information, and reports. In other words, if a business has a positive experience using Microsoft and other accounting software, they are more likely to do so again in the future. Despite the fact that there are still some

issues with owners finding it hard to use. The fact that business owners and managers continue to embrace computerized accounting system approaches shows that these systems provide a positive user experience that encourages continuing use. According to a Qne Software article from 2020, using software that can boost efficiency and deliver reliable information was a helpful strategy for outweighing competitors. Furthermore, Wali et al. (2022) stated that as a result of continuous improvement and the transition from manual to electronic accounting operations, users have concluded that accounting is easier and more practical, and it helps companies monitor their cash flow and maintain an accurate and reliable financial operation.

**Effects of Computerized Accounting System on Financial Management in terms of Financing**

Table 9 shows the mean performance of financial management in terms of financing. It can be seen that the use of computerized accounting in monitoring financial management gained a mean rating of 3.41 (standard deviation of 0.71), which is interpreted as excellent. Having the capacity to review both historical and current financial records obtained a mean rating of 3.35 (standard deviation of 0.68), interpreted as excellent. Reviewing accurate financial reports was given a mean rating of 3.35 (standard deviation of 0.68), interpreted as excellent. Using computerized accounting in responsible choices landed on a mean rating of 3.30 (standard deviation of 0.71), interpreted as excellent. Identifying the company’s earnings or losses was rated with a mean of 3.41 (standard deviation of 0.75), interpreted as excellent. Overall, the average mean rating of the performance of financial management in terms of financing is 3.36 (standard deviation of 0.71), which is interpreted as excellent. According to the study by Gofwan (2022), computerized accounting systems offer access to historical and current financial records, aiding decision-makers in informed financing choices and ensuring accurate reports. Organized financial data simplifies funding decisions and enhances financial strategies. Accounting information systems also assist financial managers in planning and controlling finances, enabling effective strategy execution and providing valuable insights into a company's financial performance (Amos & Ivungu, 2019)

**Table 9. Effects of Computerized Accounting System on Financial Management in terms of Financing**

Indicators	Mean	Standard Deviation	Interpretation
1. The use of CAS in monitoring financial management making decision become easier in terms of financing.	3.41	0.71	Excellent
2. The use of CAS can have the capacity to review both historical and current financial records become helpful in selecting the best funding options.	3.33	0.72	Excellent
3. The use of CAS become useful in reviewing the accurate financial reports that inform them of the financial status.	3.35	0.68	Excellent
4. The use of CAS in making responsible choices about funding become easier by well-organized financial data.	3.30	0.71	Excellent
5. The use of CAS become useful in identifying the company's earning and losses.	3.41	0.75	Excellent
<b>Average</b>	<b>3.36</b>	<b>0.71</b>	<b>Excellent</b>

**Legend:**

- 3.26 – 4.00 Excellent
- 2.51 – 3.25 Good
- 1.76 – 2.50 Fair
- 1.00 – 1.75 Poor

**Effects of Computerized Accounting System on Financial Management in terms of Controlling**

Table 10 shows the mean performance of financial management in terms of controlling. It can be seen that accurately controlling business practices gained a mean rating of 3.33 (standard deviation of 0.68), which is interpreted as excellent. Implementing appropriate managerial approaches obtained a mean rating of 3.34 (standard deviation of 0.67), interpreted as excellent. Helping to identify common errors in financial management was given a mean rating of 3.39 (standard deviation of 0.68), interpreted as excellent. Utilizing a computerized accounting system landed on a mean rating of 3.31 (standard deviation of 0.70), interpreted as excellent.

**Table 10. Effects of Computerized Accounting System on Financial Management in terms of Controlling**

Indicators	Mean	Standard Deviation	Interpretation
1. A computerized accounting system controls business practices for sustainable financial management accurately.	3.33	0.68	Excellent
2. Implementing appropriate managerial approaches in financial management using a computerized accounting system demonstrated competency compared to other businesses.	3.34	0.67	Excellent

## *Effects of Computerized Accounting System on the Financial Management of Selected Small ..*

3.	Technical guidance on using a computerized accounting system become helpful in identifying common errors in financial management.	3.39	0.68	Excellent
4.	Utilizing a computerized accounting system provided an alternative protocols that enhance accounting principles and maintain efficient financial management	3.31	0.70	Excellent
5.	Computerized accounting system effectively navigated and managed financial operations, ensuring proper monitoring of financial performance.	3.36	0.73	Excellent
<b>Average</b>		<b>3.35</b>	<b>0.69</b>	<b>Excellent</b>

Navigating and managing financial operations was rated with mean of 3.36 (standard deviation of 0.73), interpreted as excellent. Overall, the average mean rating of the performance of financial management in terms of controlling is 3.35 (with standard deviation of 0.69), which is interpreted as excellent. The values of standard deviation which are all less than 1 signifies harmony in the responses of the participants. Effective financial control is essential for maintaining financial stability, minimizing risks, and achieving financial goals. Controlling is a testament to the organization's dedication to sound financial practices, discipline, and a forward-looking approach. Such performance not only ensures financial stability but also provides a solid foundation for the organization's growth and success in which the respondents found effective. Accounting software is very helpful in the execution of many preventative, investigative, and corrective internal control procedures in firms Itang (2020).

### **Effects of Computerized Accounting System on Financial Management in terms of Organizing**

Table 11 shows the mean performance of financial management in terms of organizing. It can be seen that allowing organizations to organize effectively gained a mean rating of 3.48 (standard deviation of 0.64), which is interpreted as excellent. Making business organizations by allowing them to be successful obtained a mean rating of 3.47 (standard deviation of 0.69), interpreted as excellent. Having a clear image of the organization reports was given a mean rating of 3.50 (standard deviation of 0.63), interpreted as excellent. Establishing a clear line of financial management landed on a mean rating of 3.43 (standard deviation of 0.90), interpreted as excellent. Precise compliance in the financial management was rated with a mean of 3.39 (standard deviation of 0.72), interpreted as excellent. Overall, the average mean rating of the performance of financial management in terms of organizing is 3.45 (standard deviation of 0.72), which is interpreted as excellent.

**Table 11. Effects of Computerized Accounting System on Financial Management in terms of Organizing**

Indicators	Mean	Standard Deviation	Interpretation
1. The Computerized accounting system and financial management made organizations to organize effectively and efficiently.	3.48	0.64	Excellent
2. A well-organized financial management helps in making business organizations to be successful.	3.47	0.69	Excellent
3. The clear image of an organization facilitated the operational efficiency of business.	3.50	0.63	Excellent
4. Established clear line of financial management and computerized accounting system boost productivity and enable the organization to have a significant effect on the firm's profitability.	3.43	0.90	Excellent
5. The precise compliance in the financial management and synchronization of computerized accounting system make the organization improves the response time of data.	3.39	0.72	Excellent
<b>Average</b>	<b>3.45</b>	<b>0.72</b>	<b>Excellent</b>

#### **Legend:**

3.26 – 4.00 Excellent  
 2.51 – 3.25 Good  
 1.76 – 2.50 Fair  
 1.00 – 1.75 Poor

The values of standard deviation which are all less than 1 signifies harmony in the responses of the participants. As a result of the computerized accounting system the Small and Medium Enterprises (SMEs) choose to utilize, SMEs can have excellent financial management in terms of organizing. Accounting software, according to Peprah and Amponsem (2021), separates and centrally organizes data by category. If a company requires specific information about a transaction, it can look for it in the software's accounts payable section by clicking a link or tab. When employing a manual method, the same operation may require paging through multiple pages and taking longer to locate the transaction. This also helps to establish a clear chain of command,



which increases productivity and efficiency while allowing the organization to react to change more quickly.

**Performance of Computerized Accounting System on Financial Management in terms of Speed across Types of Business Operation**

Table 12 highlights the ANOVA result of performance of computerized accounting systems in terms of speed across type of business operation. It can be seen that businesses offering services obtained the highest mean in terms of performance of computerized accounting systems in terms of speed, while other types of business provided that lowest rating. This difference is not significant because the P-value (0.14) is greater than the alpha value (0.05). With 95% level of confidence, it can be said that there is not enough evidence to claim that the performance of computerized accounting systems in terms of speed is different across different types of business operation.

**Table 12. Performance of Computerized Accounting System on Financial Management in terms of Speed across Types of Business Operation**

Type of Business Operation	Mean	Standard Deviation	F-value	P-value	Decision
Manufacturing	3.33	0.63	2.01	0.14	Not Significant
Merchandising	3.45	0.47			
Services	3.54	0.44			

alpha = 0.05

The findings indicate that there is no significant difference between the performance of computerized accounting systems (CAS) in terms of speed when classified according to the type of business operation. This suggests that the performance of Computerized Accounting System are consistent across different business types. The results align with the research of Maruschak (2021) and Villanueva (2021), both emphasizing the pivotal role of accounting software in business operations. Maruschak underscores the fundamental nature of accounting software as a tool for efficient financial management across diverse business types. Similarly, Villanueva's study specifically highlights the benefits of CAS for Small and Medium Enterprises (SMEs) in the Philippines. These advantages include increased efficiency, improved accuracy, enhanced reporting, and heightened security measures. Collectively, these findings underscore the essential role of accounting software, such as CAS, in streamlining financial processes and elevating overall business performance.

**Performance of Computerized Accounting System on Financial Management in terms of Accuracy across Types of Business Operation**

The ANOVA results examining the performance of computerized accounting systems in terms of accuracy across different types of business operations are noteworthy. According to the data, merchandising sector obtained the highest mean scores, indicating a relatively higher performance level of computerized accounting systems in terms of accuracy. In contrast, the manufacturing and services sectors received the lowest ratings. The calculated P-value of 0.77 exceeds the alpha value of 0.05, indicating that there is no compelling evidence to reject the null hypothesis. Thus, at a 95% confidence level, it can assert that there is insufficient evidence to claim that the performance of computerized accounting systems in terms of accuracy significantly differs across various types of business operations.

**Table 13. Performance of Computerized Accounting System on Financial Management in terms of Accuracy across Types of Business Operation**

Type of Business Operation	Mean	Standard Deviation	F-value	P-value	Decision
Manufacturing	3.27	0.53	0.26	0.77	Not Significant
Merchandising	3.35	0.47			
Services	3.27	0.51			

alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms of Reliability across Types of Business Operation**

Table 14 highlights the ANOVA result of performance of computerized accounting systems in terms of reliability across types of business operation. It can be seen that businesses offering services obtained the highest mean in terms of performance of computerized accounting systems, while other types of business provided that lowest rating. This difference is not significant because the P-value (0.28) is greater than the alpha value (0.05). With 95% level of confidence, it can be said that there is not enough evidence to claim that the

performance of computerized accounting system in terms of reliability is different across different types of business operation.

**Table 14. Performance of Computerized Accounting System on Financial Management in terms of Reliability across Types of Business Operation**

Type of Business Operation	Mean	Standard Deviation	F-value	P-value	Decision
Manufacturing	3.21	0.52	1.29	0.28	Not Significant
Merchandising	3.28	0.52			
Services	3.36	0.53			

alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms of Speed across Number of Years in Operation**

Table 15 highlights the ANOVA result of performance of computerized accounting system in terms of speed across years in operation. It can be seen that the second level obtained the highest mean in terms of performance of computerized accounting system, while stabilization provided that lowest rating. This difference is not significant because the P-value (0.10) is greater than the alpha value (0.05). With 95% level of confidence, it can be said that there is not enough evidence to claim that the performance of computerized accounting system in terms of speed is different across years in operation. The study's findings reveal that there is no significant difference in the perspectives of small and medium-sized businesses regarding the effectiveness of Computerized Accounting Systems (CAS) when categorized based on the speed of operation, specifically in relation to the number of years they have been in business. This implies that the perceptions of small businesses on CAS effectiveness are not influenced by the duration of their business operations.

**Table 15. Performance of Computerized Accounting System on Financial Management in terms of Speed across Number of Years in Operation**

Number of Years in Operation	Mean	Standard Deviation	F-value	P-value	Decision
Development Stage (1 year below)	3.50	0.37	1.96	0.10	Not Significant
Second Level of Development (more than 1 year to 4 years)	3.61	0.4			
Stabilization Stage (more than 4 years to 7 years)	3.41	0.45			
Expansion Stage (more than 7 years to 10 years)	3.43	0.61			
Maturation Stage (above 10 years)	3.27	0.53			

alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms of Accuracy across Number of Years in Operation**

Table 16 shows the findings of an ANOVA analysis that looked at how well computerized accounting systems performed in terms of accuracy throughout a range of operating years. Notably, the expansion category was rated lowest, while the development category had the greatest mean performance. The performance difference between these categories, as seen, is not significant. A P-value of 0.79 beyond the predetermined alpha value of 0.05 supports these findings. The researcher states that there is insufficient data to conclude that the accuracy of computerized accounting systems varies greatly depending on the number of years in operation, with a 95% confidence level.

**Table 16. Performance of Computerized Accounting System on Financial Management in terms of Accuracy across Number of Years in Operation**

Number of Years in Operation	Mean	Standard Deviation	F-value	P-value	Decision
Development Stage (1 year below)	3.40	0.28	0.42	0.79	Not Significant
Second Level of Development (more than 1 year to 4 years)	3.34	0.39			
Stabilization Stage (more than 4 years to 7 years)	3.34	0.42			
Expansion Stage (more than 7 years to 10 years)	3.22	0.69			

Maturation Stage (above 10 years)	3.25	0.54
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alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms of Reliability across Number of Years in Operation**

The findings of an ANOVA analysis evaluating the performance and reliability of computerized accounting systems across years in operation are displayed in table 17. Remarkably, maturation had the lowest mean, and the second stage showed the highest mean of performance. Though a P-value of 0.22 exceeds the alpha value of 0.05, the performance difference across various years in operation was found not significant, at a 95% confidence level, there is insufficient evidence to assert differentiation in the reliability of computerized accounting systems based on years of operation. This result is consistent with the Journal of Accounting & Organizational Change (2022), especially when considered in light of the research examining how changes in the financial industry affect accounting procedures. The study emphasizes how important it is that the financial landscape is changing, even though there is insufficient evidence of a direct association between it and the ANOVA results on computerized accounting systems throughout years in operation.

**Table 17. Performance of Computerized Accounting System on Financial Management in terms of Reliability across Number of Years in Operation**

Number of Years in Operation	Mean	Standard Deviation	F-value	P-value	Decision
Development Stage (1 year below)	3.30	0.53			
Second Level of Development (more than 1 year to 4 years)	3.43	0.44			
Stabilization Stage (more than 4 years to 7 years)	3.29	0.42	1.44	0.22	Not Significant
Expansion Stage (more than 7 years to 10 years)	3.25	0.67			
Maturation Stage (above 10 years)	3.12	0.57			

alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms Speed across Software Used**

Table 18 highlights the ANOVA result of performance of computerized accounting system in terms of speed across software used. It can be seen that Xero obtained the highest mean in terms of performance of a computerized accounting system, while other software provided that lowest rating. This difference is not significant because the P-value (0.57) is greater than the alpha value (0.05). With 95% level of confidence, it can be said that there is not enough evidence to claim that the performance of computerized accounting systems in terms of speed is different across software used.

**Table 18. Performance of Computerized Accounting System on Financial Management in terms Speed across Software Used**

Software Used	Mean	Standard Deviation	F-value	P-value	Decision
Quickbooks	3.47	0.42			
Microsoft Excel	3.43	0.49			
Xero	3.90	0.14	0.67	0.57	Not Significant
Others (Personal Softwares)	3.33	0.99			

alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms of Accuracy across Software Used**

Table 19 highlights the ANOVA result of performance of computerized accounting systems in terms of accuracy across software used. It can be seen that Xero obtained the highest mean in terms of performance of a computerized accounting system, while other software provided that lowest rating. This difference is not significant because the P-value (0.42) is greater than the alpha value (0.05).

**Table 19. Performance of Computerized Accounting System on Financial Management in terms of Accuracy across Software Used**

Software Used	Mean	Standard Deviation	F-value	P-value	Decision
Quickbooks	3.39	0.37			
Microsoft Excel	3.28	0.49	0.94	0.42	Not Significant

Xero	3.80	0.00
Others (Personal Softwares)	3.27	1.10

alpha = 0.05

**Performance of Computerized Accounting System on Financial Management in terms of Reliability across Software Used**

Table 20 outlines the ANOVA findings pertaining to the dependability of computerized accounting systems across diverse business operations. Noteworthy is that Xero exhibited the highest mean performance, while Quickbooks and other personal software garnered the lowest scores. Nevertheless, the observed disparity lacks statistical significance, as indicated by a P-value of 0.89, exceeding the alpha threshold of 0.05.

**Table 20. Performance of Computerized Accounting System on Financial Management in terms of Reliability across Software Used**

Software Used	Mean	Standard Deviation	F-value	P-value	Decision
Quickbooks	3.20	0.38	0.21	0.89	Not Significant
Microsoft Excel	3.30	0.52			
Xero	3.40	0.85			
Others (Personal Softwares)	3.20	1.22			

alpha = 0.05

**Significant Difference of Performance of Computerized Accounting System across the Business Profiles**

Table 21 presents the ANOVA results, focusing on the performance of Computerized Accounting Systems (CAS) across various business profiles. The analysis includes factors such as speed, accuracy, and reliability, providing insights into the influence of different business contexts on CAS performance. Delving into the statistical underpinnings of the interpretations, the associated P-values underscore a consistent narrative—none of the observed differences in CAS performance across business profiles attain statistical significance. With P-values of 0.14, 0.77, and 0.28 for speed, accuracy, and reliability, respectively, surpassing the alpha threshold of 0.05, a 95% confidence level corroborates the notion that variations in CAS performance across business profiles lack statistical significance.

**Table 21. Significant Difference of Performance of Computerized Accounting System across the Business Profiles**

Business Profile		Performance of Computerized Accounting System		
		Speed	Accuracy	Reliability
Type of Business Operation	F-value	2.01	0.26	1.29
	P-value	0.14	0.77	0.28
	Decision	Not Significant		
Number of Years in Operation	F-value	1.96	0.42	1.44
	P-value	0.10	0.79	0.22
	Decision	Not Significant		
Software Used	F-value	0.67	0.94	0.21
	P-value	0.57	0.42	0.89
	Decision	Not Significant		

alpha = 0.05

**Significant Relationship of Effects of Computerized Accounting System on the Financial Management**

Table 22 highlights the Pearson-R treatment result of the correlation of performance of computerized accounting systems and financial management. It can be seen that all computed r-values are greater than the r-critical value (0.1655), signifying that there is a significant relationship between the two variables. Specifically, the three indicators of performance of computerized accounting system and the three indicators of financial management. This is supported by the P-values which are all lower than the alpha value (0.05). With 95% level of confidence, it can be said that there is enough evidence to claim that the performance of computerized accounting system is significantly correlated with financial management.

**Table 22. Significant Relationship of Effects of Computerized Accounting System on the Financial Management**

Financial Management		Computerized Accounting System		
		Speed	Accuracy	Reliability
Financing	R-value	0.6163	0.6729	0.7638
	P-value	0.0000	0.0000	0.0000
	Decision	Significant		
Controlling	R-value	0.7200	0.7130	0.7031
	P-value	0.0000	0.0000	0.0000
	Decision	Significant		
Organizing	R-value	0.6163	0.6645	0.7006
	P-value	0.0000	0.0000	0.0000
	Decision	Significant		

**alpha = 0.05**

## VI. Conclusion

Based on the findings presented in this study, the following conclusions are drawn:

1. Majority of the owners or 64 out of 127 (50%) of small and medium enterprises in Sta. Cruz Laguna were operated a Merchandising business. In this study, it could also be seen that 27% or 35 out of 127 responses were on the second level of the number of years in operation. In terms of the software used, 83% or 105 out of 127 responses were found to have used Microsoft Excel among small and medium enterprises in Sta. Cruz, Laguna.
2. The Computerized accounting systems among small and medium enterprises (SMEs) were affected to a “excellent level” into the performance in terms of speed, accuracy, and reliability.
3. The Financial Management of Small and Medium Enterprises in Sta. Cruz Laguna were affected to a “great extent/excellent level” by the use of the Computerized Accounting System in terms of Financing, Controlling, and Organizing.

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