

# EFFECTS OF COMPUTERIZED ACCOUNTING SYSTEM ON THE PERFORMANCE OF SMALL MEDIUM ENTERPRISES: A CASE OF BUSINESS COMMUNITY IN BOMET COUNTY

<sup>1</sup>NG'ENO KIPKEMOI PETER, <sup>2</sup>DANIEL KAMAU, <sup>3</sup>DR KEPHA OMBUI

<sup>1</sup>STUDENT OF MASTERS IN BUSINESS ADMINISTRATION (ACCOUNTING OPTION) OF JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

<sup>2</sup>ADJUNCT LECTURER OF JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

<sup>3</sup>LECTURER JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

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**Abstract:** The study was guided by four objectives: to establish the effect on quick books accounting systems on financial performance, to assess the effects of sage accounting systems on the decision making, to establish the effect of pastel accounting systems on financial reporting and to establish the effects of tally accounting systems on SME's in Bomet County. The study was guided by the decomposed theory of planned behavior, the theory of reasoned action and the theory of innovation. This study was based on epistemology. This study adopted a descriptive survey research design which is used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. The study populations were all the 1200 SME's business community in Bomet County. The target group was drawn from top level management. The study adopted a stratified random sampling technique to come up with the required strata's in the geographical locations. The study used a sample of 254 respondents. The questionnaires were the main instruments of data collection that were used. The questionnaires were administered by the researcher personally using drop and pick later method. Reliability of the instrument was enhanced through a pilot study. Based on the findings the study recommends that the management should have a strategic master plan from which the accounting systems are phased in line with the organizational financial ability and implemented in line with the strategic plan for the successful performance of the SMEs. Further the management to increase more staff to bridge the deficiency of the accounting staff. The SMEs should establish amicable ways to control political interference and put in more permanent governance structures to be sought with clear roles and authority among the management of the SME's. The study established that the planning of accounting processes existed in the SME's. However, this process was mainly done by the management and consultants with consultation of some senior staff which left out other staff and stakeholders. The study recommends that the management of the SMEs make this process inclusive by wide sampling both vertical and horizontal of their staff and all key stakeholders. Further the study established that even through the SMEs implemented computerised accounting systems, they inter-departments never had their own strategic plans with the exception of some departments only. The study recommends that all the SMEs should develop and implement their accounting systems in line with the organizations strategic plans which will enhance achievement of the organizational goals. The study also revealed that respondents describe the implementation process as poor due to the fact that the systems are never reviewed. The study recommends that the SMEs should review their level of and departments' level to ensure the success of the implementation process. Due to the fact that there are challenges are not limited to SMEs in Bomet County alone, the study recommends that the management of other public and private or global organizations can adopt the findings of the study and bench mark their strategies with those of SMEs in Bomet County.

**Keywords:** Effects, Accounting System, Small Medium Entrepreneurs.

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## **1. BACKGROUND OF THE STUDY**

Information technology has existed almost at every stage of human existence but being reflected differently at each stage (Haigh, 2011). The use of computer technology has made a tremendous global impact in all sectors of life and has made a huge transformation particularly in the way of doing business both within and across countries. Since 1950's when information storage and processing using computers started, it became easier and quicker to handle massive data and produce more accurate and timely reports (Kharuddin et al., 2010). Since then, most organizations have been changing their ways of transacting business to increase their levels of profitability.

Small medium enterprises have been the builder of most economies. They are the largest employers of workers both in developing and developed industrial economies. They are seen as resourceful and productive employment avenues, the power of big businesses and the driver of national economic locomotives (Carsamer, 2009). SMEs enhance the effectiveness of a countries market and make creative use of limited resources, thus enhancing long-term economic advancement.

Accounting plays a very important role in the management and success or failure of contemporary business institutions. Computerized Accounting information systems (CAS) are responsible for recording, analyzing, monitoring and evaluating the financial condition of companies, processing of documents necessary for tax purposes and providing information support to many other organizational functions (Amidu et al., 2011) In the context of SMEs, accounting information is important because it helps the firm's manager make decisions in critical areas such as costing, expenditure and cash flows by proving information to support monitoring and control (Mitchell et al.; Son et al., 2006). Most SMEs are owned and managed by a family unit, however; the workforce is drawn from non – family members. Therefore, SMEs operates under a different environment and is influenced by the management style and the culture that the family inherited from generation to generations (Peter and Buhalis, 2004).

### **Computerized Accounting System in Bomet County**

Computerized Accounting system has revolutionized accounting systems practices of businesses. Most developed economies have benefitted from this system. However the Kenyan economy has been adopting it gradually in most businesses especially small and medium enterprises which constitute the majority of businesses in most cities and towns and Bomet County is no exception. County of Bomet is a county in the former Rift Valley Province of Kenya it was created when Constitution of Kenya was promulgated in 2010.

It has a population of 724,186. Bomet county borders Kericho county to the North and North East, Narok county to the South East, South, and South West, Nyamira county to the North West and Nakuru county to the East. The county occupies an area of 2,037.4 Km<sup>2</sup> where 1,716.6 Km<sup>2</sup> of this land is arable land suitable for farming.

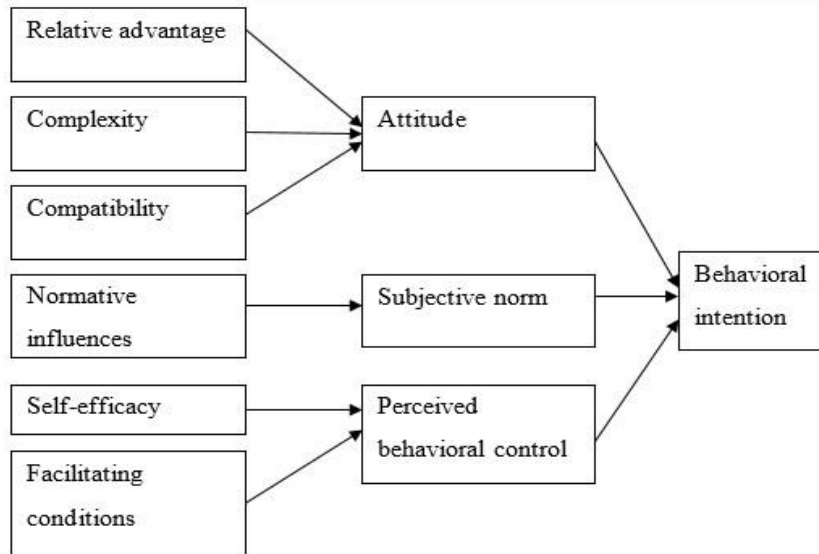
Bomet County is now opening up rapidly due to the setting up of new tertiary institutions coupled with rural urban migrations. This situation has attracted many small and medium enterprises to the county. To be able to measure whether the business communities in the county are doing well in terms of their business operations, it is crucial that these SMEs should have in placed computerized accounting system in their business operations.

## **2. LITERATURE REVIEW**

This chapter presents a review of literature on the influence of information communication and technology strategies on the organizational performance.

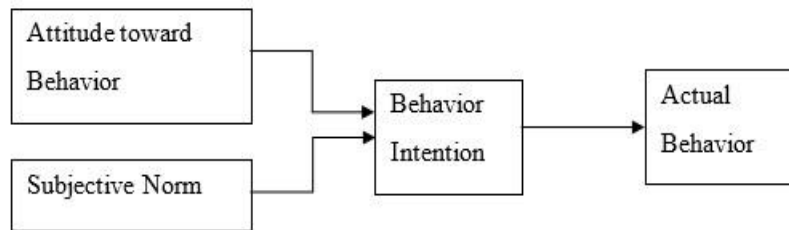
### **Decomposed Theory of Planned Behavior**

Decomposed Theory of Planned Behavior (DTPB) was formulated through combination of both Technology Acceptance Model (TAM) (Davis, Bagozzi and Warshaw, 1989) and Theory of Planned Behavior (TPB) (Ajzen, 1988) which was intended for providing better understanding of behavioral intention by concentrating on the factors that are likely to impact systems use. TAM is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably include Perceived Usefulness (PU) and Perceived Ease-Of-Use (PEOU). Davis (1989), asserted that PEOU and PU influences in a significant way the attitude of an individual through two main mechanisms namely self-efficacy and instrumentality/facilitating.



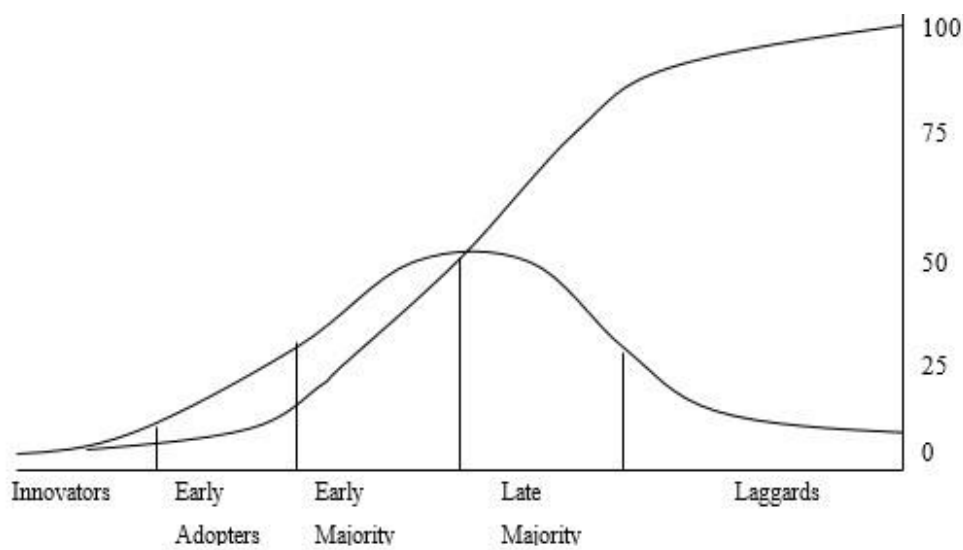
**Theory of Reasoned Action**

According to Ajzen and Fishbein (1980), the Theory of Reasoned Action (TRA) focuses on a person's intention to behave in a certain way. Attitude would be shaped by whether or not management and employees think implementing computerized accounting system is likely to be relevant to their work (the outcome of the behavior) and whether or not they think that new that could be relevant to their work would be beneficial to them and to the organization.



**Innovation Diffusion Theory**

Albert Bandura (1960) popularized Innovation diffusion theory (IDT) by establishing a powerful model which has been vastly used to determine factors influencing different type of computer technology and IT adoption including general IT adoption, Electronic Data Interchange (EDI) and web service standards adoption, IT diffusion patterns and the relationship between IT adoption and firms' competitive advantage in both developed and developing countries.



### 3. RESEARCH FINDINGS AND DISCUSSIONS

Findings of the study were on the effects of computerized accounting system on the performance of small medium enterprises: a case SMEs in Bomet County. The findings have been presented on the response rate, reliability test, the demographic information of the respondents, and the effect of QuickBooks, sage, pastel and tally accounting systems on performance of SMEs in Bomet County.

#### Response Rate

The study was conducted with 254 respondents as the sample size. After the distribution and returning of the questionnaires, the response rate was found to be 187 respondents giving a percentage of 73.6% which is good as the recommendations of (Mugenda & Mugenda, 2003) who recommends that after a field study, a response rate of 50% is good and that of 70% and above is excellent.

#### Reliability Results

Reliability Testing: Cronbach's Alpha is designed as a measure of internal consistency of items in the questionnaire. It varies between zero and one. The closer alpha is to one, the greater the internal consistency of the items in the questionnaire. Cronbach's alpha test was performed to check the reliability of questions or items. The table display several results obtained. The Cronbach's alpha test was performed and it resulted in an overall score of 0.697 indicating internal consistency of the items.

**Reliability Table**

Item	Score
Cronbach's Alpha	<b>0.697</b>
Mean	192.24
Variance	90.294
St. Deviation	9.502
No of items	<b>187</b>

#### Demographic Information of the Respondents

This section contains the respondents information on gender, age, level of education, the form of businesses, classification of businesses, the duration the businesses have been in existence, the level of computerized accounting systems, the level of experience with the computerized accounting systems,

#### Gender Distribution

The first item sought information on the gender distribution of the respondents. The findings were presented in table below.

**Table : Gender of the Respondents**

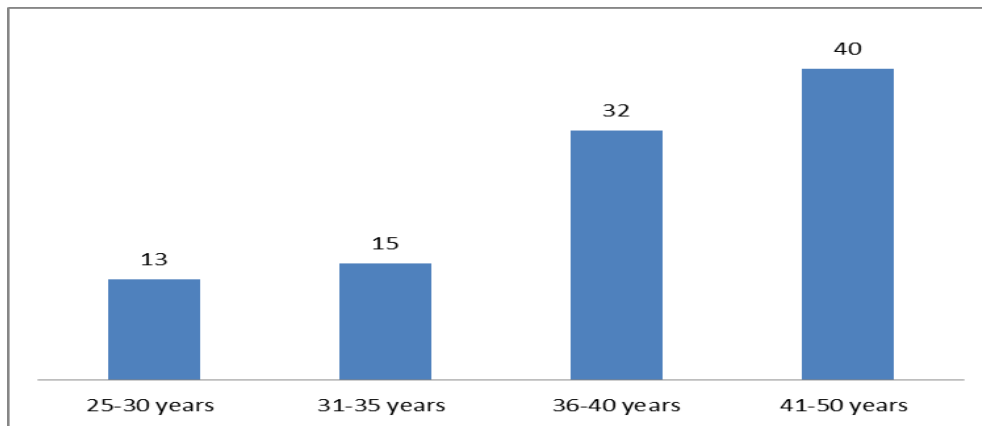
Gender	Frequency	Percentage
Male	118	63
Female	69	37
<b>Total</b>	<b>187</b>	<b>100</b>

The study found that most of the respondents were men at 63% while the women respondents were found to be least at 37%.

#### Age Distribution

Then the researcher sought information on the age distribution of the respondents. The findings were presented in figure below.

**Figure: Age Distribution**

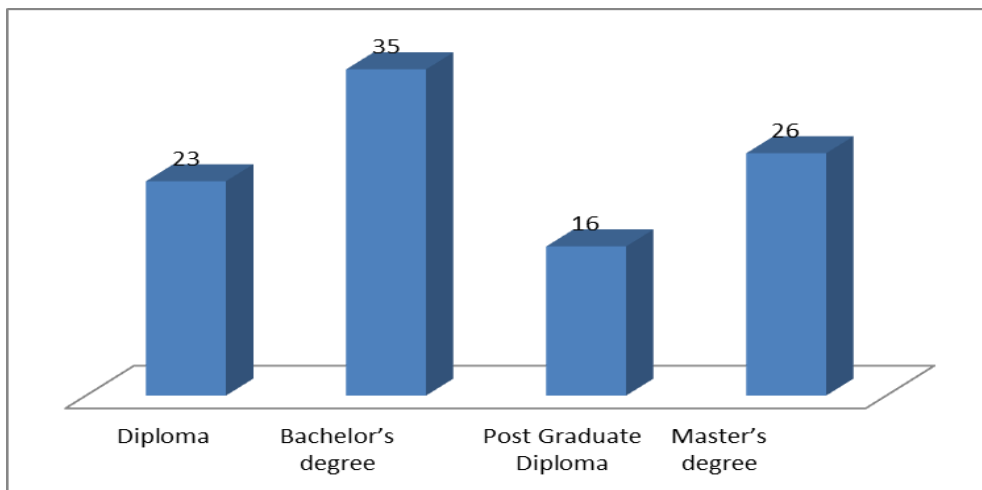


The results show that most of the respondents were aged between 41-50 years at 40% response rate. They were followed by those aged between 36-40 years at 32%. Then those aged between 31-35 years were ranked at a response rate of 15% with the least being those aged between 25-30 years at 13%.

**Level of Education**

The study further sought to establish the level of education attained by the respondents. The response was presented in figure below.

**Level of Education**



The findings were that those who had degrees in various business fields were ranked at 35%. Then those with post graduate master's degrees were second at 26%. They were then followed by those with diplomas in business related fields at 23% while the least were those with post graduate diplomas at 16%.

**Form of business**

Then the researcher sought to find out the various forms of businesses operated by the respondents. The findings were presented in table below.

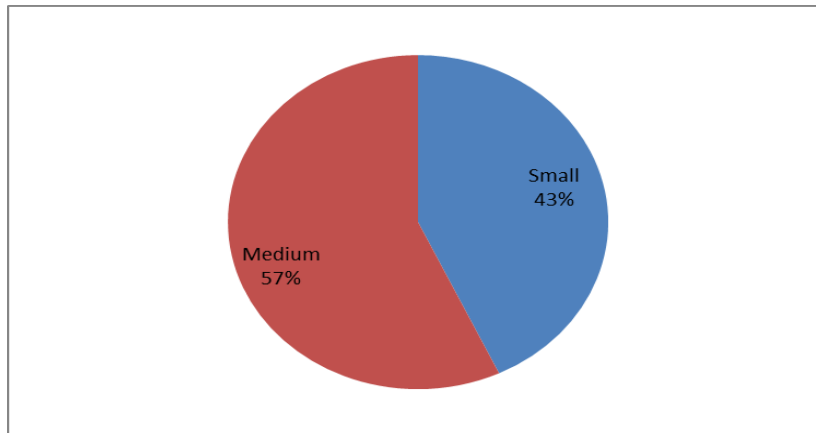
**Table: Form of Business**

Form of Business	Frequency	Percentage
Sole proprietor	120	64
Partnership	43	23
Cooperative	6	3
Public company	18	10
Total	187	100

**Classification of Business**

The study further sought to understand the classification of the businesses operated by the respondents. The findings were presented in figure below

**Classification of Business**

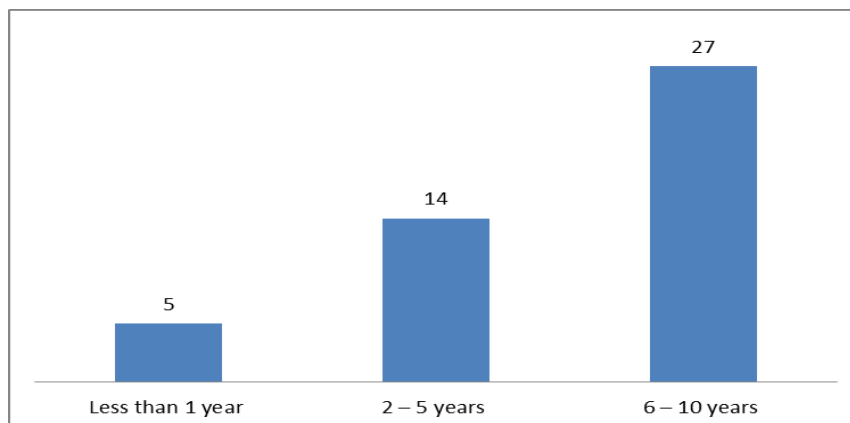


The results show that most of the businesses were medium form of business at 57% while 43% were classified as the small business enterprises.

**Duration of Running the Business**

Further the study sought information on the duration the respondents had been running the businesses. The response was presented in figure below

**Duration of Running the Business**



The study found that most of the businesses had been running for 6-10 years at 27%, followed by the businesses which had been in operation for 2-5 years at 14% while the least were those who been running their businesses for less than 1 years at 5%.

**Level of Awareness on Computerized Accounting System**

Then the researcher identified the accounting systems presented in table 4.3 where the respondents were asked to indicate their level of awareness in those accounting systems. The findings were presented as given below.

**Table: Level of Awareness of Computerized Accounting Systems**

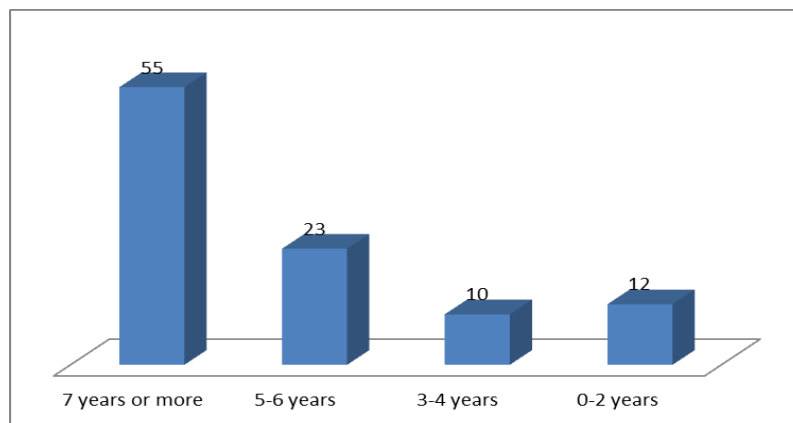
Accounting Systems	Aware	Partially aware	Not aware	Total
Quickbooks	122 (65%)	64 (35%)	0	187(100%)
Sage	80 (43%)	75 (40%)	17 (9%)	187(100%)
Pastel	64 (34%)	95 (51%)	28 (15%)	187(100%)
Tally	165 (88%)	22 (12%)	0	187(100%)

The study found that most of the respondents were very much aware of the quickbooks accounting systems at 65% while 35% indicated that they had partial awareness. For sage 43% of the respondents indicated that they were aware while 40% indicated that they were partially aware and another 9% were not aware at all. At the same time 51% of the respondents indicated that they were partially aware of the pastel accounting system and another 34% were fully aware of it with 15% indicating that they were not aware. But the most common method of accounting was the tally system where 88% of the respondents indicated that they were very much aware of it while 12% said that they were partially aware of it.

**Work Experience**

The last item on the demographic information of the respondents sought information on the work experience among the respondents. The findings were presented in figure 4.5.

**Figure: Work Experience**



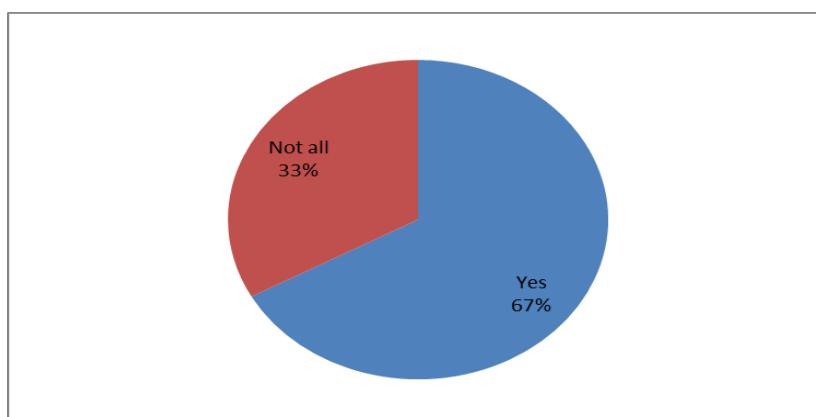
The findings show that most of the respondents had over seven years experience in their businesses at 55% while 23% had between 5-6 years’ experience followed by 12% who had between 0-2 years’ experience while the least were those with 3-4 years’ experience at 10%.

**Computerized Accounting System**

**Computerized Accounting System**

Further the study sought to find out if the SMEs were using computerized accounting systems. The findings were presented in figure below

**Computerized Accounting System**



The study found that most of the accounting work was being done using accounting computer software at 67% while 33% were of said that they don’t use all the software.

**The most common computerized accounting system used among the SMEs.**

The study also sought information on the most common form of accounting systems used by the SMEs. The results were presented in table below.

**Table: Most Common Computerized Accounting System Used**

Form of Business	Frequency	Percentage
Quick books	123	65.8
Sage	51	27
Pastel	13	7.2
Total	187	100

The study found that the most common computerized accounting system among the SMEs in Bomet town is quick books at 65.8%. This was followed by sage at 27% while pastel was used by the SMEs up to 7.2%.

#### Costs Associated with Quick books

Then the respondents were asked to indicate the costs associated with the use of quick books. The response was presented in table below.

**Table: Costs**

Costs associated with quick books	Yes	No
Time	38 (20.3%)	0
Cost Unit	149 (79.7%)	0
<b>Total</b>	<b>187 (100%)</b>	

The results show that the respondents indicated that the most important factors for consideration when using quick books were both time and cost unit at a response of 79.7%. While 20.3% felt that time was the most important factor and another indicated that cost unit was the most important factor for consideration when using quick books by the SMEs.

#### QuickBooks Accounting System on the Performance

##### The use of Quick Books for Cash Management

The research sought to establish if the respondents were using quick books for cash management. The response was presented below.

Table: The use of Quick Books for Cash Management

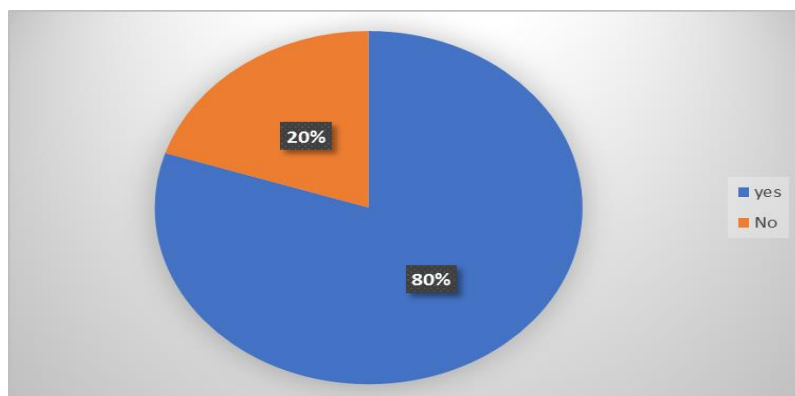
Gender	Frequency	Percentage
Yes	118	63
No	69	37
<b>Total</b>	<b>187</b>	<b>100</b>

The study fund that most of the respondents indicated that they use quick books for cash management at 63% while 37% indicated that they don't use quick books for cash management.

##### The Use of Quick Books on Accounts Receivables

The respondents were asked if they used quick books accounting systems to prepare accounts receivables. The response was presented in the figure below.

##### The Use of Quick Books on Accounts Receivables



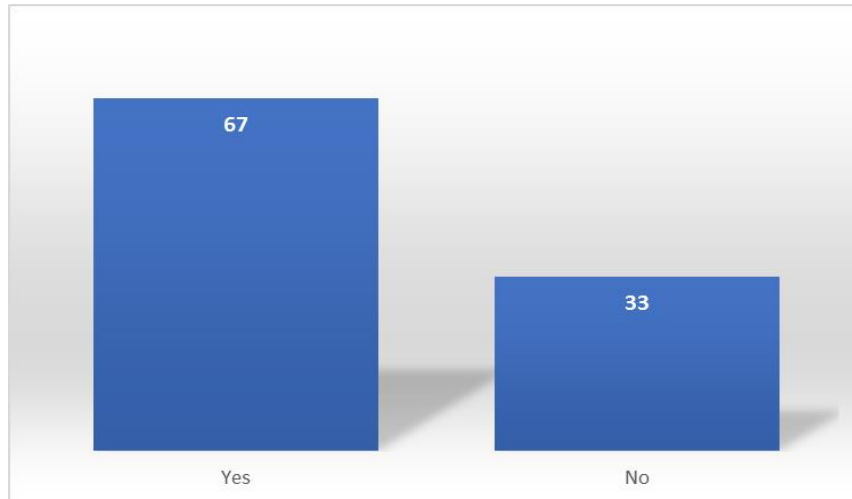


The results show that most of the respondents agreed that they used quick books on accounts receivable at 80% while 20% were of the contrary opinion.

### **Quick Books in Inventory Management**

The researcher sought to find out if the respondents used quick books accounting systems for inventory management practices. The response was presented in figure below

#### **Quick Books in Inventory Management**

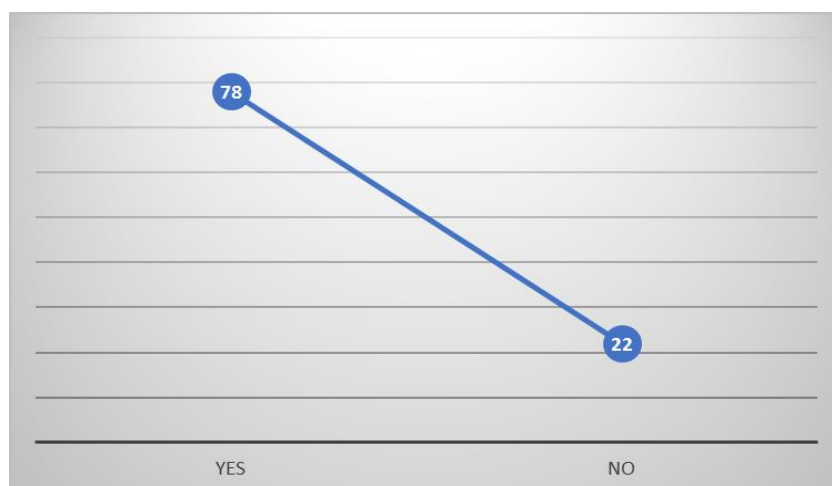


The study found that the SMEs used quick books for inventory management at 67% while 33% said that they did not use quick books for inventory management.

### **Quick Books to Prepare Financial Reports**

The study sought to find out if the respondents used quick books to prepare financial reports. The response was presented as follows.

**Figure : Quick Books to Prepare Financial Reports**



The results show that most of the respondents at 78% said that they used quick books for making financial reports while 22% observed that they did not use quick books for making financial report.

### **Sage Accounting System**

#### **Benefits of Sage Accounting Systems**

The respondents were asked to give their views on whether sage accounting systems has benefits to the firm. The response was given as follows.

**Benefits of Sage Accounting Systems**

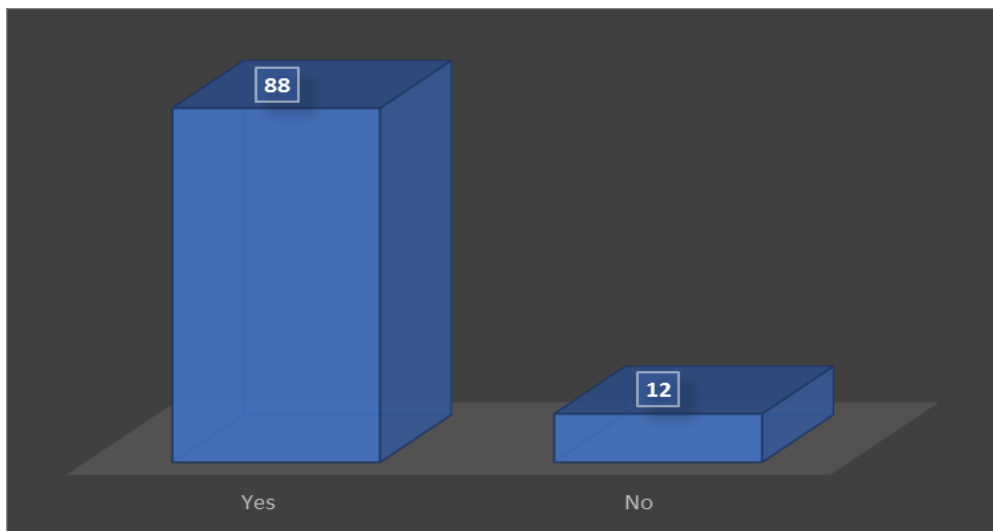
	Frequency	Percent
Yes	103	55
No	59	32
Not sure	25	13
<b>Total</b>	<b>187</b>	<b>100</b>

The findings show that most of the respondents observed that sage accounting systems have a lot of benefits to their firms at 55%. They followed by those who felt that they did not have benefits at 32% while those who were not sure were rated at 13%.

**The impact of sage accounting systems on financial reporting**

The respondents were asked if sage accounting systems has an impact on financial reporting. The response was presented in figure below.

**The impact of sage accounting systems on financial reporting**



The results show that most of the respondents were in agreement that sage accounting systems have an impact on the firms at 88% while 12% were on the contrary opinion.

**Table: Benefits of Sage Accounting System**

Impact of Sage accounting system on the firms	Yes	No
Financial reports are timely generated for decision making	78	22
There is improvement in business performance due to computerization of the accounting system		
There is accuracy and efficiency in account accounting systems through sage accounting systems	56	44
Accounting functions like posting transactions to the ledger and double entry are simplified	66	34
Arithmetic errors are easily minimized through application of Sage accounting systems	76	24
Auditing of the financial statement is ease with the use of Sage accounting systems	83	17

On the specific impact of sage accounting system on performance of the firms, the study found that auditing of the financial statement is ease with the use of sage accounting systems at 83%, this was followed by the fact that Financial reports are timely generated for decision making at 78%. Then the study found that Arithmetic errors are easily minimized through application of Sage accounting systems at 76% while accounting functions like posting transactions to the ledger and double entry are simplified at 66%.

**Pastel Accounting System**

The respondents were asked, “What effects on productivity does your organization face in adopting pastel accounting system? The response was presented in table below.

**Table. Pastel Accounting System**

<b>Effects of Pastel Accounting system</b>	<b>Strongly agree</b>	<b>Agree</b>
Improved productivity	89	11
Mass production	90	10
Time consuming	81	19
Quality goods and services	84	16
Risk of wrong data entry	79	21

The study found that the use of pastel accounting system has led to mass production at 90% This was followed by those who felt that there was improved productivity at 89%. Then another group indicated that there was improvement in the quality of goods and services at 84%, followed by time consumption at 81% and the risk of wrong data entry at 79%.

**4. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

**Summary of Major Findings**

The study found that most of the respondents were men while the women respondents were found to be least. The results show that most of the respondents were aged between 41-50 years. They were folloed by those age between 36-40 years. Then those aged beteen 31-35 years followed of with the least being those aged between 25-30 years. The findings were that those who had degrees in various business fields. Then those with post graduate master’s degrees were second. They were then followed by those with diplomas in business related fields while the least wwere those with post graduate diplomas. The results show that most of the businesses were medium form of business while were classified as the small business enterprises.

The study found that most of the businesses had been runningg for 6-10 years, followed by the businesses which had been in operation for 2-5 years while the least were those who been running their businesses for less than 1 years. The study found that most of the respondents were very much aware of the quickbooks accounting systems while indicated that they had partial awareness. For sage of the respondents indicated that they were aware while others indicated that they were partially aware and another 9% were not aware at all. At the same time of the respondents indicated that they were partially aware of the pastel accounting system and another were fully aware of it with others indicating that they were not aware. But the most common method of accounting was the tally system where most of the respondents indicated that they were very much aware of it while others said that they were partially aware of it.

The findings show that most of the respondents had over seven years experience in their businesses while had between 5-6 years’ experience followed by who had between 0-2 years’ experience while the least were those with 3-4 years’ experience. The study found that most of the accounting work was being done using accounting computer software while were of said that they don’t use all the softwares.

**Conclusion**

From the value the independent variables explain a significant of the variability of the dependent variable i.e performance of SMEs in Bomet County. The table shows that the independent variables statistically significantly predict the dependent variable. The researcher therefore concluded that quickbooks, sage, pastel and tally accounting systems strongly affect performance of SMEs in Bomet County. This means that quickbooks accounting systems affects performance of the SMEs. The regression coefficient for sage which means sage accounting systems improves performance of the SMEs. The regression coefficient for pastel. This means that pastel accounting systems improves the performance of the SMEs. The regression coefficient for tally is which implies that tally accounting systems improves performance of SMEs by.

## Recommendations

Based on the findings the study recommends that the management should have a strategic master plan from which the accounting systems are phased in line with the organizational financial ability and implemented in line with the strategic plan for the successful performance of the SMEs. Further the management to increase more staff to bridge the deficiency of the accounting staff. The SMEs should establish amicable ways to control political interference and put in more permanent governance structures to be sought with clear roles and authority among the management of the SMEs.

The study established that the planning of accounting processes existed in the SMEs. However, this process was mainly done by the management and consultants with consultation of some senior staff which left out other staff and stakeholders. The study recommends that the management of the SMEs make this process inclusive by wide sampling both vertical and horizontal of their staff and all key stakeholders.

Further the study established that even through the SMEs implemented computerised accounting systems, they inter-departments never had their own strategic plans with the exception of some departments only. The study recommends that all the SMEs should develop and implement their accounting systems in line with the organizations strategic plans which will enhance achievement of the organizational goals.

The study also revealed that respondents describe the implementation process as poor due to the fact that the systems are never reviewed. The study recommends that the SMEs should review their level of and departments' level to ensure the success of the implementation process.

Due to the fact that there are challenges are not limited to SMEs in Bomet County alone, the study recommends that the management of other public and private or global organizations can adopt the findings of the study and bench mark their strategies with those of SMEs in Bomet County.

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