ENVIRONMENTAL FACTORS INFLUENCING THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN MACHAKOS COUNTY: A CASE STUDY OF HARD WARES IN MACHAKOS SUB COUNTY IN KENYA

STEPHEN MUINDE MUTUA

ST PAUL'S UNIVERSITY

THIS DISSERTATION IS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF BUSINESS ADMINISTRATION (MBA) FROM ST. PAUL'S UNIVERSITY

2016

ENVIRONMENTAL FACTORS INFLUENCING THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMES) IN MACHAKOS COUNTY: A CASE STUDY OF HARD WARES IN MACHAKOS SUB COUNTY

BY

STEPHEN MUINDE MUTUA

THIS DISSERTATION IS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF BUSINESS ADMINISTRATION (MBA) FROM ST. PAUL'S UNIVERSITY

SUPERVISOR: DR.JOHN MUHOHO KIMANI

AUGUST, 2016

ST. PAUL'S UNIVERSITY

DECLARATION

This dissertation is the product of my own work and is not the result of anything done in collaboration. It has not been previously presented to any other institution. I agree that this dissertation may be available for reference and photocopying, at the discretion of the university.

.

NAME: Stephen Muinde Mutua

REG NO. MBA/MKS/6299/13

Signature_____ Date_____

Word count: 18,740 words

I confirm that the work reported in this dissertation was carried out by the student under my supervision.

Dr. John Muhoho Kimani

Signature _____ Date: _____

ST. PAUL'S UNIVERSITY

DEDICATION

This dissertation is dedicated to the creator our Lord Almighty who both destined and called me to academic excellence and who gave me the physical and mental strength to undertake and accomplish this project in the prescribed period of time.

ST. PAUL'S UNIVERSITY

ABSTRACT

Small and Medium Enterprises (SMEs) play an important economic role and are regarded as engines of growth and development in many countries. This study sought to investigate on the factors that influence the performance of SMEs so as to determine why businesses (SMEs) fail or succeed .The study was guided by the objectives related to technology adoption, locational issues, entrepreneurial competence, and how legal and regulatory framework influence the performance of SMEs in Machakos County.

The study used descriptive survey to examine the factors influencing the performance of SMEs in Machakos County. Data was gathered from owners or managers of hardware's in Machakos Sub County. Stratified random sampling was adopted to select 34 SMEs from a target population of 63 SMEs. The study employed the use of questionnaire and interviews to collect primary data. All the questions were edited and analyzed through the use of statistical package for social sciences version 20.0 (SPSS) computer software to do analysis of variance (ANOVA) and to get the beta coefficient for the independent variables and F test results showed there was a statistical relationship between the predictor variables and the dependent variable. Correlation analysis was conducted at 95% significance level 2-tailed to establish the correlation. The study concludes that location was the most important independent variable as it read to 0.883 increases in scores of performance and there was a positive and significant relationship between all the independent variables and the dependent variable. The study recommends another study to be done in other counties and findings to be compared to those of Machakos County.

ST. PAUL'S UNIVERSITY

ACKNOWLEDGMENT

First and foremost, I thank Almighty God for enabling me to complete my work and anybody who assisted and offered his or her support. I wish to pass my gratitude to my supervisor Dr. John Muhoho Kimani who devoted a lot of his time and patience to this study and manuscript preparation. I am particularly very grateful for the extraordinary advice, guidance and concern that he accorded to me. I would also not forget to thank my beloved wife Hellen Mwikali, my beloved son Ian Mwendwa and my beloved daughter Hope Ndinda together with the staff of St. Paul's University Library for their precious support.

ST. PAUL'S UNIVERSITY

ABBREVIATIONS/ACRONYMS

BSC : Balanced Score Card

GDP : Gross Domestic Product

IT : Information Technology

PEOU : Perceived Ease of use

PM : Performance Measure

RBV : Resource Based View

SMEs : Small and Medium Enterprises

TAM : Technology Acceptance Model

TC : Technology Capability

ST. PAUL'S UNIVERSITY

TABLE OF CONTENT

DECLARATION iii

DEDICATION iv

ABSTRACT v

ACKNOWLEDGMENT vi

LIST OF TABLES xii

LIST OF FIGURES xiii

CHAPTER ONE 1

INTRODUCTION 1

1.1 Background of the study 1

1.2 Statement of the Problem 5

1.3 Purpose of the Study 6

1.4 Research Objectives 7

1.5 Research Questions 7

1.6 Significance /Justification of the Study 8

1.6.1 Significance of the Research to Machakos County Government 8

1.6.2 Significance of the Research to SMEs 8

1.6.3 Significance of the Research to Scholars 8

1.7 Delimitation of the Study 9

1.8 Definition of key Terms 9

CHAPTER TWO 12

LITERATURE REVIEW 12

2.1 Introduction 12

2.2. Theoretical framework 12

ST. PAUL'S UNIVERSITY

2.2.1 Technological acceptance model **12**

2.2.2 Application of Technological Acceptance Model to the study **14**

2.2.3 Location of business theories (Behavioral and Classical) **15**

2.2.4 Application of webers industrial site theory to the study **18**

2.2.5 Resource Based View Theory **20**

2.2.6 Application of resource based theory to the study **21**

2.2.7 Public interest theory of Legislation **24**

2.2.8 Application of public interest theory to the study **24**

2.2.9 Performance Theories **27**

2.3 Empirical study **28**

2.3.1 Critique of existing literature **31**

2.4.1 Challenges facing SMEs **36**

2.4.2 Characteristics of SMEs **39**

2.4.3 Performance measures in SMEs **42**

2.5 Conceptual Framework **43**

CHAPTER THREE **47**

RESEARCH METHODOLOGY **47**

3.1 Introduction **47**

3.2 Research Design **47**

3.3 Target population of study **48**

3.4 Sampling and sample size of SMEs **49**

3.5 Data collection instrument **51**

3.6 Validity of Research Instrument **52**

3.7 Ethical Consideration **52**

ST. PAUL'S UNIVERSITY

3.8 Data Analysis and Presentation **53**

CHAPTER FOUR **55**

RESEARCH FINDINGS AND DISCUSSION **55**

4.1 Introduction **55**

4.2 Response Rate **55**

4.3 Demographic Information **55**

4.4 Technological use and Adoption **60**

4.5 Location of Business **65**

4.6 Entrepreneurial Skills and Competence **70**

Figure 4. 7: If the respondents had formal training on business management **71**

4.7 SMEs operating environment and Legislations **75**

4.8 Regression Analysis **79**

4.21 F-Test **81**

4.9 Pearson's Correlation **81**

CHAPTER FIVE **85**

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS **85**

5.1 Introduction **85**

5.2.1 The extent to which technology adoption influence the performance of SMEs **86**

5.2.2 The outcome to which location influence the operational performance of SMEs **86**

5.2.3 The extent to which the level of entrepreneur's competence influence the performance of SMEs **86**

5.2.4 The extent to which legal and regulatory framework of county by law influence performance of SMEs **87**

5.3 Conclusion **87**

5.4 Limitation of the Research **89**

ST. PAUL'S UNIVERSITY

5.5 Recommendations **89**

5.5.1 County Government Recommendations **89**

5.5.2 County Government recommendations **90**

5.5.3 Recommendation for Further Research **91**

References **92**

APPENDIX I: LETTER OF INTRODUCTION **96**

APPENDIX II: QUESTIONNAIRE FOR MANAGERS/OWNERS OF HARD-WARE SHOPS **97**

ST. PAUL'S UNIVERSITY

LIST OF TABLES

Table 4. 1: Designation/Title of the respondents 56

Table 4. 2: Age of the respondents 56

Table 4. 3: Marital Status of the respondents 57

Table 4. 4: Form of business (SME) 58

Table 4. 5: SMEs start-up Capital 59

Table 4. 7: Type of machine respondent had bought for the last two years 61

Table 4. 8: Type of technology in use 61

Table 4. 6: Amount that money exchanged hands per month through M-Pesa services 64

Table 4. 9: Distance of business location relative to the town Central Business Area (CBA) 65

Table 4. 10: Infrastructural facilities considered to be important around the business premises 66

Table 4. 11: Factors respondents considered before locating a business 69

Table 4. 13: Extent that formal training had influenced the business performance in return of sales 73

Table 4. 14: Business records kept that facilitated the daily operation 74

Table 4. 15: Rating of SMEs operating environment and legislation to overall performance 75

Table 4. 16: SMESs Operating Environment and Legislation 75

Table 4. 17: If the respondents had renewed the business permit 78

Table 4. 18: Amount paid for the permit per year 78

Table 4. 19: Model Summary 79

Table 4. 20: Summary of One-Way ANOVA results 80

Table 4. 22: Correlation Matrix 81

ST PAUL'S UNIVERSITY

LIST OF FIGURES

Figure 4. 1: Gender of the respondents 57

Figure 4. 3: Whether the business operations were computerized 60

Figure 4. 4: Extent to which technology helped respondents to improve on profits 62

Figure 4. 2: If the respondents had adopted M-Pesa services 63

Figure 4. 5: If the location affected the daily operational efficiency on business performance 67

Figure 4. 6: If the respondents intended to transfer the business in the future 68

Figure 4. 7: If the respondents had formal training on business management 71

Figure 4. 8: Whether formal training had influenced the business performance in relation to return on sales 72

Figure 4. 9: If the respondents were aware of any legislation that had been passed by county government of Machakos that affected the business annual profitability 77

ST. PAUL'S UNIVERSITY

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

There is no single accepted or criteria definition of SMEs but globally, reference is usually made to number of employee's, assets value or annual sales turnover (Nieman 2006). In Kenya, Small and Medium Enterprises (SMEs) play a vital role in building of the economies of a country and they are regarded as engines of growth and development. Governments in the 21st Century have realized the significant role that is played by SMEs in job creation, improving the welfare of the people and hence a huge impact in the economy.

In the entire world, the SMEs are mainly operated for one goal of either making profits for an individual or for a corporation. The world leaders in the past decade have been in the forefront championing on measures on how to improve the sector in their manifestos. The success or failure of SMEs is generally not attributed to a single manager but it is a collective responsibility that cuts across in all sub section or departments within an enterprise. However, it is clear that the top managers (strategic leaders) are the main drivers of the organization since the work of subordinates is only to translate and disseminate information. The leaders at strategic levels in the SMEs always give clarity of new ideas to ensure the continuity of the business. In Kenya, the SMEs employ the biggest percentage in the Kenyan labor market as compared to other sectors in the country (Mbwesa, 2006). For example, they have provided 74% of total employment and contribute 18% of Gross Domestic Product (Gakure & Amurle, 2013).

ST. PAUL'S UNIVERSITY

In the European economy, they are regarded as the major source of entrepreneurial skills, they are the most prolific sources of employment and they are a major source of innovation skills (European commission). In addition, in the European Union 23 million SMEs contribute to 75million jobs which represent 99% of all the business and they are legislated. Moreover, it estimated that SMEs are the major source of income in the British economy for the past decade (Rowe, 2008). Similarly, it is estimated that the UK economy is 99% SMEs and they have employed over 14million people out of a growing population of 30 million. According to Wymenga (2011), SMEs in the Europe economy employ more than 66% of the work force in the private sector which translates to over 55% of the total revenues raised by the government. In Portugal the story is the same. They contribute to 98% of the industrial fabric (Stone house & Pemberton, 2002). Likewise, in the United States SMEs contribute the highest number of employees in the private sector and have contributed to over 50% of GDP (Kobe, 2007). Moreover, in Singapore economy, the SMEs contribute to 47% of the GDP and they are said to have created 62% of the readily available jobs (Zahra, 2004)

In Africa, the SMEs are the major source of employment both in the private and public sector in the developed and developing countries contributing to around 90% of the total business done by the countries (Kozak, 2011). The SMEs contribute to 90% of businesses in existence and have created more than 50% of the total employment (Kauffmann, 2005). For example, according to Ghatak (2010), the SMEs in S. Africa are not left behind in building the economy of that country. The SMEs contribute to more than 56% of the total jobs in the private sector and more than 36% of the total GDP. While the action of some government to control mortality rate is commendable, the poor growth of SMEs in most of the African countries can be associated with poor governance, political instability and

ST. PAUL'S UNIVERSITY

corruption by the management like in Kenya, Equatorial Guinea, Nigeria and Democratic republic of Congo (Wanjohi, 2009).

In Kenya, SMEs play a major contributing role in the government towards achieving vision 2030 which is based on political, economic and political pillars (GOK 2010). The SMEs are the major source of families' income and they cut across all major umbrellas of the economy. To support the above statement, during the 2003 annual budget reading by minister Mwiraria, he said that "SMEs activities form a breeding ground for businesses and employees, and provide one of the most prolific sources of employment." Despite their significance role in the economy, it is estimated that out of every five businesses collapse within their few months of operation (Kenya National Bureau of Statistics, 2012). The SMEs face unique challenges which hinder their chances of survival ranging from technological challenges, leadership wrangle's, corruption, lack of current information, difficult in access of financial activities and even strict government regulations (GOK 2010).

In our modern society, Information Technology (IT) has been regarded as the life wire of SMEs business sector as it facilitates the growth and performance of an enterprise in a country. Information Technology is an important tool that all organizations need to embrace if they want to remain relevant in the market but it needs to be coupled with factors like strategy for an organization to achieve better performance. Technology is indeed a secret weapon that is regarded as a competitive resource for maintaining effectiveness in SMEs. This tool is important to SMEs as it gives them an opportunity to compete with the giants in the market and gain market share. On the other hand, the physical location of a business to the Central Business Area (CBA) determines the failure or success of any business in both

ST. PAUL'S UNIVERSITY

short term and long term plan for any organization that want to survive in the 21st century. The place where the premises are located can be seen as the entry to the market place in respect to communication, easy access to raw materials and in terms of transport which must not be ignored.

The strategic location is very important as it gives a firm the ability to serve its clients and customers well. Thus location might be viewed as nearness and accessibility of a firm to raw material, infrastructure and accessibility to customers.

Moreover, in the contemporary society which is full of competiveness, the managerial aspects have to come in place for any organization that wants to achieve a competitive edge and gain superior performance. The entrepreneurs need a wide range of competencies in order to overcome the modern problems in the contemporary society. According to Henderson (2000), he argues that competencies are not determined by individual qualities but the most important thing is how individuals consider what is important in life.

In Kenya, every business requires laws that act as a reference point to facilitate smooth running of the industry. In Kenya, Small Enterprise Development (SED) is the body that is mandated in creating an enabling environment that govern entrepreneurs and fix new regulations. Notably, the problems encountered by SMEs in different sectors of the economy might vary but according to Garikai (2000), most of the problems encountered by business owners include the issue of legal framework. Therefore, when all the above factors are considered by an organization, they will contribute to a certain level of performance either directly or indirectly.

ST. PAUL'S UNIVERSITY

1.1.1 Machakos County Government

In Kenya, we have 47 counties which are envisioned by the 2010 constitution of Kenya. They were established after the 2013 general election and their chief officers are the governors and deputy governors respectively. They are regarded as devolved governments and in each county, there is one member elected to the senate and another member to the August House (Parliament). Machakos County is among the 47 known counties due to the publicized Machakos people's park, Machakos City and Konza Technology City. The capital town of the county (Machakos Town) is 63kilometres South East of Nairobi and the economy of the area is driven by business and agriculture and is home to 1,098,854 (Census, 2009) in habitants from different ethnic background. Moreover, the county has got 8 Sub-Counties which are namely Masinga, Yatta, Kangundo, Matungulu, Kathiani, Mavoko, Mwala and Machakos which is our subject of study. Machakos Sub- County has got 7 County Assembly Wards and 7 groups of hard ware Permit Business Class.

1.2 Statement of the Problem

SMEs play a vital role in building the economy of Kenya towards achieving the three pillars of vision 2030. In Kenya, over 60% of small businesses are estimated to fail each year (Kenya National Bureau of Statistics, 2012). The small businesses are prone to risks like theft, fiducially and management risk. Some SMEs in Machakos County have not grown for the last decade despite some flourishing in the same environment. They have the same number of employees, they have decreased turnovers or even some are ending to closure while others have opened new branches and hence the need to conduct the study and establish some of the main environmental factors that could have contributed to failure of

ST. PAUL'S UNIVERSITY

the businesses to grow. Most of the studies have focused on large organizations (Kauffmann, 2005) and hence there is a greater need to fill the research gap. In developing countries like Kenya, there is little available information about factors that influence the performance of SMEs in Kenya and particularly in Machakos Sub County. Notably, the issue of SMEs is important for the welfare of a nation because of its significant role of providing solutions to economic problem of a country and particularly on basis of providing employment. Bearing in mind the pivotal role played by SMEs in building the Kenyan economy, there is a greater need to conduct this study to establish the factors influencing the success or failure of SMEs in Machakos Sub County and to know how the SMEs encounter the ever emerging dynamic problems.

This study seeks to establish on the factors that influence the performance of SMEs so as to determine why businesses (SMEs) fail to grow. This will form policy guidelines that will enhance the growth of the SMEs in the upcoming growing town of Machakos County and can be inferred to other counties in the republic of Kenya. Such information will be crucial to the County Government of Machakos which has always remained as the first unique county in embracing devolution and investment opportunities.

1.3 Purpose of the Study

The general objective of this study was to establish the environmental factors influencing the performance of SMEs in Machakos County and more specific the Machakos Sub-County, which is the hub of Machakos County.

ST. PAUL'S UNIVERSITY

1.4 Research Objectives

The specific objectives were;

i. To establish the extent to which technology adoption influence the performance of hardware's in Machakos sub-county business permit class.

ii. To determine the extent to which location influence the operational performance of hardware's in Machakos sub-county business permit class.

iii. To determine the extent to which the level of entrepreneurs' competence influence the performance of hardware's in Machakos sub-county business permit class.

iv. To determine the extent to which legal and regulatory frameworks of county by laws influence performance of hardware's in Machakos sub-county business permit class.

1.5 Research Questions

The research questions of this study were;

i. How does technology adoption influence performance of hardware business in Machakos sub-county business permit class?

ii. How does location influence operational performance of hardware in Machakos sub-county business permit class?

iii. How does level of entrepreneurial competence influence the daily performance of hardware in Machakos sub-county business permit class?

iv. How does the legal and regulatory framework of county by laws influence performance of hardware in Machakos sub-county business permit class?

ST. PAUL'S UNIVERSITY

1.6 Significance /Justification of the Study

What is the value of this study to different stakeholders?

1.6.1 Significance of the Research to Machakos County Government

County Government of Machakos is known to be on the right track in embracing devolution activities (they have branded themselves as 'the place to be') and hence the information collected would aid in drafting of by laws and policies that would enhance the growth of SMEs in the county with minimal resistance. The county government would also be in a position to know the challenges that affect SMEs performance before investors start to build on the free given land for investors in the upcoming Machakos city and Konza City in advance. In addition, the information would be useful in distribution of 'Uwezo' funds to SMEs in the county and other regions in the country as a means of boosting the daily operations of business.

1.6.2 Significance of the Research to SMEs

On the other hand, the SMEs would be in a position to understand the market well and take measure's in advance that will facilitate their performance in the future and avoid making serious mistakes in their daily operation. Such kind of information can be inferred to other counties in Kenya or even globally

1.6.3 Significance of the Research to Scholars

Finally, the results of this study will be stored in St Paul University libraries that will help scholars in tapping in new knowledge not only in doing research but also in academic work

ST PAUL'S UNIVERSITY

globally. Moreover, the study acts to advance academic inquiry particularly in the field of SMEs management.

1.7 Delimitation of the Study

The study only concentrated on hardware's operating from Machakos Sub County because it has got many different SMEs trading in different businesses. The Sub County is the capital place of Machakos County and is said to be densely populated with major source of income to the County Government of Machakos. Moreover, the study used questionnaires and interviews to collect data. In additions, the study assumed that all businesses operating within Machakos Town are legally registered, have a lifespan of not less than 2 years and are ethically transacted. In addition, the data collected from the hardware shops represents the perspectives of all SMEs not only in Machakos County but to a greater extend the Kenyan economy as a whole.

1.8 Definition of key Terms

This research used words that have been narrowed done in specific ways and context to suit the research and their meanings are given herein:-

a) **Communication** –This is the transfer of information from one person/point to another either electronically or non-electronically, with the information being understood by the receiver (Vilaseca, 2013).

b) **Computer.** Computer is an electronic data that accepts, process, stores and output data at high speed according to program installed by institutions (Vilaseca, 2013)

ST. PAUL'S UNIVERSITY

c) **Entrepreneurs**-A person who comes up with a business (SME) idea, takes risk, organizes the idea and take full responsibility in terms of operation, losses and profits (Alila & Ove 2011).

d) **Environmental factors**- They are determinants which contribute to success or failure of SMEs firms or to entrepreneurs themselves (Wanjohi, 2009).The environmental factors are many and for the purpose of the research, only four have being picked.

e) **Hardware shops** -They are part of SMEs and they sell various kinds of products including electrical goods, farm supplies, building materials and housewares. In the study, all the SMEs in Machakos County are represented by the group (Alila & Ove 2011).

f) **Jua Kali**-Kiswahili word meaning 'fierce sun'.

g) **Technology**. Technology is a specific knowledge used in practical ways in industry For example; designing new machines which are made to meet up the demand of current and future situation or trend (Shin ,2001)

h) **Uwezo fund –**It is a fund that was assigned to finance women and youth by the current Kenyan government which initially was planned to finance a presidential run-off in 2013 general election. The word UWEZO is a Kiswahili word meaning being 'able' (GOK, 2010).

ST. PAUL'S UNIVERSITY

i) **Financial literacy**-Possessing the knowledge necessary to understand and interpret concepts related to finance among SMEs. These ideas may include understanding of bank interest rates or employee benefits. (Wanjohi & Mugure, 2008).

j) **Small and medium enterprises**-The term SME (Small and Medium Enterprise) is used to describe all those businesses with under 500 employees. The small enterprises employ less than 250 while the medium is less than 500 but more than 250 employees (Nieman 2006).

ST. PAUL'S UNIVERSITY

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section presents a review of related literature on the environmental factors influencing SMEs performance. It starts by examining the theoretical framework, the empirical studies main challenges facing SMEs, the characteristics of SMEs and Performance measures. The last part of the chapter deals with the conceptual framework.

2.2. Theoretical framework

A theoretical framework shows how some set of items are connected and helps the researcher to stick to the main theme which in our case is performance of SMEs.

2.2.1 Technological acceptance model

Adoption and implementation of new technologies is essential in the 21st century for the survival and growth of SME ((Venkatesh *et.al*, 2003). Basically, we have common models and theories that try to explain the importance of embracing technology in organizations. They are the Theory of Research Action (TRA), the Theory of Planned Behaviour (TPB) and the Technology Acceptance Model (TAM). The TAM was the first to be developed but was later revised because it didn't reflect the true relationship between PEOU and PU with the emerging need and purpose of use. However, the revised version of the model without the attitude received overwhelming support from several academicians who later improvised a new modified version of TAM which they called Unified Theory of Acceptance and use of Technology (UTAUT). The improvised model suggests that high performance can be

ST. PAUL'S UNIVERSITY

derived from the expectancy, the social networks, and effort applied as it determines the usage, intention, and behaviour of an individual (Venkatesh *et.al*, 2003).

TAM, however, is a better model that has been used by researchers to study the relationship between user acceptance and technology adoption as it is a key model that explains in depth the users' behavioural or intention in a business set up. TAM model emphasize on the perceived usefulness (PU) and perceived ease of use (PEOU) as the two main components that determine the user acceptance and technology adoption. In this study TAM has informed the researcher on how the characteristics of technology such as ease of use and usefulness of technology can influence SMEs to adopt ICT.

Perceived Usefulness is based on the perceived usefulness and the reasoning that, using a modern technology will facilitate the potential user's job satisfaction and performance. Therefore, perceived usefulness is an important aspect of embracing ICT adoption within the SMEs sector. Elsewhere, Kiveu (2013) on his study of aspects of ICT adoption level and Use among SMEs in Kenya revealed that ICT adoption was more influenced by the organization or individual based on the perceived usefulness and value creation to the end user. This clearly shows that a potential user of ICT who views the technologies as important is most likely to adopt the ICT and in the organization and achieve high performance.

ST. PAUL'S UNIVERSITY

2.2.2 Application of Technological Acceptance Model to the study

In our modern society, Information Technology (IT) has been regarded as the life wire of SMEs business sector as it facilitates the growth and performance of an enterprise in a country. According to Shin (2001), Information Technology is an important tool that all organizations need to embrace if they want to remain relevant in the market but it needs to be coupled with factors like strategy for an organization to achieve better performance. Technology is indeed a secret weapon that is regarded as a competitive resource for maintaining effectiveness in SMEs.

This tool is important to SMEs as it gives them an opportunity to compete with the giants in the market and gain market share. Tidd and Bessant (2009) says that SMEs that encourage innovation by adoption of IT will do well in the market and are more likely to be differentiated from the competitive world since they will stand to be tall. However, most of the SMEs do not value the importance of IT in decision making but in most cases IT is used for administration and operational tasks. For installation of IT to be effective, organizations need to invest heavily on Technological Capability (TC) since it drives an organization in achieving its goals and objective in both short and long term plans . Therefore, TC can be regarded as an important tool for competitive advantage within the SMEs sector in any given country. For example, in Thailand, the plastic industry is one of the industries that have embraced technology and it contributes to 50% of the exports (Shin, 2001). In addition, organizations that embrace the culture of improving their IT increase the quality of work but mostly, it will depend on the size of the firm and the industry in which a firm operates from.

ST. PAUL'S UNIVERSITY

Large organizations have huge reserves of capital, have many tasks to be addressed at any given time and need timely information to make key decisions. It can therefore be concluded that adoption of TC by SMEs is beneficial and determines the overall performance of a business in our modern fiercely competitive world.

2.2.3 Location of business theories (Behavioral and Classical)

The location theory of business tries to explain how the choice of locating a business is important to SMEs (Kala *et al*., 2010). There are two major mainstream theories that explain how location of a business is important in our modern society: Classical location theories and Behavioural location theory.

The minimisation of costs is the main issue which forms the core of the older, classical theories. The cost aspect is the main basis of neo-classical location theories but these differ from the classical approach in several ways. Both (neo) classical theories assume a well-informed, rationally acting entrepreneur for whom the costs and benefits of a certain location are of great importance, that is, the economic man (Van Noort & Reimer J.T, 1999). The organizational behavioural theories came into being as a reaction to the classical approach theory. In behavioural location theory the weight is directed to the location of the premises behaviour of entrepreneurs and the motives involved in the formation of the enterprise (Bennett & smith, 2002).

Van Thunen's theory (1882) assumes that there is perfect competition in the market so that there is a defined fixed market price. In spite of all the efforts made by economists, the

ST. PAUL'S UNIVERSITY

location theory is not widely accepted owing to the concerns that keep on varying when it comes to choosing the business location. The theory assumes that transport related costs are in proportion to the distance covered (range) and the amounts transported in the market, and that transport costs will differ per product. It assumes that there is an outlet market in a nearby town where the products can be sold. The theory is focused on an agricultural entrepreneur aiming to get high returns inform of profits. In order to achieve this, the difference between the given market price and the sum of the production and transport costs must be at optimum level. This theory tries to reflect the relation between the agricultural use of the ground and the economic rent, where the distance covered to the market is the significant deciding factor of how business will be conducted.

Weber's industrial site theory (1909) is based on the principle that the enterprise will search for a location where the locational factors are most favourable for the business. In Weber's theory this will be the place where production is basically cheap. The analysis considers matters related to transport and labour costs, and later he also pays some attention to agglomeration business factors. Weber's theory also puts some emphasizes on transport costs and advocates for the point at which these costs will be lowest to the firm. Also included in the analysis is the availability of the raw materials to the organization so as to have a steady supply of product in the market. If there is no loss of weight during the processing of the raw materials, companies will not mind where the factory is located or the source of the raw material or other related costs as there is no likely of a loss (Fullover-Love *et al*; 2006). Notably, if an industry has to work with raw materials from the firm that

ST. PAUL'S UNIVERSITY

undergo various degrees of weight loss during production, the best location switches towards the direct source of the raw materials for production.

The neo-classical theories contain a number of supplementary items to which attention should be paid and which were missing in the classical theories. These include; Market-competition (looks at who controls the market, who is the market leader and how the market can share be increased for a firm, Types of market-competition other than perfect competition taking into account not only the minimum cost approach but also the revenues and internal scale advantages. Christaller (1929) central location theory examines the relationship between the market function of locations and the geographical pattern of towns and villages. The theory also assumes there is perfect competition taking place and it is also considered to belong to the classical location theories. Christaller attempts to explain the spatial pattern of settlements (the size of the settlement, the number and the spatial distribution) using their service function. In his explanation there are two central factors that determine performance; the threshold value and the distance (range). The threshold value for a good service determines how many people are required to make an enterprise profitable. In addition the distance people are willing to travel to purchase a certain product or service is also important. Assuming there is free competition and free entry in to the market, there will be an unbroken connection of markets for every product and service (Album *et al.*, 2005).

In the behavioural location theory emphasis is on the (location) behaviour of entrepreneurs and the motives involved. The formulation of this theory is mainly inductive and more general statements are made based on situations that are in place.

ST. PAUL'S UNIVERSITY

The behavioural approach is based on central concepts such as spatial cognition, mental pictures and regional images. Spatial cognition is defined by Pellenbarg (1994) as being the base on which judgements are made about, or values assigned to, potential business locations. A mental map is a subjective picture which brings to mind a certain location. This explanation also applies to the term regional image to which other spatial associations are connected.

Behavioural analysis deals with the extent to which a certain location meets the emerging needs and requirements of an entrepreneur. When assessing the most suitable location of the premises, the mental picture which the entrepreneur has of the present location, and also of previous locations, also plays an important part.

2.2.4 Application of webers industrial site theory to the study

In our modern society, the physical location of a business to the Central Business Area (CBA) determines the failure or success of any business in both short term and long term plan for any organization that want to survive in the 21st century. The place where the premises are located can be seen as the entry to the market place in respect to communication, easy access to raw materials and in terms of transport which must not be ignored (Kala *et al*., 2010). Therefore, location is an indispensable component that determines the success or failure of business. The strategic location is very important as it gives a firm the ability to serve its clients and customers well. Thus location might be viewed as nearness and accessibility of a firm to raw material, infrastructure and accessibility to customers.

ST. PAUL'S UNIVERSITY

As an illustration for starting a business, the labor costs and demographic factors should be put into consideration since they usually affect the profitability of the company. North and Smallbon (2000) advocates for businesses in the Central Business Area as compared to businesses in the rural areas which are said to be less creative and innovative in nature. This might be due to lack of startup seed capital and poor communication network which is said to be the blood of the organization and untimely readily available information in the market. They showed that the location of a business had an impact on its overall performance. His work demonstrated that the location played a vital role in business growth. The location of a premises means easy access to materials, assess to security facilities and good means of transport. Therefore, the issue of location is an indispensible factor which must not be overlooked by people who want to do serious business.

In addition, the location of a business might be viewed as the place where it is situated. There are a number of factors that need to be considered in choosing a location for a business. For example, one of the earliest decisions any entrepreneur has to make is where to locate his or her business. In order to do this, he or she has to make a careful assessment of costs. The ideal location would be one where costs are minimised. The entrepreneur would need to look at the benefits which each area has to offer as well as any government help which might be available (Bennett & smith, 2002). In other dimensions, businesses located in metropolitan areas have got different challenges and advantages. According to Mittelstaedt *et al.,* (2006), metropolitan areas are good for business location has they can increase their export performance. They have easy access to financial institutions, technological partnership, specialized labour and infrastructure and favourable supply of raw

ST. PAUL'S UNIVERSITY

materials (Fullover-Love *et al*; 2006). On the other hand, North and Small bone (2000), they argued that SMEs in the regional locations in most cases have poor infrastructure and they make them to be less innovative as compared to their metropolitan counterparts. In addition, they argue that in terms of strategies, the distance and time required to complete a transaction becomes a challenge to most of the regional exporters and transport and freight related constraints have been cited as major challenges (Album *et al.*, 2005).

2.2.5 Resource Based View Theory

The resource based view in most cases addresses the source and nature of organization capabilities. Performance of a firm is derived from the resources it owns and capabilities it us (Helliriegal *et al*.; 2008). A company must position itself for the future so as to confirm getting higher profits and dominate the market share by utilizing the underlying resources. The resource based view (RBV) suggests that an organization will do better in the market if firm specific resources and capabilities are costly to be copied by their competitors in the market (Henderson, 2000). In addition, the resource and capabilities will only be important if they possess characteristics related to value, rare, imperfectly imitable and been non substitutable.

Competitive advantage mostly point at two major components which are the concept of leadership cost and differentiation as two major sources of competitive advantage in the firm. Cost leadership enables a firm to penetrate in the market by aggressive pricing which in return translates to high sales volume. In addition, differentiating a product enables a

ST. PAUL'S UNIVERSITY

manager to create brand loyalty to the customers. The main emphasize is for a firm to look at future position and source of competition advantage instead of communicating on profitability and growth alone. The researcher feels that companies that have better nurture of skills in individual and large core competencies outperform those that are preoccupied and have good strategic business plan (Fermilab, 2009). However, technological changes shift in the external environment may render the existing competencies obsolete.

2.2.6 Application of resource based theory to the study

In our modern context, managerial competence can be defined as a set of knowledge, skills and experience that contribute to organizational effectiveness (Helliriegal *et al.;* 2008). These words are in line with the words of Henderson (2000) who says competence is a mixture of knowledge and skills required to perform a certain task. The results of such kind of a combination can only be seen through by how individuals tackle and handle issues within the work place. In the modern society which is full of competiveness, the managerial aspects have to come in place for any organization that wants to achieve a competitive edge and gain superior performance. The entrepreneurs need a wide range of competencies in order to overcome the modern problems in the contemporary society. According to Henderson (2000), he argues that competencies are not determined by individual qualities but the most important thing is how individuals consider what is important in life.

In our Kenyan context, the *juakali* informal sector has proved beyond reasonable doubt that it can uplift the standards of people and can boost economic growth in several different

ST. PAUL'S UNIVERSITY

ways. In this sector, practical skills are developed at low cost and with minimal financial cost; multiple kinds of small scale business could be developed for labour-intensive market that could absorb hundreds of young jobless Kenyans. However, those who manage the businesses in this sector lack basic business skills which are attributed to low levels of education (Wanjohi & Mugure, 2008). In addition, education must also be considered as a key to life that facilitates growth of a business. It is through education that entrepreneurs become enlightened about modern trends that affect business like in the field of technological changes. Research has shown that there is a positive relationship between the educational level of an individual and the firm performance (Lyles *et al*, 2004).

Education can be gained through the formal and informal ways and in both cases; the owner of a business adds more knowledge about the outside world. This might be the major reason as to why the researcher feels that the Kenya and Mauritius governments had to introduce free primary and secondary education as a means of enlightening the society about entrepreneurial skills. According to Lyles *et al* (2004), entrepreneurs require both informal and general knowledge to run their organizations effectively. On the other hand, the level of education can be measured based on educational qualification of an individual and employees. A research by Kristiansen, Furuholt, & Wahid (2003) revealed that education contributes a significant role when it comes to formation of new ventures, development of new products and the likelihood of owning high-technology business. Therefore, SMEs run by individuals with basic educational background are more likely to achieve better performance as compared to those that don't have basic knowledge related to SMEs management.

ST. PAUL'S UNIVERSITY

Experience also determines the future of an organization. Basically it can be determined by the number of years spend by a manager or employee in an organization (Kayongo, 2005). This is because they pass through different tests in the organization or phenomenon which they can use as a reference to solve future problem given the same scenario. Managers who are educated and working in the relative office of a business are considered to be competent managers than those who are working in different departments who might not have the necessary credentials. This study will therefore seek to establish whether there is a relationship between the competence level of an entrepreneur and the overall performance of a business.

Moreover Lyles *et al* (2004) argued that, the entrepreneurial level of education of the founder of the organization and startup experience had a positive impact on business. When it comes to educational matters, many people have got no degrees, diplomas and certificates in their pocket but what distinguishes an individual from the rest of the group is how highly motivated he is. According to Fermilab (2009), employees with the necessary competencies were in a better position of delivering organizational goals and objectives within a shorter period as compared to the less learned. In his remarks, he emphasized on the need to align organizational goals with strategy in order to achieve better performance. Moreover, he argued that, the educated employees and managers have got good hierarchical structure which set them apart from other individuals and chain of commands are clear and hence the importance of the managerial competence lied with how the leader influence his followers.

ST. PAUL'S UNIVERSITY

2.2.7 Public interest theory of Legislation

The theory was developed by A.I (Pigou) 1932. He believed that regulations are prepared due to public demand of correcting ineffectiveness in the society. In this research, regulation means the employment of legal instrument by the government of the day to compel organizations to comply with prescribed behaviour or imposing of sanctions. In most cases, the government is involved in giving out direction and monitoring the market which is said to be fragile. The sanctions can include imprisonment, fines or closing of business by the owners or managers of the SMEs so as to create a good working environment. According to Garikai (2000), the government either makes economic or social regulation as a means of achieving efficiency in the market and gain improved performance. The economic regulations deal with regulating the market situation like having restrictions on entry or exist of the markets. In addition, it looks into matters relating to price mechanism and quality assurance of products. On the other hand, the social regulations focus on environmental discharge of waste matters, health and safety matters.

2.2.8 Application of public interest theory to the study

In the current dynamic society, SMEs continue to face problems ranging from management issues, corruption, technological problems, poor infrastructure and legal legislative policies. In Africa, most of the governments do not have a good regulatory framework which governs the operation of SMEs based on a study that was carried out in African countries (Commission for Africa, 2001). For example, the commission cites the case of Nigeria. The main problem is associated with the government since it lacks transparency and consistency

ST. PAUL'S UNIVERSITY

in implementing the policies. The government is involved in issuing of illegal licenses and permits to family members who evade tax which could be useful in transforming the major sectors of the economy. In addition, rampant corruption in the government is the order of the day.

In Kenya, every business requires laws that act as a reference point to facilitate smooth running of the industry. In Kenya, Small Enterprise Development (SED) is the body that is mandated in creating an enabling environment that govern entrepreneurs and fix new regulations. Notably, the problems encountered by SMEs in different sectors of the economy might vary but according to Garikai (2000), most of the problems encountered by business owners include the issue of legal framework. In the Kenyan economy, most of the businesses follow under SMEs sector and an example can be the Jua Kali industry and hardware business. Government initiatives through enactment of legislation usually have got an impact on the SMEs sector either directly or indirectly.

The Kenya government support SMEs as avenues for employment and as innovation centers. However, it is very hard for them to access finances and markets as compared to large organizations (Alila & Ove 2011). The government tenders are biased and do not give room for the SMEs to contribute in the market. Moreover, he argues that, complex registering and licensing procedures to be a major challenge facing the SMEs sector. In his conclusion, he cites government policies, corruption and high taxation as among the key factors that face the SMEs sector. According to Kenyan government sessional paper no-2 of 2005 on ‘Development of micro and small enterprise for wealth and employment creation

ST. PAUL'S UNIVERSITY

for poverty Reduction' the government is committed in developing the sector of SMEs through quickening the time frame for registering a business and creating an equal playing ground for easy access of financial facilities for both men and women.

The main challenge of SMEs is lack of awareness on policies governing the sector and frequent harassment by county government authorities. There has been complains regarding tedious registration and certification processes in Kenya. Various bodies need various requirements before start of business and hence mean more money and time. One option left to an entrepreneur is to evade the process but this proves more expensive at the end because of penalty given. For instance, for an entrepreneur running chemical related business, a certificate is needed from the Ministry of Health or similar authority to show that the products or services offered have been analysed and found to be safe. The authorities may also require the product to conform to legal standards regarding composition (Alila & Ove 2011).

In addition, most of the urban authorities are operating on colonial by-laws that are yet to be reviewed based on a study carried by Mitullah (2003). She observed that, obtaining license which is a key requirement for operating a business was a nightmare for most of the SMEs. This could be due to other extra expenses which govern the health sector, pollution and sewage disposal as proposed differently by the 47 county governments. In her conclusion, she reviewed that there was a greater need for county government to review their laws that govern business so as to enhance the SMEs performance. This study seeks to determine the

ST. PAUL'S UNIVERSITY

extent to which legal and regulatory framework of county by laws influence the performance of SMEs in Machakos Sub County.

2.2.9 Performance Theories

2.2.9.1 Goal approach theory

Different theories have been developed which try to explain how performance can be measured in a business. They include the goal approach theory, system approach theory, and stakeholder approach theory and the balance scorecard. The goal approach theory measure the ability of the firm in realizing its goals while the system approach theory measure the ability of the firm in utilizing its resources (Tarkman,2009). On the other hand, the stakeholder approach theory measures the ability of the firm in meeting the expectation of the external stakeholders.

The goal theory is advocated for in most cases as it is simple and information can be readily available from the managers or owners of the organization when it comes to evaluation and monitoring process. In most cases, it focuses on financial measures as compared to non-financial measures. Arguably, measuring performance of an enterprise through finances is not the best way since there might be other leading indicators which might not be in monetary terms. In addition, monetary interpretations are prone to manipulation of figures and in some cases they might require professional skills for interpretation. Therefore, the best approach which can be recommended for evaluating the performance of an organization

ST. PAUL'S UNIVERSITY

is through measuring the financial and non-financial indicators as it gives an organization a broader aspect of understanding.

2.2.9.2 Balance Score Card

In other works by (Zahra (2009), he advocated the use of the Balance Score Card (BSC) and recommended the use of it as a tool for measuring performance in SMEs. This argument was based on the fact that SMEs have got their own limited resources within their disposal and hence performance should be resource based oriented. One of the biggest advantages of BSC is the ability to incorporate both financial and non-financial measures when measuring performance of an organization which should be tied to the strategic plans of the organization and the desired objectives. BSC incorporates both financial and non-financial measures under one basket. It looks at an organization from 4 major dimensions which include the customer perspective, internal perspective, innovation & learning perspective and finally the financial perspective (Senge, 2002). Nowadays, it has emerged has an important tool as it helps the managers to monitor and measure strategy of business so as to position an organization for the future.

2.3 Empirical study

2.3.1 Technology Use and Adoption

Previous studies clearly demonstrate there is a significant impact of perceived ease of use and adoption of ICT within the SMEs sector. According to Azam and Quaddus (2013), On their study done to examine the Influence of National Culture on Adoption and Use of Information and Communication Technology: A Study from Bangladesh's SME Perspective revealed there was a great association between perceived ease of use with SMEs' intention

ST. PAUL'S UNIVERSITY

to use ICT as well as a strong and significant effect of intention on actual use of ICT by SMEs in Bangladesh.

2.3.2 Entrepreneur Skills and Competence

In regard to competencies, some of the entrepreneurs who were running business lacked the competencies to run the business (Senge, 2002). His findings were some entrepreneurs with less education, less basic managerial skills, neither any knowledge of the market and they were performing well as compared to those who had such competencies. This was due to family orientation background or some inborn natural traits. Notably, ideas of SMEs are always good at the back of every entrepreneur in our modern society but implementing them might be the biggest challenge which they die possessed off. The researcher feels that, if individuals were given an opportunity to visit and extract ideas from the graves of entrepreneurs, the world could change because of great ideas, visions and goals that they had not realized and which were not practiced or implemented to run the business.

Generally, SMEs have got good great ideas and the people behind them have competent skills but "they do not have a clue on how to run business" and they do not have simple basic business fundamentals which might be required. The same words are echoed indirectly by Herringston (2010), who started that lack of education and training to be a key component which leads to failure of new ventures or lack of creativity.

2.3.3 Performance Measures

On the other side of companies, they have used both financial and non-financial measures to measure the overall performance of a firm. The financial matters include the market share, profit and sales. On the other hand, the non-financial measures include product cost, number

ST. PAUL'S UNIVERSITY

of customers, product quality and product flexibility (Tarkman, 2009). In some organizations, the measurement of firm performance is based on the balance scorecard which lays more emphasizes on employees perspective, customers, suppliers and government. Physically, SMEs performance is assumed with success or failure of a firm. It might include the measure of firm's turnover and change in workforce numbers. Thus determining the SMEs performance, the researcher will use both financial and financial as established by other researchers.

As an illustration Yusuf (2010), did a study to investigate factors affecting business success of SMEs in Thailand. The main aim of the study was to provide an understanding to the people on how to reduce risk of failure and increase changes of survival. The study examined some factors which included, SMEs characteristics, management and know- how, customer and market, resources and external environment. The study used questionnaire and 8 hypotheses were tested out of which 5 were found to be true. A regression analysis was used out of which the results showed that most of the significant factors affecting business success in Thailand were SMEs characteristics, customer and market, the way of doing business, resources and finance and external environment. Moreover Annie (2012) did a study on factors affecting the performance of SMEs in Malaysia. The study focused mainly on the manufacturing sector and 300 SMEs were sampled. Contingency theory was used to support the findings of the research. The result showed there is a positive relationship between access to market information as well as the rate of technology adoption and the performance of business.

ST. PAUL'S UNIVERSITY

2.3.1 Critique of existing literature

Even though studies on technology adoption and use comprise of a significant area of study within the ICT sector (Green, 2011), there continues to be a greater need for enhanced understanding of the factors influencing adoption and use of technology within the specific context of SMEs (Sakai, 2012). Several research related to SMEs have a variety of mixed variables influencing the adoption and use of technology, such as e-banking, computerization of business and electronic money transfer. According to Vilaseca, (2013) lack of technology awareness and cost element are critical consideration in the adoption and use of technology for modern SMEs. Lack of awareness contains numerous factors that need to be considered, which includes uncertainty of future technology benefits, lack of relevant guidance and unfamiliarity of technologies. According to Giovanni & Mario, (2013) cost is mostly related to technological factors such as, training of the staff, maintenance costs of information systems and software upgrading

Moreover Barua (2011) argues that lack of favourable technological environment, lack of critical mass use, unavailability of modern technology, and e-business formal infrastructure to be the major external hindrances obstructing technology adoption and use by Kenyan SMEs. He observes that majority of external hindrances emanate from business related issues. Similarly Ritchie and Brindley, (2010) noted that there are three barriers in adoption and use of technology by SMEs. These are: external business pressures (requirements by trading business partners and competitiveness from key players in the market), SMEs readiness and perceived benefits to be derived from the technology in use. The authors argue that derived benefits form a key reason as to why many SMEs adopt and continue to use the

ST. PAUL'S UNIVERSITY

modern technology. According to Giovanni and Mario (2013), most adoption and use frameworks look like a general framework using the technology, the capabilities of the organization and the external environment as its key explanatory variable. The external environment (suppliers, buyers, financial institution, government interventions and competitive pressure) are very crucial factors influencing adoption and use of technology by many SMEs. The authors suggest that environmental and organizational characteristics are required for proper implementation of technologies in SMEs businesses. In addition, Alila and Ove (2011) observed that, as primary external factor of the technology adoption and use, government role is a very important factor in the integration of the technology by SMEs. Most of government roles, the author notes, are related to financial supports including direct support of the development of application and tax breaks on technology infrastructure. Therefore, SMEs need more attention in terms of financial support than big companies because of their unique structural characteristics such as: weakness of market bargaining power and lack of business experience.

In other studies by Vilaseca (2013), he argues that due to the rapid development of a variety of new technologies, outsourcing of technology in an organization is becoming suitable and is emerging to be an influencing factor that is determining the performance of many SMEs sectors. He observed that cost of technology should be factored in an organization budget since it is an important component in the adoption and use of technology by many SMEs. Moreover, he argues that SMEs will less likely adopt and use technology when its initial set-up cost of acquiring the necessary machines is high. As an illustration, he notes that many SMEs in African countries often have many challenges when it comes to outsourcing for

ST. PAUL'S UNIVERSITY

financial support. Therefore, the rate of adoption and use of new technologies in firms may be considered to be a tedious and an expensive exercise by these enterprises because of their lack of strong financial support. According to Mingaine (2013), many SMEs in Africa face different problems in the formulation stage of innovation strategies because of limited capacity of technological competencies and limited financial resource access.

In other related carried out by Ghimire and Abo (2013) on unlocking the potential of small and medium enterprises in West African countries, it reveals that adoption and use of relevant technology by SMEs depended on the owner being the final decision-maker. The findings from this study clearly indicated that embracing technology adoption in businesses and use is positively related to the organizational size. The study concluded that organizations should consider the level of skills and knowledge its workforce have, because previous experiences and knowledge may determine the organization decision in adopting or using the technology. Notably, the ability of the enterprise manager in technology skills and knowledge is definitely increasing the opportunity of adoption and use of the modern technology amongst SMEs.

In other studies by Thong and Yap (2011) established that SMEs managers are unlikely to adopt and use modern and more sophisticated technologies if they are not familiar with the existing and basic ones. Similarly, a study by Mingaine (2013) founded that there is limited number of employees in an organization with appropriate relevant technical knowledge to adopt and use emerging new technologies. The author argues that this lack of knowledge in employees may prevent or hinder rate of adoption and use of technology in the firm if the

ST. PAUL'S UNIVERSITY

owner believes that it can only be implemented by a specialist staff. According to Mingaine (2013), external pressure coming from other trading partners is one of the significant predictors that has strong impact on SMEs in adoption and use of technology. The author argues that without this external pressure, many SMEs owners may perceive adoption and use of technology as a waste of company resources. This has an indication that many SMEs are not fully utilizing the new technology advancements in doing business. This points out that dependency on supplier and customer to use technology in their daily transaction is closely related to external pressure to adopt and use technology in the organizations. Mingaine notes that, when a major customer or supplier adopts new technology, the SME owner will more likely adopt, use and install the same technology. He argues that SMEs are often forced to adopt and use technology by large companies. Hence, this might be a major contributing factor that makes SMEs to adopt and use technology especially when their trading partners force them to do so.

In a study performed by Thong and Yap (2011), (2010) in Malaysia found that perceived benefits, government legislative support and managerial support are important predictors that influenced SMEs in the country to adopt and use technology. They identified factors influencing adoption and use of technology by SMEs as: perception of relative advantage, manager's perception, CEOs individual characteristics, complexity of the matter, compatibility of machines in place and organizational size. In another study carried out by Sakai (2012) in Taiwan, SMEs found that technical organizational backing and necessary computing skills were strong anchors of the perception of usefulness and had direct influence on adoption and use of the technology. He found that adoption and use of

ST. PAUL'S UNIVERSITY

advanced technology was significantly related to innovativeness and advocated that innovativeness as a significant trait in determining technology adoption and use among SMEs in Taiwan.

In other dimension, Legal and regulatory framework governs the daily operations of SMEs. However, very few enterprises might be aware of their existence. While the laws enhance the growth of a firm, they have also been cited as major hindrances of growth since some have got outdated colonial and policy formulation back up (Mitullah, 2003). This is in line with the work of Wanjohi & Mugure (2008). In addition, legal and regulatory requirements usually need to be reviewed to suit the emerging needs of every sector. The process of changing them is vigorous processes which require the involvement of the necessary stakeholders and majority of the SMEs are not aware of their existence. Moreover, the public interest theory is incomplete since it doesn't show how an individual view on the public translates into legislative action that can lead to maximizing of economic welfare. In political decision making process, many participants will be aiming to pass legislation that will favor their operations than looking at performance of an organization since they have different constraints and objectives. In addition, the theory doesn't show which sectors and industries which should be regulated or mention to whom the accrued advantages and disadvantages will benefit in short and long run operations.

In other studies related to performance of SMEs, different models have being used to measure performance but most of them have got their own shortcomings since variable like profits have been used to measure performance. Profits are prone to manipulation by accountants to suit different stakeholders and might not indicate the nature of profits. Every

ST. PAUL'S UNIVERSITY

industry faces its own unique problems which are different from each other and a good example can be the use of BSC on performance of SMEs (Zahra 2009). In most cases, the Balance Score card focuses on long term measures while in contrast the SMEs operational system keep on changing due to the ever changing dynamic environment. Moreover, the SMEs usually interact with their customers more often than large organizations in different aspects. Therefore, the SMEs processes are unpredictable as compared to large organizations that have got a good corporate culture in handling their issues. The researcher views the BSC to be 'unbalanced' because the strategy used by one organization is different from another organization. Similarly, Zahra (2004) argues that little research has been done to see how useful the BSC is useful to organizations. He discovered that no paper had been submitted that address how effective is a BSC and its usefulness to a firm

2.4.1 Challenges facing SMEs

In every corner of the World, SMEs are spread all over. They make significant role in contributing to the GDP and creating employment. They are seen as the driving force behind the development of any country. Despite their significant role in any country, they face a series of challenges ranging from competition, high failure rate and hence less growth (Gakure & Amurle, 2013). Most of the challenges facing the sector are as a result of financial crisis of 2008. Estimates of SMEs business around the globe suggest that more than 95% of enterprises are SMEs and 60% are in the private sector with Japan leading the sector with most of the firms in the industrial sector (Ayyagari *et al*.2011). India has 80% of

ST PAUL'S UNIVERSITY

SMEs business and the number of SMEs is said to be over 13 million (Ghatak 2010). Globally, the SMEs face similar and common obstacles when it comes to survival and gaining of competitive advantage. According to Gakure & Amurle (2013), more than 50% of SMEs collapse in their first years of operation due to poor management. They cite major challenges as heavy regulatory framework, lack of seed capital, regional and global outsourcing policies and lack of finances. In the same way, access to credit facilities and lack of clear networks are said to be a major barrier to the growth of SMEs.

In Africa, South Africa is said to have 91% SMEs who contribute to the economy of the country. Elsewhere, in Morocco they contribute to 93% of investment and 38% of production as compared to Ghana SMEs where they contribute 70% of the country's GDP and 92% of Ghananian business (Abor & Quartey 2010). When the SMEs are compared to large established organizations, their output is said to be lower, even though they contribute to the economy of nations (Wymenga *et al*.2011). According to Robb and Wolken (2002), black owned SMEs have low profits and lower sales and are more likely to close when compared to white or Asian-Owned SMEs. In addition, black owned SMEs are less likely to export when compared to Asian owned SMEs. The difference in terms of performance is thought to arise from prior experience, family background or the ability of a firm to access capital. They point out that more than half of the white owned business had a member who was self-employed when compared to a third of black entrepreneurs. The blacks are said to have poor networking which put them to be disadvantaged when compared to the white counterparts.

ST. PAUL'S UNIVERSITY

In Kenya, SMEs face unique challenges like registration issues, lack of credit facilities, and inadequate managerial skills to run businesses (Wanjohi, 2009). In addition, rampant corruption and poor governance affect the performance of the SMEs directly or indirectly. To mitigate some of the challenges, the current regime has set aside revolving fund at lower affordable rates to facilitate growth of this spurring sector so as to achieve vision 2030.

Lack of finances for SMEs is a major problem that hinders growth not only in Africa, but in major parts of the world as well (Herrington *et al*., 2010). For example, difficult in accessing finance is major challenge mentioned by the National Expert Panel in South Africa based on a report by the National Credit Regulator (NCR). Based on the report, a significant number from minority communities were spread amongst entrepreneurs from the minority registered groups (NCR, 2011). Moreover, difficulties were less to firms that kept cash book records, debtors record and those who controlled the inventory as well (NCR,2011) .

The banking sector is a major solution for SMEs financing and most of the decisions made are borrowed from credit rationing theory. According to the theory, banks are not only interested in the interest or profits that they make but they usually look at the chances of getting their principal and the risk that might be involved. This is because, given the efficient framework market hypothesis, individuals who are willing to pay high interest rates may on average fail to pay back the loan and banks are discouraged from funding such kind of organization or individuals. Moreover, registering of business is a not easy for most of the organizations. Individuals spend many days and resources in acquiring the necessary document. It is only recently that the Kenyan government realized the importance of creating necessary documents through integrated technology platforms and acquiring of

ST. PAUL'S UNIVERSITY

trading documents is currently being done through Huduma Centers where services can be obtained under one roof and within a reduced time frame as compared to before. Currently, the Huduma Centers are in Machakos Sub -County, Nairobi, and Mombasa among others. Despite such significant role played by SMEs in Kenya for job creation and production, most of the SMEs face higher barriers to external sourcing than large firms when it comes to growth and development (Obanda 2011). They find difficulties in obtaining commercial bank loan due to lack of collateral, inability to prove credit worthiness, small cash flows or inadequate credit history. A firm which has got tangible assets is likely to secure a bank loan than an organization whose assets are intangible. Moreover, owing to lack of necessary skills and experience of SME owner-manager in business, the risk may be more significant than in large organizations. The SMEs have got few finances to draw in case of crisis and banks are reluctant to finance them.

According to Obanda (2011), SMEs do not access timely information in the market which enhances productivity. He points out that information should remain on the top of the list among other services provided by an organization. Notably, SMEs perform well in environments that have got ease access to the relevant information. For example, easy access to information is important in public procurement and obtaining of tenders. The increase use of ICT is important nowadays since it means easy access to internet and website related matters which reduce copying expenses and mailing costs.

2.4.2 Characteristics of SMEs

The age of entrepreneurs can determine the success or failure of the SMEs. Several studies have got mixed reactions when it comes to owner age when compared to SMEs

ST. PAUL'S UNIVERSITY

performance. For example, SMEs owned by younger entrepreneurs have got high chances of closure but they can still turn to be profitable at the time of closure (Headd 2002). Contrary, Van Praag (2001) found that the older the entrepreneur when starting a business, the more likely the entrepreneur was in a position to succeed. Entrepreneurs who are the most successful are the ones who remain aggressive in the market and have the ability to develop strategic plans for their businesses. In other studies conducted in Indonesia, Kristiansen, Furuholt & Wahid (2003) found that there was a significant correlation between age and performance of SMEs. Business owners who were aged 25 years and above were more successful as compared to those which were run by young ones. Generally, the number of years in business operation can be associated with the learning curve. The old players in the market are more experienced than new comers and are more exposed. In addition, the length time in operation of a business is linked to chances of improved performance (Kristiansen, Furuholt & Wahid 2003).

In addition, gender mixture in running of SMEs is common and may be defined as the social identity that might be attributed to women in a social set up.in most cases, it is rooted in our society as a result of structural positioning of women and men which puts some at advantageous and disadvantageous situation in performing different tasks (Robb & walken, 2002). The factors that face women SMEs might be significantly different from those faced by men entrepreneurs. This is in line with liberal and social feminist theories. Liberal feminist theory advocates for equal equality while liberal feminist theory attribute for gender based difference which might be attributed to position which individuals occupy in the society. According to Robb and Wolken (2002), women owned business are less likely to flourish since most of them are young, small and in most cases they engage in retail

ST. PAUL'S UNIVERSITY

business. In addition self-employed women are more disadvantaged when compared to self-employed men because they face unique features related to education, workplace and family (Robb & Wolken 2002).

Disparity in achievement of individual goals is mainly attributed to the differences in our social set up where men are presented with more opportunities when compared to women. Entrepreneurial women being deprived access to education, experience and key positions limit realization of their full potential. The difference between the two begins from the earliest social life and the way they view world. Therefore, one would expect to find differences in various dimensions when it comes to owners and managers of SMEs in the country.

Moreover, SMEs are exposed to liabilities related to their smallness. For example, they might face difficulties in raising the required capital and competing with giants in the market who offer greater discounts and benefits to their customers (Kauffmann (2005). He claims the major source of SMEs failure to be shortage of startup capital. In addition, he says that they have got no tooth to compete, to create new jobs or even to alleviate poverty in the developing countries. In most cases, they can't meet the conditions set by financial institutions since they lack asset to attach as collaterals. Moreover, majority of SMEs owned by individuals have far reaching effects due to personal lifestyle and hence acquiring of new technologies, or even competing in the Global market becomes a challenge. Kauffmann (2005) sums up access to startup capital and high risk of default to be a major challenge that affects SMEs performance.

ST. PAUL'S UNIVERSITY

2.4.3 Performance measures in SMEs

Performance measure (PM) is a measure of how an organization is progressing in achieving the objectives which determine the overall performance of an organization, how they value the need of the customers and that of the relevant stakeholders (Amaratunga & Baldry, 2002). Generally, performance may be defined as a measure of using knowledge instead of merely possessing it or as the above average rate of return sustained over a period of time. It could be in relation to profit or market share from which a firm operates from. Tarkman (2009) argues that, regardless of the firm, performance evaluation is vital to determine success or failure of the SMEs so as to ensure the firm gains a competitive advantage. It is through monitoring performance that an organization can evaluate its weaknesses and strengths and hence take proper action.

In addition, SMEs can be in a position to upgrade their performance either internally or externally and hence attain a sustainable growth. Basically, there is no universal tool for measuring performance and hence it has become to be a controversial issue. Some have used growth of firm and others the firm performance (Tarkman, 2009). He argues that measuring a firm on basis of growth is the best way instead of using accounting and financial measures. Therefore, measuring performance based on growth and financial measures might be the best approach since one measure is inadequate to determine success or failure of a premise at any given time.

A financial measure occurs when SMEs make a sale. A sale involves the selling of a product or service in return for money or compensation. When such an exchange occurs, we say a commercial transaction is deemed to have taken place. In most cases, assumptions are made

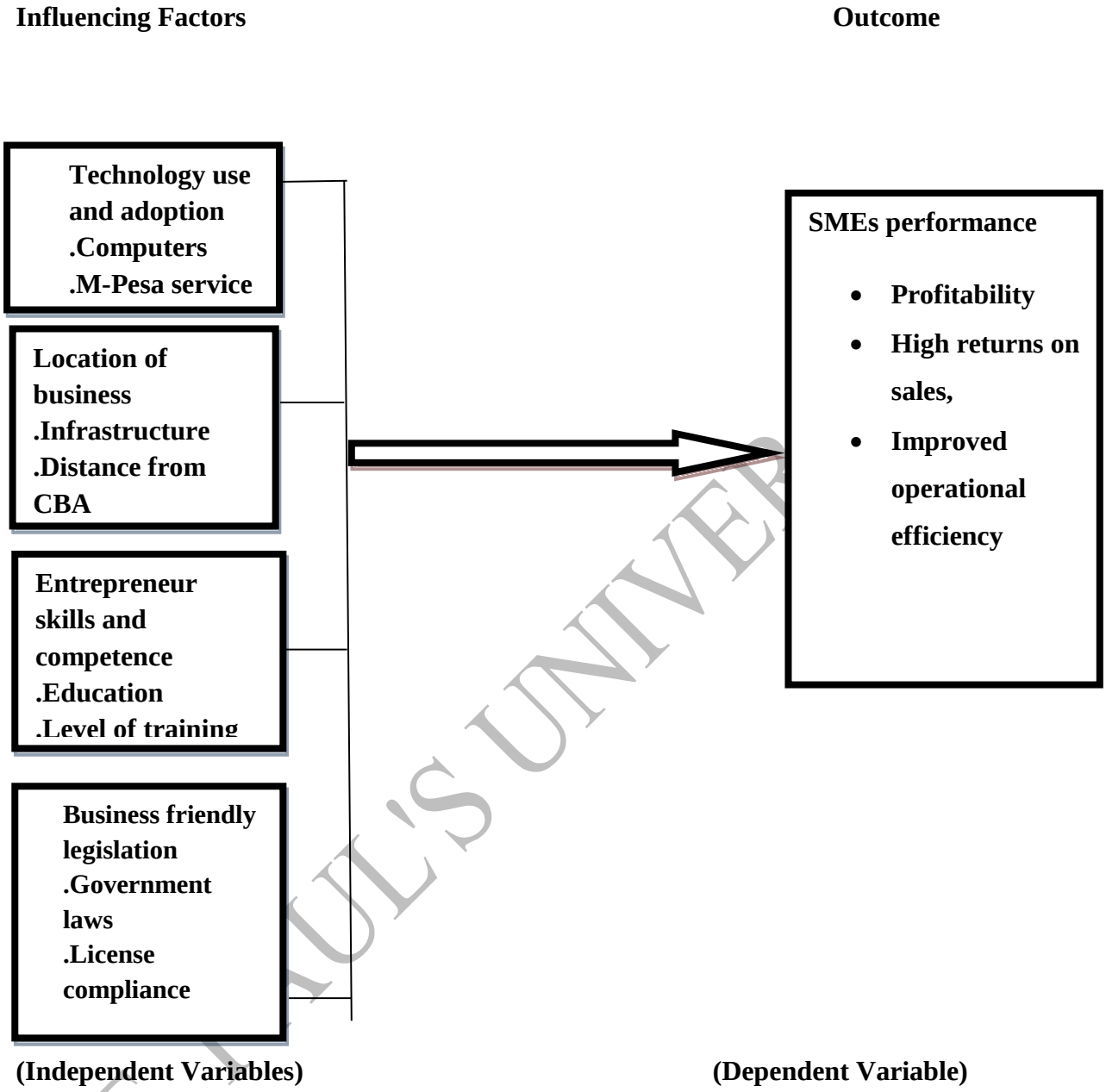
ST. PAUL'S UNIVERSITY

by business owners that if sales increase, it automatically increases the profits and in most cases it might not be correct. Therefore; a firm makes profit if the revenue generated exceeds the general expenses related to the product up to the final consumer.

2.5 Conceptual Framework

The conceptual framework of this study indicates the relationship between the variables including how the independent variables influence the dependent variables. The dependent variable of this study is the SMEs performance, while the independent variables of this study are technology use and adoption, location of business, entrepreneur skills and competence, and business friendly legislation.

ST. PAUL'S UNIVERSITY



Source: Researcher, 2016

ST. PAUL'S UNIVERSITY

The independent variables are the factors that influence the performance of SMEs in Machakos County. They are the factors that in one way or another are attributed to an entrepreneur in running the business. The adoption and use of technology in our modern society determines the future of an organization. In order to comply with the law, organizations are required to install computer machines and embrace the use of M-Pesa services for better performance.

In addition the location of a business from the CBA and infrastructural facilities plays a major role in determining the performance of an organization. On the other hand, the manager or owners of the business might have exceptional attributes like knowledge and skills which might either affect the business in the future. Attributes could include understanding of the consumer markets, leadership attributes, marketing skills and experience in that nature of business. In addition, management training and level of education play an important role. The business legislation is mostly linked to the county by laws which are made by the government. The laws have an impact on tax compliance and affect the operation of business since it is mandatory to obtain licenses. Such attributes affect the performance of an organization directly or indirectly.

These factors combined with other attributes of small business have an impact on the general performance of SMEs (dependent variable). They affect the profits of an organization, the return on sales and the daily operational performance of an enterprise. In our modern society, organizations can't afford to be losing skilled workforce due to unfavorable environment. This is because the work environment contributes to the overall

ST. PAUL'S UNIVERSITY

performance of a business. In some organizations, they have introduced performance appraisal method in which the employees are rewarded based on what they have achieved.

A good environment is where results can be achieved within a short period of time as outlined in the management strategic plan (Mike, 2010). In most cases, the work can be viewed as the critical factor that facilitates the employee in our competitive world and that might be the reason as to why organizations need the employees more than how the employees need them. The researcher felt that there was need for a study on this area and thus this study intended to bridge this gap and focus on the environmental factors influencing the performance of SMEs and how these factors contribute to the performance of SMEs in Machakos County.

ST. PAUL'S UNIVERSITY

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter three presents the methodology that was used in the study inform of subsections which include: the research design, the target population, sampling procedure and sample size, research instruments, validity and reliability, data analysis procedures and ethical consideration.

3.2 Research Design

Research design is a road map that outlines the origin and type of relevant information related to the research problem (Mugenda & Mugenda, 2003)). The study used descriptive survey to examine the environmental factors influencing the performance of SMEs in Machakos County. It was suitable for the study because several SMEs were sampled from the population. In addition, it described how people perceived a certain idea in a given phenomenon out of which the truth can was established. Moreover, descriptive survey used both qualitative and quantitative data to study a certain phenomenon and it didn't limit the incorporation of human knowledge or experience. Descriptive survey was appropriate for the study since it sought to answer the question of how, why and who in regard to the problem statement at hand.

Descriptive survey is appropriate when a researcher wants to describe organization, individuals or a particular phenomenon in a limited geographical area (Mbwesa, 2006). It involves the researcher going to the target population where he collects data but he as

ST. PAUL'S UNIVERSITY

limited control of the variables since they are already in place. The research design was conducted from a sample of SMES in the hard-ware sector. According to Mbwesa (2006), research design is convenient for a population that has got uniqueness because such information can only be obtained from the limited group that is under study.

3.3 Target population of study

Target population can be defines as the total number of individuals or units with common characteristics (Mugenda & Mugenda, 2003). The target population for this study was the hard-ware shops within Machakos constituency wards in Machakos Sub County that are within the area which were registered. From Machakos County headquarters office, there is 63 registered hardware's operating within Machakos Sub County. They are mainly involved in bringing construction and firm materials closer to the public and not limited to transport services. The goods and services offered include the sale of iron sheets, timber, nails, among others. The hard-wares are spread in the wards having different varying numbers. The numbers are as follows: Mutituni/Ngelani (10), Mumbuni South (3), Mua/Katheka Kai (5), Machakos Town (30), Kimutwa / Kola (10) and Muvuti/Kiima Kimwe (5). Machakos Sub County hard-wares are divided based on business permit class and they are widely spread and hence the findings was a representative of all SMEs within Machakos County.

ST. PAUL'S UNIVERSITY

Business Permit Class	No. of Hardware Shops
Mutituni/Ngelani	10
Mumbuni South	3
Mua/Katheka kai	5
Machakos Town	30
Kimutwa	10
Muvuti/Kiima Kimwe	5
Totals	63

Source: Machakos County Government Headquarters, 2015

3.4 Sampling and sample size of SMEs

This study used stratified random sampling since the SMEs could be grouped into different business category. It involved a process of stratification of segregation of the study population in homogenous defined groups (groups based on same attributes). This was followed by random selection of subjects from each stratum after first dividing the SMEs into sub- population in the line of business (Mbwesa, 2006). According to Mugenda and Mugenda (2003), a representative sample size that can be recommended is either 10-50% of the total population of study. The sample size should be at the limit to ensure accurate and efficient representation of results. On the other hand, Neuman (2003) argues that a sample of 10%-20% is adequate enough to carry a descriptive study and the main factor that is

ST. PAUL'S UNIVERSITY

considered is to keep the sample size manageable. In addition, it is more appropriate for a densely populated area since it gives accurate results and comparison can be drawn easily. Moreover, the researcher is in a position to derive a detailed data within a short period of time with minimal costs in relation to finances and human capital (Mugenda and Mugenda, 2003). Therefore, the sampling in this study involved grouping of the SMEs in Machakos Sub County based on business category from data provided by County Government of Machakos and thereafter a sample size was determined by using a 50% proportionate sampling of each strata. Based on the target population of 63 hard-wares, a sample size of 34 respondents was assumed to be the right sample size which is demonstrated in table 3.2 below;-

Permit Class	**No. of Hard-Wares**	**Proportion %**	**Sample size**
Mutituni/Ngelani	10	50	5
Mumbuni South	3	50	2
Mua/Katheka Kai	5	50	3
Machakos Town	30	50	15
Kimutwa/Kola	10	50	5
Muvuti-kima Kimwe	7	50	4
Totals	63	50	34

Source: Researcher, 2016

ST. PAUL'S UNIVERSITY

3.5 Data collection instrument

The researcher used structured questionnaires to collect data. According to Mugenda and Mugenda (2003), structured questionnaires are those that have definite, concrete and predetermined questions and are accompanied by a list of possible alternatives from which respondents select the answers that best describe the situation. Structured questionnaires was used in the study because they reduce the amount of thinking that a respondent needs to undertake to complete the task which leads to higher response and more accurate data as well as considering the kind of work done by the respondents

The respondents were lower manager employees or owners of the business. Interview guide was used in the collection of data. Interviewing is a way to collect data as well as to gain knowledge from the respondents. In order to ensure accurate results, the researcher trained four research assistants for three hours on how to administer the questions under the questionnaire and the area under jurisdiction to collect primary data. The primarily data was supplemented by secondary data that was readily available from written books but specifically the ones that dealt with SMEs literature.

3.5.1 Description of data collection procedure

Data collection as a process through which the researcher obtains information about the selected subjects of study (Creswell 2002). The researcher started by enrolling for the course before seeking an introductory letter from St Paul University to carry out the research. In addition, he sought consent from the ministry of higher learning and thereafter the county government of machakos. He issued the questionnaire to the respondents with the help of research assistants and where the respondents needed more time; the researcher was in a position to pick the filled questionnaire within a period not exceeding three days. Primary

ST. PAUL'S UNIVERSITY

data was collected from the owners or managers of the Hard-wares in Machakos Town through the use of questionnaires or schedule interview to maintain consistency.

3.6 Validity of Research Instrument

The researcher used structured questionnaires to collect data. According to Mugenda and Mugenda (2003), structured questionnaires are those that have definite, concrete and predetermined questions and are accompanied by a list of possible alternatives from which respondents select the answers that best describe the situation. Structured questionnaires was used in the study because they reduce the amount of thinking that a respondent needs to undertake to complete the task which leads to higher response and more accurate data as well as considering the kind of work done by the respondents. Reliability of the research instrument was done through pilot testing in Kitui Sub County. The test was done immediately after the training of research assistants so as to ensure the researcher gets accurate results. Pilot testing was important because it gave indications on areas that had challenges in doing the research. In addition, the pilot test helped in framing and re-structuring of questionnaire where clarity was required. The researcher in this case corrected the questions that had ambiguity to the respondents on electronic tax register which had written on abbreviation from and hence quality and efficiency of the research work was assured. Reliability is regarded as the extent to which results are consistent and portray accurate information in regard to the total population.

3.7 Ethical Consideration

The researcher observed high ethical standards in the study through several ways. For example, he sought consent from the university, County Government of machakos, and

ST. PAUL'S UNIVERSITY

ministry of higher education. Moreover, the researcher ensured anonymity of the respondents and materials which was not gathered from the researcher was cited.

When framing the questionnaire, offensive questions were not asked and respondents were briefed on the nature of the study. Lastly, the researcher informed the respondents that no financial benefits was to be derived from the study and information got from them was only to be used purposely for the main study and confidentiality was to be maintained.

3.8 Data Analysis and Presentation

The researcher used quantitative descriptive means of data analysis. Data analysis helped to fulfill the research objectives and provided answers for the formulated research questions. The quantitative data analysis was used to measure quantifiable characteristic such as the startup capital and locational distance from the Central Business Area (CBA) of the business. All the questions were edited and analyzed through the use of statistical package for social sciences version 21.0 computer software to do analysis of variance (ANOVA) at 5% and regression analysis to establish the relationship between independent variable and dependent variable. After analysis, data was summarized and presented inform of percentages, proportions and frequency tables for better understanding. In addition, descriptive statistics was used to provide relevant information using measures of central tendency. The coding was done in a careful manner to ensure no key information was left out since it was impossible to recover details which might be omitted in the study (Mugenda & Mugenda 2003). To create a better understanding of the report, qualitative data analysis was conducted since it can't be ignored as it gave a deeper understanding of the respondent's. They respondents were in a position to express their attitude, experience and

ST. PAUL'S UNIVERSITY

feeling to a certain issues. The regression model was adopted and used for the study as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y - is performance (which was measured in terms of profits, return on sales and operational efficiency)

β_0 - is a constant which is equal to Y when all other variables are at Zero

X_1- is technology adoption (which was measured by rate of adoption to ETR machines, computers or embracing of M-Pesa services

X_2- is the location (which was measures in terms of distance and infrastructure)

X_3 - is the entrepreneurial skills and competence (which was measured in terms of formal training and level of education)

X_4 - is the legal and regulatory framework (which was measures in terms of legal requirement for operating a business which include obtaining of licenses, and adherence to county by laws.

ε- Is the error of prediction

Correlation analysis was conducted at 95% significance level and 5% confidence level 2-tailed to establish the correlation and significance.

The F-test was also carried to check whether there is a relationship between the variables. If F-statistic is above the limit, then it falls in the rejection region and therefore there is no relationship between the variables.

ST. PAUL'S UNIVERSITY

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The purpose of this study was to establish on the environmental factors influencing the performance of SMEs in Machakos County and more specific the Machakos Sub-County, which is the hub of Machakos County. The data received through questionnaires was analyzed, classified and tabulated to get the relevant information into easily readable form. Further presentation was provided by the use of tables and pie charts for easy interpretation. The data was interpreted according to the research objectives and research questions.

4.2 Response Rate

The researcher distributed 34 questionnaires to the respondents. One type of questionnaire was used for all the respondents. The response rate was as follows: out of the 34 questionnaires distributed only 30 questionnaires were returned duly completed. This is 88.2% of the total distribution. The return rate was above the expected prescription of 50% recommended by Mugenda and Mugenda (2003). The results of the analysis above indicate that there was a high response rate and reliability of the findings was credible.

4.3 Demographic Information

The study sought to find out the designation/title of the respondents in relation to performance. According to the findings, 63.33% of the respondents were owner of business and 36.67% of the respondents were and manager of business. Therefore, most of the SMEs were run by the owners but not managers

ST. PAUL'S UNIVERSITY

Table 4. 1: Designation/Title of the respondents

	Frequency	Percentage
Owner of business	19	63.33
Manager of business	11	36.67
Total	**30**	**100.00**

Source: Research findings, 2016

Table 4. 2: Age of the respondents

The study sought to find out the age of the respondents. From the findings, 46.67% of the respondents were aged 31 – 40 years, 26.67% of the respondents were aged 41 – 50 years, 16.67% of the respondents were aged 30 & Below years and 10.00% of the respondents were aged 50 years and above. In other studies conducted in Indonesia, Kristiansen, Furuholt & Wahid (2003) found that there was a significant correlation between age and performance of SMEs.

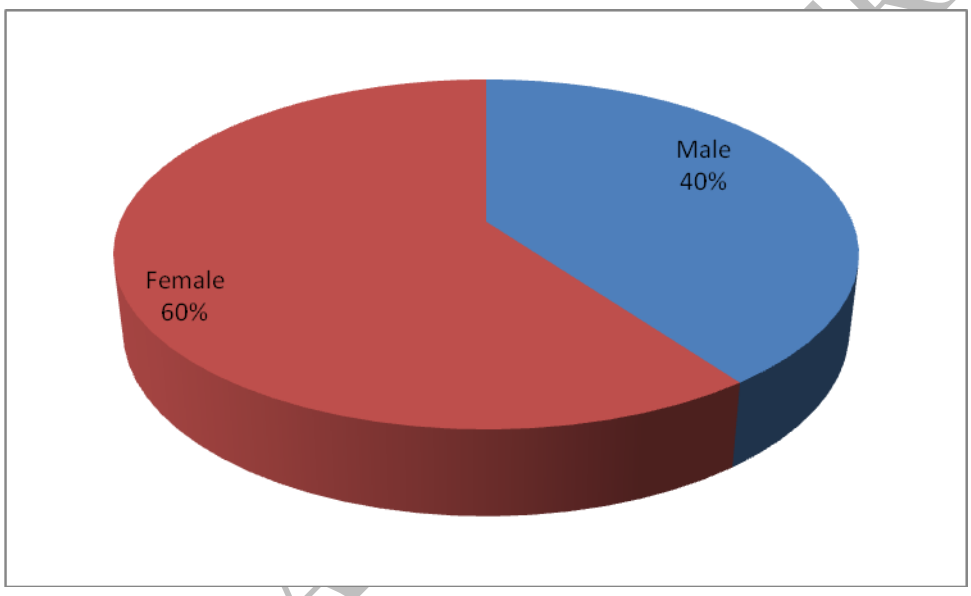
	Frequency	Percentage
30 & Below	5	16.67
31 – 40	14	46.67
41 – 50	8	26.67
50 +	3	10.00
Total	**30**	**100.00**

Source: Research findings, 2016

ST. PAUL'S UNIVERSITY

Figure 4. 1: Gender of the respondents

The study sought to find out the gender of the respondents in relation to performance. According to the findings, 60% of the respondents were female while 40% of the respondents were male.



Source: Research findings, 2016

Table 4. 3: Marital Status of the respondents

The study sought to find out the marital Status of the respondents in relation to performance. From the findings, 40.00% of the respondents were married, 30.00% of the respondents were single, 23.33% of the respondents were separated and 6.67% of the respondents were divorced.

ST. PA RSITY

	Frequency	Percentage
Married	12	40.00
Single	9	30.00
Separate	7	23.33
Divorced	2	6.67
Total	**30**	**100.00**

Source: Research findings, 2016

Table 4. 4: Form of business (SME)

The study sought to find out the form of business (SME) in relation to performance. According to the findings, 56.67% of the respondents indicated that the business was a sole proprietorship, 30.00% of the respondents indicated that the business was a partnership and 13.33% of the respondents indicated that the business was a limited organization.

	Frequency	Percentage
Sole proprietorship	17	56.67
Partnership	**9**	30.00
Limited organization	4	13.33
Total	**30**	**100.00**

Source: Research findings, 2016

ST. PAUL'S UNIVERSITY

Table 4. 5: SMEs start-up Capital

The study sought to find out the SMEs start-up Capital structure in relation to performance. From the findings, 66.67% of the respondents indicated that the SMEs start-up Capital was 400,001-600,000, 20.00% of the respondents indicated that the SMEs start-up Capital was less than 200,000, 10.00% of the respondents indicated that the SMEs start-up Capital was 800,001- 1000,000, 3.33% of the respondents indicated that the SMEs start-up Capital was above 1000,000. This shows that majority of the SMEs started their business with less than a million shillings. Kauffmann (2005), claim the major source of SMEs failure to be shortage of startup capital.

ST. PAUL'S UNIVERSITY

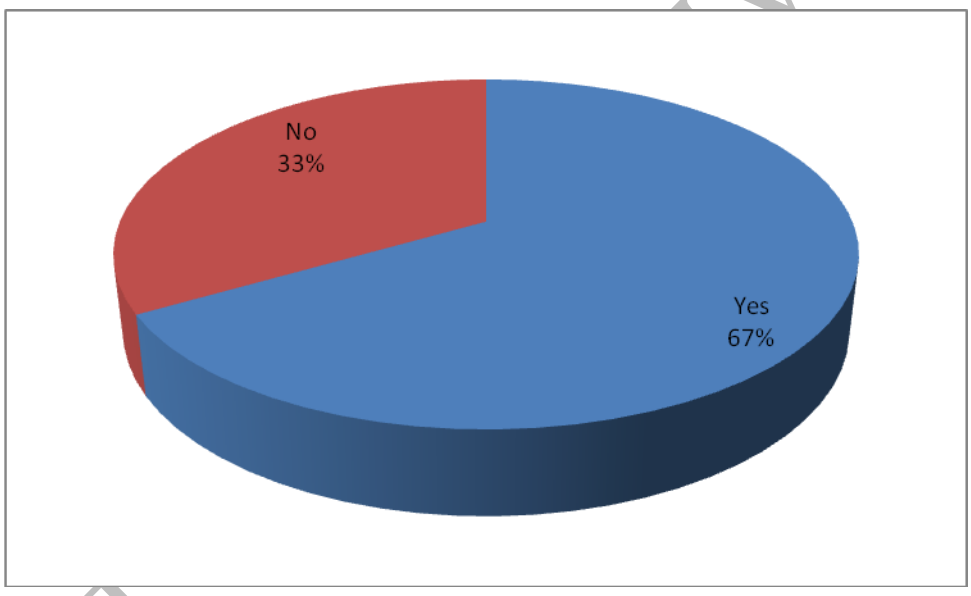
	Frequency	**Percentage**
Less than 200,000	6	20.00
400,001-600,000	20	66.67
800,001- 1000,000	3	10.00
Above 1000,000	1	3.33
Total	**30**	**100.00**

Source: Research findings, 2016

4.4 Technological use and Adoption

The study sought to find out whether the business operations were computerized. According to the findings, 67% of the respondents had computerized their business operations while 33% had not computerized. The study findings show that a great number had computerized their operations. Tidd and Bessant (2009) says that SMEs that encourage innovation by adoption of IT will do well in the market and are more likely to be differentiated from the competitive world since they will stand to be tall

Figure 4. 2: Whether the business operations were computerized



Source: Research findings, 2016

ST. UNIVERSITY

Table 4. 6: Type of machine respondent had bought for the last two years

The study sought to find out the type of machine respondent had bought for the last two years. From the findings, 53.33% of the respondents had bought Electronic Tax Register (ETR), 26.67% of the respondents had bought printing machine and 20.00% of the respondents had bought CCTV machine and hence majority could not evade tax.

	Frequency	Percentage
CCTV machine	6	20.00
Printing machine	8	26.67
Electronic Tax Register (ETR)	16	53.33
Total	**30**	**100.00**

Source: Research findings, 2016

Table 4. 7: Type of technology in use

The study sought to find out the type of technology in use. According to the findings, 60.00% of the respondents indicated that they used internet, 26.67% of the respondents indicated that they used Electronic Money transfer and 13.33% of the respondents indicated that they used Electronic Advertisement. Therefore, the SMEs were in a position to access timely information from the websites and other social networks.

ST. PAUL'S UNIVERSITY

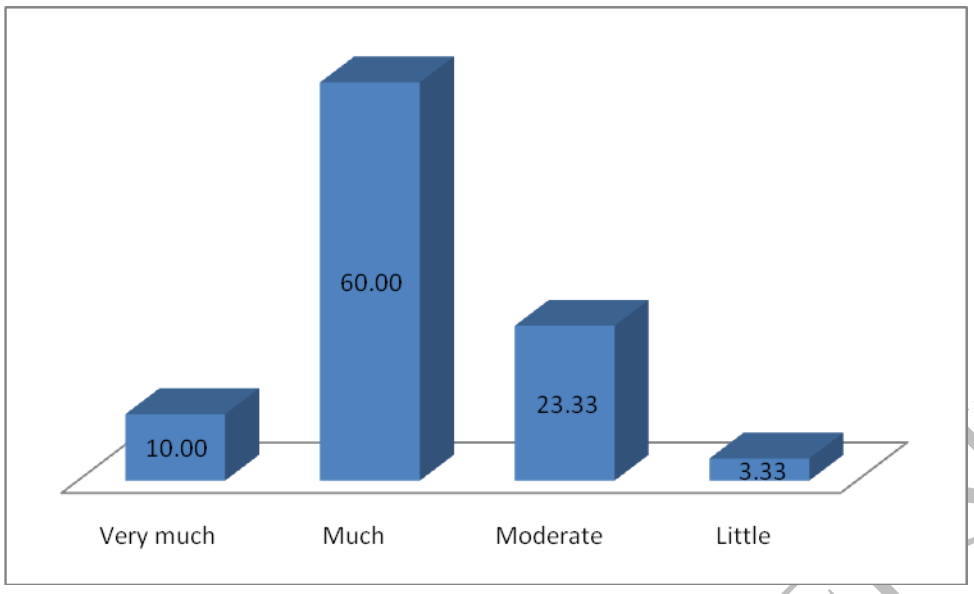
	Frequency	Percentage
Internet	18	60.00
Electronic Money transfer	8	26.67
Electronic Advertisement	4	13.33
Total	**30**	**100.00**

Source: Research findings, 2016

Figure 4. 3: Extent to which technology helped respondents to improve on profits

The study sought to find out the extent the programs helped respondents to improve on business profits. From the findings, 60% of the respondents indicated that the programs helped to improve on business profits much, 23.33% of the respondents indicated that the programs helped to improve on business profits moderate, 10% of the respondents indicated that the programs helped to improve on business profits very much and 3.33% of the respondents indicated that the programs helped to improve on business profits little.

ST. PAUL'S UNIVERSITY

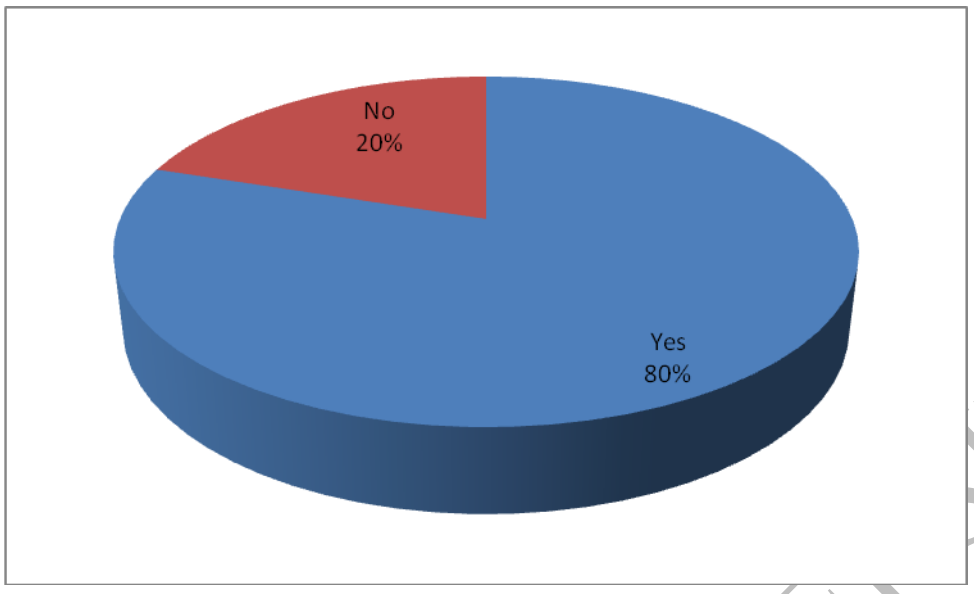


Source: Research findings, 2016

Figure 4. 4: If the respondents had adopted M-Pesa services

The study sought to find out if the respondents had adopted M-Pesa services in the business. According to the findings, 80% of the respondents had adopted M-Pesa services while 20% of the respondents had not adopted M-Pesa services.

ST. PAUL'S UNIVERSITY



Source: Research findings, 2016

Table 4. 8: Amount that money exchanged hands per month through M-Pesa services

The study sought to find out the amount of money that exchanged hands through M-Pesa services at the end of each month. From the findings, 43.33% of the respondents exchanged ksh 601,001-900,000 ksh per month, 33.33% of the respondents exchanged ksh 301,000-600,000 per month , 13.33% of the respondents exchanged ksh 300,000 per month and 10.00% of the respondents exchanged above ksh 900,000 per month .

ST. PAUL'S UNIVERSITY

	Frequency	Percentage
Below 300,000	4	13.33
301,000- 600,000	10	33.33
601,001-900,000	13	43.33
Above 900,000	3	10.00
Total	**30**	**100.00**

Source: Research findings, 2016

4.5 Location of Business

Table 4. 9: Distance of business location relative to the town Central Business Area (CBA)

The study sought to find out the distance of business location relative to the town Central Business Area (CBA). According to the findings, 43.33% of the respondents indicated that the distance of business location was 1-5km, 20.00% of the respondents indicated that the distance of business location was less than 1km, 13.33% of the respondents indicated that the distance of business location was within the CBA, 13.33% of the respondents indicated that the distance of business location was 10-15km and 10.00% of the respondents indicated that the distance of business location was 5- 10km. Therefore majority of the businesses were within the CBA but not more than 5km from the CBA. 23% indicated that the location

ST. PAUL'S UNIVERSITY

did not affect the daily business efficiency performance. North and Smallbon (2000) advocates for businesses in the Central Business Area as compared to businesses in the rural areas which are said to be less creative and innovative in nature.

	Frequency	Percentage
Within the CBA	4	13.33
Less than 1km	6	20.00
1-5km	13	43.33
5- 10km	3	10.00
10-15km	4	13.33
Total	**30**	**100.00**

Source: Research findings, 2016

Table 4. 10: Infrastructural facilities considered to be important around the business premises

The study sought to find out the infrastructural facility which was valued most in the business premises. From the findings, 56.67% of the respondents indicated that the infrastructural facility that they preferred most in the business was electricity, 20.00% of the respondents indicated was tarmac road, 16.67% of the respondents indicated that the infrastructural facilities in the business premises was piped water, 6.67% of the respondents

ST. PAUL'S UNIVERSITY

indicated that the infrastructural facility was dry weather road. The study shows that majority had overhead cost in relation to electricity. Nearness to physical infrastructure means easy access to financial institutions, technological partnership, specialized labour and infrastructure and favourable supply of raw materials (Fullover-Love *et al*; 2006).

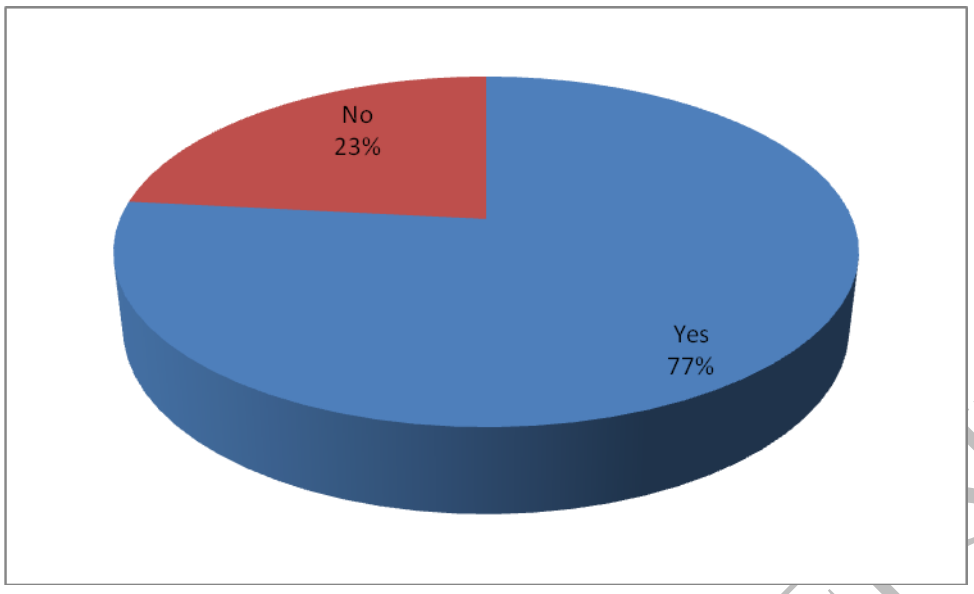
	Frequency	**Percentage**
Tarmac road	6	20.00
Dry weather road	2	6.67
Piped water	5	16.67
Electricity	17	56.67
Total	**30**	**100.00**

Source: Research findings, 2016

Figure 4. 5: If the location affected the daily operational efficiency on business performance

The study sought to find out if the location affected the daily business operational efficiency on performance. According to the findings, 77% of the respondents indicated that the location affected the daily business operational efficiency performance while 23% of the respondents indicated that the location did not affect the daily business operational efficiency performance and hence failure or success could be attributed to location of business

ST. PAUL'S UNIVERSITY

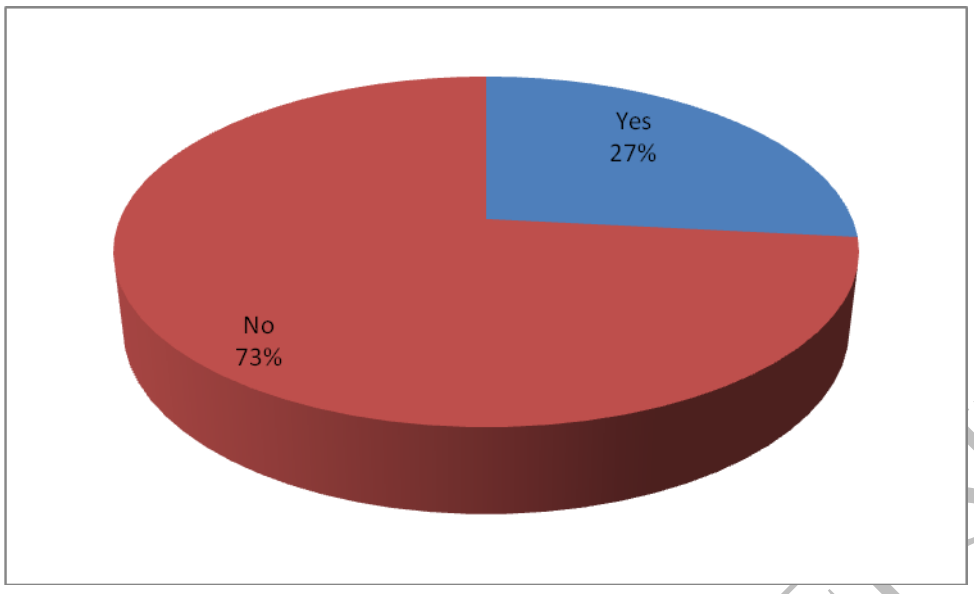


Source: Research findings, 2016

Figure 4. 6: If the respondents intended to transfer the business in the future

The study sought to find out if the respondents intended to transfer the business in the future. From the findings, 73% of the respondents indicated that they did not intend to transfer the business in the future while 27% of the respondents indicated that they intended to transfer the business in the future. This shows that most of the SMEs are comfortable with their current location.

ST. PAUL'S UNIVERSITY



Source: Research findings, 2016

Table 4. 11: Factors respondents considered before locating a business

The study sought to find out the importance of factors respondents considered before siting the business location. According to the findings, the respondents considered security, communication before siting the business location as shown by a mean of 4.85 and 4.71 respectively. In addition, the respondents considered transport cost, county government facilities and proximity to other similar business premises before siting the business location as shown by a mean of 4.35, 4.25 and 3.96 respectively. Moreover, the respondents considered family considerations, rent value and proximity to CBC before siting the business location as shown by a mean of 3.87, 3.84 and 3.65 respectively. Therefore, security is the top priority which SMEs consider to be important and this could be the reason as to why Machakos County Government bought police and inspectorate cars to boost security.

ST PAUL'S UNIVERSITY

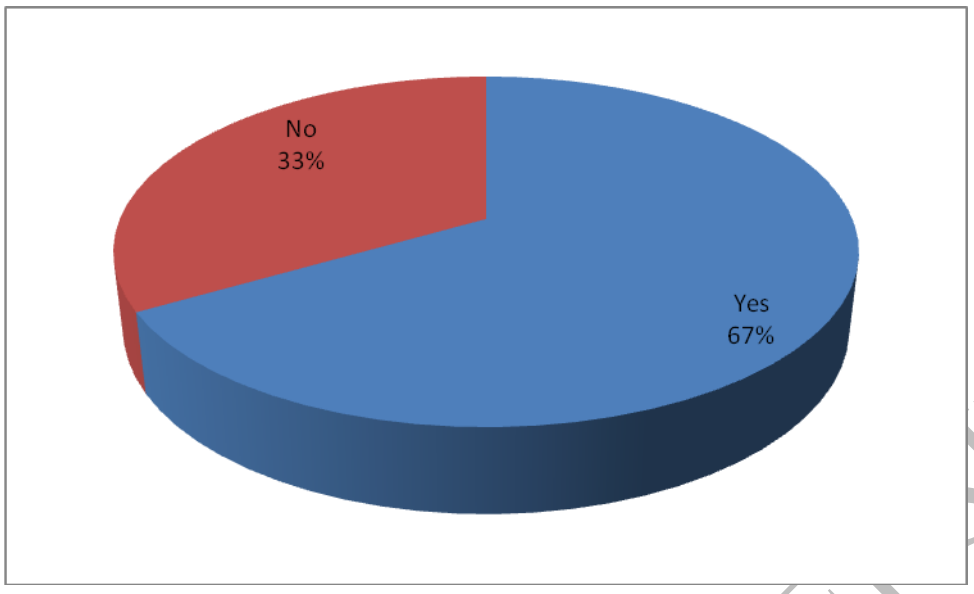
Factor	Mean
Transport cost	4.35
Communication	4.71
Rent Value	3.84
Proximity to CBC	3.65
County government facilities	4.25
Security	4.85
Proximity to other similar business premises	3.96
Family considerations	3.87

Source: Research findings, 2016

4.6 Entrepreneurial Skills and Competence

The study sought to find out if the respondents had formal training on business management. From the findings, 67% of the respondents had formal training on business management while 33% of the respondents did not have formal training on business management. Therefore majority were aware of business management skills required to run a business.

ST. PAUL'S UNIVERSITY



Source: Research findings, 2016

Figure 4. 7: If the respondents had formal training on business management

The study sought to find out the level of the training. According to the findings, 63.33% of the respondents had certificate, 23.33% of the respondents had diploma and 13.33% of the respondents had degree and hence more training was required. According to Fermilab (2009), He found that, the entrepreneurial competencies measured by the level of education, experience of the manager and knowledge of the industry market impacted on the performance of SMEs. Moreover Lyles et al (2004) argued that, the entrepreneurial level of education of the founder of the organization and startup experience had a positive impact on business performance

ST. PAUL'S UNIVERSITY

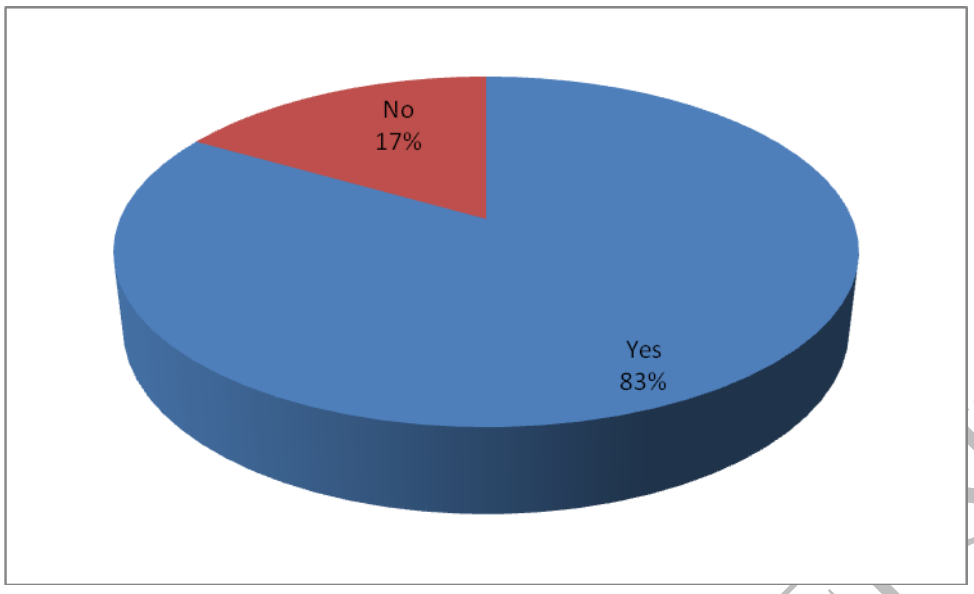
	Frequency	Percentage
Certificate	19	63.33
Diploma	7	23.33
Degree	4	13.33
Total	**30**	**100.00**

Source: Research findings, 2016

Figure 4. 8: Whether formal training had influenced the business performance in relation to return on sales

The study sought to find out whether formal training had influenced the business performance in relation to return on sales. From the findings, 83% of the respondents indicated that formal training had influenced the business performance in relation to return on sales while 17% of the respondents indicated that formal training had influenced the business performance in relation to return on sales and hence the need for more county seminars to boost the economy of the area.

ST. PAUL'S UNIVERSITY



Source: Research findings, 2016

Table 4. 12: Extent that formal training had influenced the business performance in return of sales

The study sought to find out the extent that formal training had influenced the business performance in return to sales. According to the findings, 66.67% of the respondents indicated that that formal training had influenced the business performance in return to sales moderately, 23.33% of the respondents indicated that that formal training had influenced the business performance in return to sales little and 10.00% of the respondents indicated that that formal training had influenced the business performance in return to sales much and hence more training was required.

ST. PAUL'S UNIVERSITY

	Frequency	Percentage
Very much	3	10.00
Moderate	20	66.67
Little	7	23.33
Total	**30**	**100.00**

Source: Research findings, 2016

Table 4. 13: Business records kept that facilitated the daily operation

The study sought to find out the business records kept that facilitated daily operation. From the findings, 56.67% of the respondents kept a cash book, 26.67% of the respondents kept a receipt book, 13.33% of the respondents kept a ledger book and 3.33% of the respondents kept a daily sales and hence they could track their daily operational expenses.

	Frequency	Percentage.
Ledger book	4	13.33
Daily sales	1	3.33
Cash book	17	56.67
Receipt book	8	26.67
Total	**30**	**100.00**

Source: Research findings, 2016

ST. PAUL'S UNIVERSITY

4.7 SMEs operating environment and Legislations

Table 4. 14: Rating of SMEs operating environment and legislation to overall performance

The study sought to find out the rating of SMEs operating environment and legislation to overall performance. According to the findings, renewing permit and renewing license was very important as shown by a mean of 4.72 and 4.59 respectively. In addition, business permit and obtaining license was important as shown by a mean of 4.37 and 4.17 respectively. Moreover, county laws and county inspectorate (Askaris) was somewhat important as shown by a mean of 3.65 and 3.63 respectively.

	Mean
Obtaining license	4.17
Renewing license	4.59
Business permit	4.37
Renewing permit	4.72
County inspectorate (Askaris)	3.63
County laws	3.65

Source: Research findings, 2016

Table 4. 15: SMESs Operating Environment and Legislation

ST. PAUL'S UNIVERSITY

The study sought to find out the respondents agreement level on SME operating environment and legislation statements. From the findings, the respondents strongly agreed that the county government has provided conducive environment to conduct business as shown by a mean of 4.63. In addition, the respondents agreed that the county government has helped in improving business operations, the county government organizes training seminars for SMEs in the sub county and bureaucracy in processing business document has affected business performance as shown by a mean of 4.48, 4.25 and 4.21 respectively. Moreover, the respondents were neutral that the county government officials are friendly in handling business matters and unfriendly business county laws have affected business performance as shown by a mean of 3.94 and 3.37 respectively. This might be the reason as to why investors want to invest in machakos town due to a friendly environment.

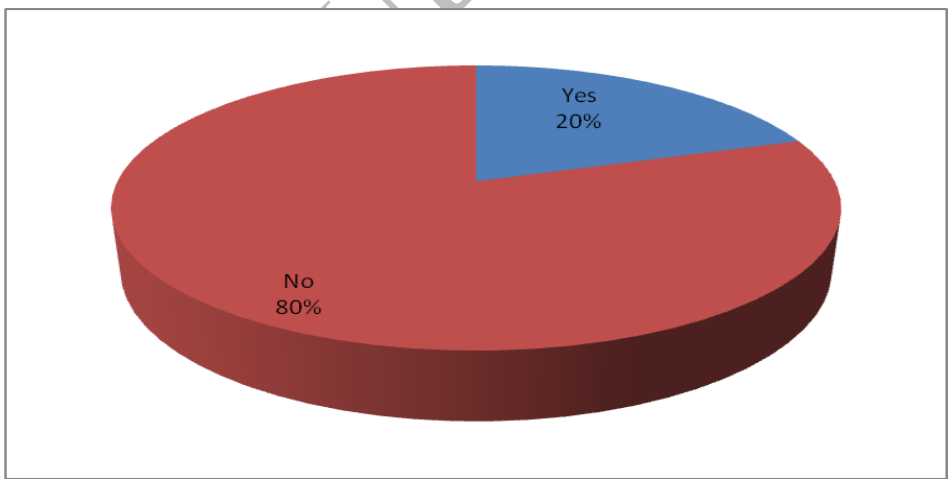
	Mean
Bureaucracy in processing business document has affected business performance	4.21
Unfriendly business county laws has affected business performance	3.37
The county government has provided conducive environment to conduct business	4.63
The county government official are friendly in handling business matters	3.94
The county government has helped in improving business operations	4.48
The county government organizes training seminars for SMEs in the sub county	4.25

Source: Research findings, 2016

ST. PAUL'S UNIVERSITY

Figure 4. 9: If the respondents were aware of any legislation that had been passed by county government of Machakos that affected the business annual profitability

The study sought to find out if the respondents were aware of any legislation that had been passed by county government of Machakos that affected the business annual profitability. According to the findings, 80% of the respondents were not aware of legislation that had been passed by county government of Machakos that affected the business annual profitability and 20% of the respondents were aware of legislation that had been passed by county government of Machakos that affected the business annual profitability. This might be the reason to increased demonstrations due to lack of public participation in drafting of by laws in the county. This is supported by work by Garikai (2000), who argued that most of the problems encountered by business owners include the issue of legal framework. All the SMEs had renewed the business permit.



Source: Research findings, 2016

L'S UNIVERSITY

Table 4. 16: If the respondents had renewed the business permit

The study sought to find out if the respondents had renewed the business permit. From the findings, all the respondents had renewed the business permit and hence law binding citizens in relation to renewal of business permit.

	Frequency	Percentage
Yes	30	100
Total	**30**	**100**

Source: Research findings, 2016

Table 4. 17: Amount paid for the permit per year

The study sought to find out the amount paid for the permit per year. According to the findings, 90% of the respondents had paid 15,000 for the permit per year and 10% of the respondents had paid 10,700 for the permit per year. This shows the county applies discriminative pricing.

Amount(ksh)	Frequency	Percentage
10,700	3	10
15,000	27	90
Total	**30**	**100**

Source: Research findings, 2016

ST. PAUL'S UNIVERSITY

4.8 Regression Analysis

The researcher used a multivariate regression model to establish the relationship between independent variable (technology adoption, location, and entrepreneurial competence, legal and regulatory framework) and the dependent variable which was performance of SMEs. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions. The multivariate regression model for this study was;

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where **Y** was performance of SMEs, $\mathbf{X_1}$ was Technology, $\mathbf{X_2}$ was Location, $\mathbf{X_3}$ was Entrepreneurial skills and Competence, $\mathbf{X_4}$ was Business friendly legislation.

Table 4. 18: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.8895	0.7912	0.7364	0.7296

Source: Research findings, 2016

R-Squared is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability.

The adjusted $R^{2,}$ also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 73.6% of the changes in the performance of SMEs could be attributed to the combined effect of the predictor variables.

Table 4. 19: **Summary of One-Way ANOVA results**

The Anova table also shows regression sum of squares of 12.223 out of total variation of 115.099 also pointing to the fact that about 10.6% variation in the dependent variable is explained by the model. In addition, the significance value of the F-statistical is less than 0.05 which means that the variation in the dependent variable explained by the model is not by chance. The significance value of 0.03 indicates that the regression relationship was highly significant in predicting how business friendly legislation and regulatory framework, entrepreneur competence, technology adoption and location influenced performance of SMEs.

AUL'S UNIVERSITY

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.223	4	3.112	6.937	0.03
	Residual	92.876	131	.641		
	Total	115.099	135			

Source: Research findings, 2016

4.21 F-Test

F- Test was carried out to find if there existed a relationship between the four independent variables and the one dependent variable. The F value is also employed in testing whether statistical models have been aligned to a set of data. The F critical at 5% level of significance was 6.937 and since F calculated is greater than the F critical (value = 2.3719), this shows that the overall model was significant as a predictor of performance of SMEs.

4.9 Pearson's Correlation

Table 4. 20: Correlation Matrix

Pearson's correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. From the findings, it was clear that there was a positive correlation between performance of SMEs and location as shown by a correlation figure of 0.626, it was also clear that there was a positive correlation between performance of SMEs and entrepreneurial competence with a correlation figure of 0.485, it was also clear that there was also a positive correlation between performance of SMEs and Legal and regulatory framework with a correlation value of 0.390, it was also clear that there was also a positive correlation between performance of SMEs and technology adoption with a correlation value of 0.267.

This shows that there was positive correlation between performance of SMEs and the variables. All these variables are important in enhancing the performance of SMEs.

The Pearson correlation in the table above indicates that there is no significant correlation between the independent variables. That is, most of the correlation coefficients are less than

ST. PAUL'S UNIVERSITY

0.5 hence no problem of multicollinearity. This means that all the four predictor variables could be used.

		Perf of SMEs	Tech adopt	Entrepre comp	Legal and reg	Location
Perf of SMEs	Pearson Correlation	1				
	Sig. (2-tail)					
Tech adoption	Pearson Correlation	0.267	1			
	Sig. (2-tail)	0.019				
Entre comp	Pearson Correlation	0.485	0.261	1		
	Sig. (2-tail)	0.018	0.109			
Legal & reg	Pearson Correlation	0.390	0.071	0.109	1	
	Sig. (2-tail)	0.035	0.666	0.507		
Location	Pearson Correlation	0.626	0.044	0.297	0.132	1
	Sig. (2-tail)	0.037	0.791	0.066	0.423	

Source: Research findings, 2016

Table 4.23: **Regression coefficients of the relationship between performance of SMEs and the four predictive variables**

ST. PAUL'S UNIVERSITY

As per the SPSS generated table below, the equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$) becomes:

$Y= 1.492 + 0.596X_1 + 0.883X_2 + 0.702X_3 + 0.617X_4$

The regression equation above has established that taking all factors into account (legal and regulatory framework, entrepreneur competence, technology adoption and location) constant at zero performance of SMEs will be 1.492. The findings presented also show that taking all other independent variables at zero, a unit increase in the legal and regulatory framework would lead to a 0.617 increase in the scores of performance of SMEs and a unit increase in the scores of entrepreneur skills and competence would lead to a 0.702 increase in the scores of performance of SMEs. Further, the findings shows that a unit increases in the scores of technology adoption would lead to a 0.596 increase in the scores of performance of SMEs. The study also found that a unit increase in the scores of location would lead to a 0.883 increase in the scores of performance of SMEs.

At 5% level of significance, legal and regulatory framework had a 0. 032 level of significance; entrepreneur competence showed a 0.027 level of significance, technology adoption had a 0.038 level of significance while location showed 0.019 level of significance hence the most significant factor is location.

Overall, there was a positive and significant relationship between all the independent variables and the dependent variable. Location had the greatest effect on the performance of SMEs, followed by entrepreneur competence, then legal and regulatory framework while

ST. PAUL'S UNIVERSITY

technology adoption had the least effect to the performance of SMEs. All the variables were significant ($p<0.05$).

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	***Std. Error***	***Beta***	***T***	***Sig.***
1	*(Constant)*	1.492	0.298		4.218	0.044
	Legal & reg.	0.617	0.178	0.326	5.374	0.032
	Enterpre comp	0.702	0.171	0.421	4.963	0.027
	Tech adopt	0.596	0.563	0.123	3.916	0.038
	Location	0.883	.0725	0.384	4.115	0.019

Source: Research findings, 2016

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presented the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn were focused on addressing the objective of the study.

5.2 Summary

The small businesses are prone to risks like theft, fiducially and management risk. Some SMEs in Machakos County have not grown for the last decade despite some flourishing in the same environment. They have the same number of employees, they have decreased turnovers or even some are ending to closure while others have opened new branches and hence the need to conduct the study and establish some of the main environmental factors that could have contributed to failure of the businesses to grow. The study was guided by the objectives related to technology adoption, locational issues, entrepreneurial competence, and how legal and regulatory framework influences the performance of SMEs in Machakos County. The study used descriptive survey to examine the factors influencing the performance of SMEs in Machakos County. Data was gathered from owners or managers of hardware's in Machakos Sub County. Stratified random sampling was adopted to select 34 SMEs from a target population of 63 SMEs.

ST. PAUL'S UNIVERSITY

5.2.1 The extent to which technology adoption influence the performance of SMEs

The study found that most of the SMEs had adopted technology in their business operations. And computers played a vital role in enhancing performance of SMEs. 67% of the respondents had computerized their business operation while 33% had not computerized. Most had bought Electronic Tax Register (ETR) within the last two years and they used internet (60%) which helped to improve on business performance.

5.2.2 The outcome to which location influence the operational performance of SMEs

The study found that most of the SMEs were close to the CBA but not more than 5km and 77% indicated location affected the daily operational efficiency on performance. 23% indicated that the location did not affect the daily business efficiency performance .This study established that the most preferred infrastructural facility around the business premises was electricity and the location of a business affected the business performance. Majority did not intend to transfer the business in the future and they mostly considered security before siting the business location. They also considered communication, transport cost, county government facilities and proximity to other similar business premises before siting the business location.

5.2.3 The extent to which the level of entrepreneur's competence influence the performance of SMEs

The study found that 67% the respondents had formal training while 33% did not have formal training on business management and 63% of the respondents had a certificate and hence more training was required. The findings established that the formal training had

ST. PAUL'S UNIVERSITY

influenced the business performance in relation to return on sales. In addition, the formal training had influenced the business performance moderately and majority of the SMEs kept a cash book.

5.2.4 The extent to which legal and regulatory framework of county by law influence performance of SMEs

The study found that the renewing permit and renewing license was very important. In addition, business permit and obtaining license was somewhat important. The respondents strongly agreed that the county government has provided conducive environment to conduct business. In addition, the respondents agreed that the county government had helped in improving business operations, the county government organizes training seminars for SMEs in the sub county and bureaucracy in processing business document had affected business performance. According to the findings, 80% of SMEs were not aware of legislation that had been passed by county government of Machakos that affected the business annual profitability.

5.3 Conclusion

In tandem with the specific objectives of the study, the researcher concludes that the location of the business to be the major determinant factor that affected the SMEs business performance. A unit increase in the scores of location would lead to a 0.883 increase in the scores of performance of SMEs. Therefore, there is a strong positive relationship between the location of SMEs and overall performance. Based on the study, majority considered security, communication, transport cost, county government facilities and proximity to other similar business premises before siting the business location. The closer to the CBA the

ST. PAUL'S UNIVERSITY

better the performance and the Location of Jam Manufacturing Industry (Kenya Orchards Limited) in the rural area 10 years ago might have facilitated to its closure since it was not close to the CBA.

In addition, the study concludes that SMEs managers had certificate on business management and hence the managerial skills should be improved to realize profits and improve efficiency in the sector. They seem to be having low skills that is not helping their business. Based on the study, the idea of all members of county assembly wards to have a diploma as the minimum entry point to county assembly is recommendable as recommended by the electoral commission of Kenya since they make legislations related to business.

Moreover, the study concludes that most SMEs had computerized their business operations and hence a certain level of technology adoption appears to be a pre-requite for SMEs survival so as to compete globally and sustain innovation. Therefore, it is important for the SMEs to abolish all hand written receipts and embraces technology in all its operation and adopts such networks so as to help them in daily operation and help reduce corruption in matters related to hand written receipts.

The study concludes that the counties by laws were hindrance to SMEs performance. This might be the main reason to increased demonstration at county levels due to poor public participation in Kenya. Majority at 80% were not aware of legislation that had hence the counties have done little as it pertains to SMEs public participation in drafting of by-laws even though the county government had provided conducive environment to conduct business. The county government had helped in improving business operations, organizing

ST. PAUL'S UNIVERSITY

training seminars for SMEs in the sub county even though bureaucracy in processing business document affected business performance.

5.4 Limitation of the Research

This research was limited by number of constraint in relation to getting of information to accomplish a comprehensive research work and therefore it doesn't involve all SMEs in Machakos Sub County. In addition, some managers were reluctant in giving out information for the fear of victimization especially by top management as it were viewed as leaking information to competitors ,exposing company secrets or even as a whistle blowing technique . The study only covered SMEs located in Machakos Sub County since the researcher was limited by time. Moreover, the managers or owners of the SMEs might have given information on what the situation must be on the ground instead of giving the situation as it is. The researcher used both closed and open ended questions to curb the issue of unfaithfulness and supplemented the given information by use of secondary data. This study also faced challenges in collection of data since the county government was undertaking major construction work which affected the daily performance of a business in one way or another.

5.5 Recommendations

5.5.1 County Government Recommendations

The study recommends the the county government to automate all its operations and to invest more heavily in technology. This will help to improve the performance of the

ST. PAUL'S UNIVERSITY

business in terms of revenue collection in the county. The managers should learn how to use the new technology especially in advertisement and record keeping.

The county government should remain the overall overseer of physical infrastructure in each county in promoting a smooth and efficient government. The business need to be located near infrastructure and near customers. SMEs owners should consider the location of business since it affects the performance of business. The owners should put in mind communication, easy access to raw materials and transport when choosing the site of a business.

The study recommends the government to establish SMEs specific training based on county competitiveness and entrepreneur skills. The county government should provide training for SMEs and members of County Assembly Wards especially in management of ward development funds. Business owners should keep the right documents in statements. This will help especially when they need loan from financial institutions.

5.5.2 County Government recommendations

The county government should allow public participation before drafting and implementing of county by laws as recommended by laws governing devolved system of government so as to reduce resistance and demonstration in relation to adoption of county by-laws. SMEs should be made aware of legislation that has been passed by county government. In addition, there is need for each county government to formulate its own policies based on the specific county's economic competitiveness. The county government should make the process of opening a new business easy to encourage many people to open SMEs.

ST. PAUL'S UNIVERSITY

Based on the study, the idea of all members of county assembly wards to have a diploma as the minimum entry point to county assembly is recommendable as recommended by the electoral commission of Kenya since they make legislations related to SMEs,

5.5.3 Recommendation for Further Research

The study focused on the factors influencing the performance of SMEs in Machakos County and more specific the Machakos Sub-County. Another study should be done in the whole of Machakos County to see if the same findings will be found. Another study need to be done in other counties and findings compared to those of Machakos County.

ST. PAUL'S UNIVERSITY

References

Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*,*39*(6), 215-228.

Albaum, G., Duerr, E., & Strandskov, J., (2005). *International Marketing and Export Management,* Prentice Hall, London.

Alila, O., & Ove, P. (2011). *Negotiating social space: East African micro enterprises.* African World Press

Amyx, C. (2005). Small business challenges–The perception problem: Size doesn't matter. *Washington Business Journal*, *3*(4).

Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V., (2011). Small vs. Young Firms across the World. *Policy Research Working Paper*, *5631*.

Amaratunga, D., & Baldry, D. (2002). Moving from performance measurement to performance management. *Facilities, 20*(5/6), 217-223.

Barua, A. (2011). Information Technologies and business value: An analytic and empirical investigation. *Information Systems Research, 6*(1), 3–23.

Bennett, R., & Smith, C., (2002). Competitive conditions, competitive advantage and the location of SMEs. *Journal of Small Business and Enterprise Development* 9(1), 73-86.

Unit, E. I. (2010). SMEs in Japan. A new growth driver. *The Economist*, 19.

Fuller-Love, N., Midmore, P., Thomas, D., & Henley, A. (2006). Entrepreneurship and rural economic development: a scenario analysis approach. *International Journal of Entrepreneurial Behavior & Research*,*12*(5), 289-305.

Gakure, R., & Amurle, G. (2013). Strategic planning practices in ICT SMEs in Kenya: What other SMEs can learn. *Prime Journal of Social Science*,*2*(6), 336-349.

Garikai, B. (2000). *Issues Note Prepared by the UNCTAD Secretariat for the 1st Meeting of Intergovernmental Preparatory Committee for the 3rd United Nations Conference on the Least Developed Countries*. Geneva

Ghatak, S. (2010). Micro, small and medium enterprises (MSMEs) in India: an appraisal. *Journal of EOFEMP, 2 (5), pp: 1, 19.*

Giovanni, F., & Mario, A. (2013). Small company attitude towards ICT based solutions: some key-elements to improve it. *Educational Technology & Society*, *2*(3) 37–49.

ST. PAUL'S UNIVERSITY

Ghimire, B., & Abo, R. (2013). An empirical investigation of Ivorian SMEs access to bank finance: Constrainingfactors at demand-level. *Journal of Finance and Investment Analysis, 2*(4), 29–55.

Global Entrepreneurship Monitor (GEM) (2004). Women and Entrepreneurship. Center for Women's leadership. Banson College, USA.

Green, N. (2011). Personas of E-commerce adoption in small businesses in New Zealand. *Journal of Electronic Commerce in Organizations*, *4*(3), 17–45.

Kauffmann, C. (2005). Financing SMEs in Africa .*Journal of Policy Insights*, 20(7), pp.5-7.

Kala, S. S., & Guanghua, W. (2010). Firm location choice in cities: Evidence from China, India, and Brazil. *China Economic Review*, 21,113–122.

Kayongo, P. (2005). Financing and Entrepreneurship Success in Selected Small Scale Business Enterprises in Kampala district. *Makerere University Business School: Unpublished MBA Dissertation*
Kenya National buereau of Statistics

Kobe, K. (2007). Federal Procurement Data System. *Small and Medium Forest Enterprises: Instruments of change in the developing world*. University of British Columbia.

Kristiansen, S., Furuholt, B., & Wahid, F. (2003). Internet café entrepreneurs: Pioneers in information dissemination in Indonesia. *The International Journal of Entrepreneurship and Innovation*, *4*(4), 251-263.

Longenecker, D. (2006). *Small business management: An Enterpreneurla Empasis,* London: Thomson South Western.

Lyles M., Saxton T., & Watson K. (2004). Venture Survival in a Transitional Economy. J. Manage., 30(3): 351-375.

Mbwesa, K. (2006). Introduction to management research, a student. Jomo Kenyatta Foundation: Nairobi, Kenya.

Mike, A. (2010). Visual workplace: How you see performance in the planet

Mingaine, L. (2013). Challenges encountered by Principals during implementation of ICT in public secondary schools, Kenya. *Journal of Sociological Research*, *4*(2) 1–19.

Mittelstaedt, J., Ward, W., & Nowlin, E., 2006. Location, industrial concentration and the propensity of small US firms to export. *International Marketing Review* 23(5), 486-503.

ST. PAUL'S UNIVERSITY

Mitullah, W. (2003). Paper Presented at the Urban Research Symposium on Urban Development for Economic Growth and Poverty Reduction December 15 –17. *Street Trade in Kenya: The contribution of Research in Policy Dialogue and Response.*Washington, DC.

Mugenda, O., & Mugenda, A., (2003). *Research Methods: Quantitative and Qualitative Approaches.* Nairobi, Acts Press.

Mahembe, E. (2011). Literature review on small and medium enterprises' access to credit and support in South Africa. *Underhill Corporate Solutions. National Credit Regulator (NCR): Pretoria, South Africa*.

Nieman, G. (2006). *Small Business Management: A South African Approach*. Pretoria: Van Schaik Publishers.

North, D., & Smallbone, D., (2000). The innovativeness and growth of rural SMEs during the 1990s. Regional Studies 34(2),145-157.

Obanda W. (2011). Small and medium enterprises (SMEs) and public procurement contract in developing countries. Kampala: Longhorn publishers.

Pigou, A. C. (1932). The Economics of Welfare. London: Macmillan and Co.

Ritchie, B., & Brindley, C. (2010). ICT adoption by MSEs: Implications for relationships and management. *New Technology, Work and Employment*, *20*(3), 205–217.

Robb, A., & Wolken, J. D. (2002). Firm, owner, and financing characteristics: Differences between female-and male-owned small businesses.

Rowe,J.(2008).SMEinBritain.PublishedinKnowledatSMU.http://knowledge@SMU.edu.sg/artice

Sakai, K. (2012). Enhancing Manufacturing Performance with ERP Systems. *Information Systems Management*, *17*(3), 1–13.

Senge, P. (2002). The Fifth Discipline; The art and practice of the learning organization, *Means of improving staff competencies*. London, Random House. *Small and Medium Enterprises in Development Countries*, UNIDO, Vienna, a seminal

Thong, J., & Yap, C. (2011). CEO characteristics, organizational characteristics and information technology adoption in small business. *International Journal of Management Science*, *23*(4), 429–442.

Shin, N. (2001). The Impact of Information Technology on Financial Performance: The Importance of Strategic Choice. *European Journal of Information Systems*. 10: 227-236

ST. PAUL'S UNIVERSITY

Stiglitz, J. and Weiss, A. (1981). Credit Rationing in imperfect Information, *American Economic Review*, Vol. 71 Issue 3

Stonehouse, G. & Pemberton, J. (2002). Strategic planning in SMEs – some empirical findings. *Management Decision*, Vol. 40 (9), pp.853 - 861

Tarkman, P. (2009) .The critical success factors of business process management. International Journal of Information Management, 30(2), 125-134

Wanjohi, A. and Mugure, A. (2008). Factors affecting the growth of MSEs in rural areas of Kenya: A case of ICT firms in Kiserian Township, Kajiado District of Kenya.

Wanjohi, A. (2009). Challenges Facing SMEs in Kenya. *Retrieved October*, *10*, 2015.

Tidd, J., & Bessant, J. (2009). Managing Innovation: Integrating Technological, Market and Organizational Change (4th ed.). West Sussex: John Wiley and Son Ltd.

Venkatesh, V., & Morris, M. (2000). Why Don't Men Ever Stop to Ask for Directions? Gender, Social Influence, and Their Role in Technology Acceptance and Usage Behavior. *MIS Quarterly*, *24*(1), 115–139. http://dx.doi.org/10.2307/3250981

Vilaseca, J. (2013). *Las TIC y las transformaciones de la empresa catalane*. Barcelona: Foundation for the Open University of Catalonia.

Wymenga, P., Spanikova, V., Derbyshire, J., & Barker, A. (2011). Are EU SMEs recovering from the crisis? Annual Report on EU Small and Medium sized Enterprises 2014/2015, Rotterdam, Cambridge.

Zahra, S. (2004). The changing rules of global competitiveness in the 21st century. *Academy of Management Executive* 13/1 (January):36-42.

ST. PAUL'S UNIVERSITY

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Re: Factors that influence SMEs performance in Machakos County

My Name is Stephen Mutua, a **Master of Business (Strategic Management and Leadership Option)** student at St. Paul's University. In partial fulfillment of the requirement of Master of Business, I am conducting a study on the environmental factors that influence SMEs performance in Machakos County. I would like to ask you some questions and I assure you that the responses you will give will be treated as strictly confidential and at no instance will your name be mentioned in this research whatsoever. Lastly, the information given will only be used for this research work only.

Your assistance in facilitating the same will be highly appreciated. A copy of this research paper will be available to you upon request. Thank you in advance.

Yours faithfully,

Stephen Muinde Mutua

MBA/MKS/6299/13.

ST. PAUL'S UNIVERSITY

APPENDIX II: QUESTIONNAIRE FOR MANAGERS/OWNERS OF HARD-WARE SHOPS

Date ___ ___/___ __/ 2015

My Name is Stephen Mutua, a Master of Business (Strategic Management and Leadership Option) student at St. Paul's University. In partial fulfillment of the requirement of Master of Business, I am conducting a study on the environmental factors that influence SMEs performance in Machakos County. Your contribution in answering this questionnaire is critical and highly appreciated for the success of this study. This study is only for academic purposes and remains confidential therefore do not indicate your name or any other identification detail on this questionnaire.

INSTRUCTIONS:

- Fill only one set of the questionnaire per individual.
- Please answer each question as completely and clearly as possible by ticking appropriately on only one answer (unless otherwise advised) from the choices given or writing your response as appropriate in the space provided.
- Please complete each section as instructed do not write your NAME on the questionnaire. All the information in this questionnaire will be kept confidential.

Section A: Demographic Information (Tick or write where necessary)

1. Designation/Title
   a) Owner of business □
   b) Manager of business □

2. Age of the respondent
   a) 30 & Below □
   b) 31 - 40 □
   c) 41 – 50 □
   d) 50 + □

3. Gender: Male □ Female □

ST. PAUL'S UNIVERSITY

4. Marital Status:
    a. Married □
    b. Single □
    c. Separated □
    d. Divorced □

5. (i) what is the form of business (SME)
    a) Sole proprietorship □
    b) Partnership □
    c) Limited organization □

(ii) SMEs start-up Capital (Kshs)
    a) Less than 200,000 □
    b) 400,001-600,000 □
    c) 800,001- 1000,000 □
    d) Above 1000,000 □

SECTION B: Technology use and Adoption

6. (i) Is your business operations computerized?

□ Yes □ No

If yes, what type of machine have you bought for the last two years?
    a) CCTV machine □
    b) Printing machine □
    c) Electronic Tax Register (ETR) □
    d) Other specify □
    e) None □

7. (a)Type of technology in use
    a) Internet □

ST. PAUL'S UNIVERSITY

b) Electronic Money transfer □

c) Electronic Advertisement □

d) None □

b) If yes to 8 (a) above, to what extent has these programs helped you improve on profit performance?

a. Very much (5)

b. Much (4)

c. Moderate (3)

d. Little (2)

e. Very little (1)

8. i) Have you adopted M-Pesa services in your business?

a) Yes □

b) No □

ii) If yes to 7 (i) above, how much does money exchange hands per month (Ksh)?

a) Below 300,000 □

b) 301,000- 600,000 □

c) 601,001-900,000 □

d) Above 900,000 □

Section C: Location of Business

9. How close is your business location relative to the town Central Business Area (CBA)

a) Within the CBA □

b) Less than 1km □

c) 1-5km □

ST. PAUL'S UNIVERSITY

d) 5- 10km □

e) 10-15km □

f) 15- 20m □

g) More than 20km □

10. What Infrastructural facility do you consider most important in the business premises

a) Tarmac road □

b) Dry weather road □

c) Piped water □

d) Electricity □

11. Does the location affect your business daily operational efficiency on performance?

Yes □ No □

12. Do you intend to transfer your business in the future?

Yes □ No □

13. In the order of importance which factors did you consider before siting your business location? 4- Very Important 3- Important 2- less important 1- Not important

Factor		1	2	3	4
	Transport cost				
	Communication				

ST. PAUL'S UNIVERSITY

	Rent Value				
	Proximity to CBA				
	County government facilities				
	Security				
	Proximity to other similar business premises				
	Family considerations				

Section D: Entrepreneurial skills and Competence

14. i) Do you have any formal training on business management?

□ Yes □ No

ii) If yes, state the level of education training

a) Certificate □

b) Diploma □

c) Degree □

d) Other, Specify_____

15. Do you think your formal training has influenced the performance of your business in relation to return on sales?

□ Yes □ No

ST. PAUL'S UNIVERSITY

16. If yes to 16(i) above, to what extent? Tick (√) one.

a) Very much □

b) Moderate □

c) little □

d) very little □

17. Business records kept at any age of the business that most facilitates the daily operation

a) Ledger book □

b) Daily sales □

c) Cash book □

d) Receipt book □

SECTION E: SMEs Business friendly Legislations

13. Using the scale provided below, how do you rate SMEs operating environment and legislation to overall performance?

5 – Very important

4 – Somewhat important

3 – Neutral

2 – Partially unimportant

1 – Very unimportant

		1	2	3	4	5
	Obtaining license					

ST. PAUL'S UNIVERSITY

	Renewing license					
	Business permit					
	Renewing permit					
	County inspectorate (Askaris)					
	County laws					

14. Use the following statements on SME operating environment and legislation to tick where appropriate,

SMESs Operating Environment and Legislation

		1	2	3	4
		Totally not agree	**neutral**	**agree**	**Strongly agree**
1.	Bureaucracy in processing business document has affected business performance				
2.	Unfriendly business county laws has affected business performance				
3.	The county government has provided conducive				

ST. PAUL'S UNIVERSITY

	environment to conduct business					
4.	The county government official are friendly in handling business matters					
5.	The county government has helped in improving business operations					
6.	The county government organizes training seminars for SMEs in the sub county					

18. a) Are you aware of any county by law that has been passed by county government of Machakos that affect your performance in terms of annual profits?

Yes □ No □

b) Have you renewed your business license? Yes □ No □

19. How much do you pay per year? Ksh._____

Thank you for taking time to complete this questionnaire!!!

ST. PAUL'S UNIVERSITY