INFLUENCE OF BUSINESS STRATEGIES AND INFORMATION SYSTEMS
ON THE PERFORMANCE OF TOP 100 SMEs IN KENYA

BY

MUEMA, MARK MAKUTHU

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR AWARD OF THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION OF THE UNIVERSITY OF NAIROBI

2016
DECLARATION

This project is my original work and has not been presented for the award of a degree in this University or any other Institution of higher learning for examination.

Signature ………………………………………. Date ……………………………

MUEMA MARK MAKUTHU

D61/68110/2011

This project has been submitted for examination with my approval as the University Supervisor.

Signature ………………………………………. Date ……………………………

PROF. BITANGE NDEMO
DEDICATION

I humbly dedicate this project to my family, colleagues, friends and all those who supported in the completion of this project. Thank you and God bless you abundantly.
ACKNOWLEDGEMENT

I am humbled to God for His abundance grace and for good health throughout my studies and for bringing me this far.

I sincerely thank the lecturers and the academic staff in the School of Business, University of Nairobi and especially my supervisor Prof. Bitange Ndemo for his valued advice, constant guidance and most of all for his patience and understanding. I also acknowledge my dear parents, brothers and sister for their prayers, love, care, and encouragement throughout the study period.

My appreciation further goes to my classmates, with whom I weathered through the storms, giving each other encouragement and for their positive criticism. Although it has not been possible to mention by name all those people that helped me in one way or another to make my work a success, to you all I say thank you and God Bless you abundantly.
ABSTRACT

SMEs have defined the economies life line in Kenya, since they contribute massively in the country’s GDP. The survival and existence of SMEs is largely contributed by the decisions made by the owners or managers in charge. This study aimed at investigating the influence of business strategies and information systems which have been largely perceived and praised to be vital ingredients of the performance of SMEs in Kenya. Business manager/owners are creating more complex business solutions only to later realise the importance of information systems in solving major issues. Further to this, majority of SMEs in Kenya are struggling during startup periods and keeping up the ever rising pressure from similar firms. Most of them either operate on low profits; change business lines merge with others or finally close down. The literature review expounded on business strategies, information systems represented by independent variables; performance of SMEs represented by dependent variables in comparison to the Porter's Theory of Competitive Advantage and the Technology Adoption Model respectively. SMEs play a vital role in development of the Kenyan economy. Little has been done to establish the real business value that both business strategies and information systems add to most businesses. The researcher embarked on a survey whose data was used to assess the performance of SMEs by adopting various business strategies and information systems. The research of the study targeted the KPMG Top 100 mid-sized companies in Kenya in the year 2015 and adopted descriptive survey method. The preferred sample size of the study was the (Top 100) SMEs in Kenya. The desired sample size was derived using Mugenda and Mugenda (2003) recommendation. The primary source of data was collected via questionnaires; the study applied quantitative techniques for data analysis and presented it in form of tables. The study’s outcomes revealed that there was a positive correlation between business strategies, information systems and performance of the Top 100 SMEs in Kenya. It revealed that SMEs adopted various business strategies and information systems dependent on the type of the business and industry circumstances. The study concluded that indeed business strategies and information systems influenced a positive performance of the top 100 SMEs in Kenya. The study also suggested further research to be done on influence of business strategy and information systems on other SMEs performance in other institutions in order to get an overall and more substantive and comprehensive conclusion. The researcher therefore recommends that SMEs need to adopt business strategies and information systems otherwise the cost of not responding could be costly leading to reduced or no performance and thereby giving their competitors the opportunity to out muscle them in the market which could eventually lead to termination of their businesses.
TABLE OF CONTENTS

CHAPTER ONE .................................................................................................................. 1

INTRODUCTION .................................................................................................................. 1

1.1 Background of the study ............................................................................................... 1

1.1.1 Business strategy ...................................................................................................... 2

1.1.2 Information systems ................................................................................................ 3

1.1.3 Performance of Firms .............................................................................................. 4

1.1.4 Performance of Top 100 SMEs in Kenya ................................................................. 5

1.2 Research Problem ......................................................................................................... 5

1.3 Research Objectives ..................................................................................................... 6

1.4 Value of the Study ........................................................................................................ 7

CHAPTER TWO ................................................................................................................... 8

LITERATURE REVIEW ....................................................................................................... 8

2.1 Introduction ................................................................................................................... 8

2.2 Theoretical Foundation ............................................................................................... 8

2.2.1 Porter’s Theory of Competitive Advantage ........................................................... 8

2.2.2 Technology Acceptance Model (TAM) ................................................................. 9
2.2.3 The Resource Based Theory .............................................................. 10

2.3 Business strategies and performance of Firms ........................................... 11

2.4 Information systems and performance of Firms ......................................... 12

2.5 Alignment of Business strategies and IS on performance of Firms ............... 13

2.6 Research Model ...................................................................................... 15

2.7 Empirical studies and Research Gaps ...................................................... 17

CHAPTER THREE ............................................................................................. 18

RESEARCH METHODOLOGY ........................................................................... 18

3.1 Introduction .............................................................................................. 18

3.2 Research design ....................................................................................... 18

3.3 Population of the study ........................................................................... 19

3.4 Sample design .......................................................................................... 19

3.5 Data collection ........................................................................................... 19

3.6 Data Analysis ............................................................................................ 20

CHAPTER FOUR .................................................................................................. 21

DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS .................... 21

4.1 Introduction .............................................................................................. 21

4.2 Demographic Information of Respondents .............................................. 22
4.2.1 Age of Respondents ................................................................. 22
4.2.2 Highest Qualification Achieved .............................................. 23
4.3 General information on the Respondent’s Organisations ............... 24
  4.3.1 Job position in the organisation ............................................. 25
  4.3.2 Number of firms employees .................................................. 26
4.4 Business strategies ................................................................... 27
  4.4.1 Business strategies utilisation by Top 100 SMEs ...................... 27
  4.4.2 Business strategies and performance ..................................... 28
4.5 Information systems .................................................................. 30
  4.5.1 Knowledge of IS ................................................................. 30
  4.5.2 Existing Information Systems ............................................... 31
  4.5.3 IS influence on performance of firms .................................... 32
  4.5.4 IS and Business Strategy alignment ..................................... 33
4.6 Performance of SMEs ............................................................... 35
  4.6.1 Business strategies and IS growth ....................................... 35
  4.6.2 Influence of business strategies and/or IS on performance ......... 36
4.7 Regression analysis ................................................................. 38

4.8 Discussion of Findings ............................................................. 40

CHAPTER FIVE .................................................................................. 43

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .................. 43

5.1 Introduction .................................................................................. 43

5.2 Summary of Findings ................................................................. 43

5.2.1 Information on respondents and the SMEs ................................. 43

5.2.2 Influence of business strategies ............................................... 44

5.2.3 Influence of information systems ............................................. 44

5.2.4 Influence of both business strategies and IS on performance ........ 45

5.3 Conclusion .................................................................................. 45

5.4 Recommendations ....................................................................... 46

5.5 Suggestion for Further Research ................................................ 47

REFERENCES .................................................................................. 48

APPENDICES ..................................................................................... 54

APPENDIX I: INTRODUCTION LETTER ............................................ 54

APPENDIX II: QUESTIONNAIRE ..................................................... 55

APPENDIX II: KENYA TOP 100 SMEs - 2015 .................................... 61
ABBREVIATIONS AND ACRONYMS

AIS - Accounting Information systems

EDI - Electronic Data Interchange

ERP - Enterprise Resource Planning

GDP - Gross domestic product

ICT – Information Communication Technology

IS – Information Systems

ISS - Information Systems Strategy

IT - Information Technology

MPESA - Mobile PESA (Money Transfer Service)

MSE - Micro and Small Enterprises

MSEA - Micro and Small Enterprises Authority

OLX - On-line-exchange

ROI - Return on Investment

SIS – Strategic Information Systems

SMEs - Small and Medium Size enterprises
CRM - Customer relationship management

SPSS - Statistical Package for the Social Sciences

SWOT – Strengths, Weaknesses, Opportunities and Threats

TOE - Technology-organization-environment

NETFLIX - A DVD rental and Internet-based video-on-demand service from Netflix
LIST OF TABLES

Table 1 : Response Rate ............................................................................................................. 21
Table 2 : Ages of the Respondents .............................................................................................. 22
Table 3 : Highest qualification achieved ..................................................................................... 23
Table 4 : Position in the organization .......................................................................................... 25
Table 5 : Number of Firms employees ........................................................................................ 26
Table 6 : Business strategies utilization ...................................................................................... 27
Table 8 : Adoption of Information systems .................................................................................. 30
Table 9 : Knowledge of IS ........................................................................................................... 30
Table 10 : IS and Business Strategy alignment .......................................................................... 34
Table 11 : Plan to invest in business strategies and IS ................................................................. 38
Table 12 : Model Summary ......................................................................................................... 38
Table 13 : ANOVAa ..................................................................................................................... 39
Table 14 : Coefficients ................................................................................................................ 40
LIST OF FIGURES

Figure 1 : Conceptual Diagram ................................................................................................................. 16

Figure 2 : Response Rate .......................................................................................................................... 21

Figure 3 : Ages of the Respondents ........................................................................................................ 23

Figure 4 : Business strategies utilization ............................................................................................... 28

Figure 5 : Business strategies utilization ............................................................................................... 29

Figure 6 : Information systems used ........................................................................................................ 32

Figure 7 : IS influence on performance of a firm .................................................................................... 33

Figure 8 : Business Strategies and IS growth on SME services ............................................................. 36

Figure 9 : Business strategies and IS on firm’s performance .................................................................. 37
CHAPTER ONE

INTRODUCTION

1.1 Background of the study

An effective and efficient strategy could be a significant contributing factor when it comes to the performance of firms in Kenya and is a major factor of its GDP growth. Many business managers/owners lack sufficient business-related and technological knowledge base while making strategic decision’s for their firms. Firms have either implemented best business solutions but have left out the importance of information systems either due to ignorance or lack of adequate knowledge. Strategy is commonly defined and measured as a set of activities used to accomplish competitive gain giving consistency, bearing and confidence to a business (O’Regan & Ghobadian, 2005). Therefore, the essence of strategy is to relate the organization to the changes in the environment (Ansoff, 1990). On the other hand information systems have facilitated business and eased the load of doing business. With the current technology boom many business owners/managers are heavily investing in IT systems to remain relevant in the competitive market.

This study was founded on three theories: Founded on the resource based philosophy, which safeguards its geneses in economic philosophies (Penrose, 1959) and initial approach notion (Selznick, 1957; Ansoff, 1965), the lengthy effectiveness of an organization is influenced by its utilization of resources that are not same as its competitors, that are resilient and, that are challenging to copy or replace (Peteraf, 1993;
Collis and Montgomery, 1995; Barney 1991). Secondly, (Porter, 2008) believes that a business needs to have a competitive strategy in order to realize its full market potential. Thirdly, technology acceptance prototype initially suggested by Davis in 1986. TAM has demonstrated as an ideal aid in clarifying and envisaging consumer attitudes towards information technology (Legris, Ingham, & Collerette, 2003). In this context we would argue that strategies and systems to be adopted by a firm would depend on the demands of an organization in respect to the needs and preferences of its stakeholders ranging from suppliers, end users, shareholders amongst others.

Business strategies and IS have empowered various firms to the tip of their performance, with the emergence of information systems revolution, information systems redefine business strategies from the likes of Kenya’s MPESA, NETFLIX, UBER, OLX etc. Technology drives business as it has become a fundamental need in our lives and business, although technology alone cannot determine an organizations full performance, it needs to apprehend its underlying business strategy. In this age, technological disruption has come with a massive impact merged with unique business strategies that dictate an organizations performance and survival.

1.1.1 Business strategy

Mintzberg (1990) suggests the term strategy is assumed to mean a pattern, a position, a plan, a perspective or a ploy of the 5 Ps. (Chandler, 1962) specified that strategy defines the elementary objectives of a firm and the widespread of resources it requires to fulfill its mandate within its planned duration. Strategy can be perceived as a shield against attacks from enemies in this case other competitors, or as areas can be exploited within
the industry to gain some edge over others (Pearce & Robinson, 1997). Porter (1996) observed strategy as a way of providing special and unique methods that are specific to a firm with the aim and goal of realizing its objectives in general. (Jauch, 1998) reasoned that assessments or engagements engaged eventually lead to the improvement of attainable strategies that will improve and aid an organization in achieving goals.

Compared to large businesses, small firms tend to offer a more narrow range of products on a more restricted number of markets and rather use market infiltration and product expansion strategies instead of diversification strategies. The Management of some firms lacks appropriate business-related expertise in strategic skills. The fundamental notion is that most firms need to formalize, restructure their structural process in a strategic manner that can be embraced by its environment. Prior knowledge would be necessary when coming up with good and productive business strategies that would fit in an organization, thus it is vital for managers/owners to embrace a forward thinking culture that is beneficial to the organization at large. Since a strategy is like a blue print of an organization, proper mechanisms need to be adopted to accommodate the demands of clients.

### 1.1.2 Information systems

A Strategic Information System is a system that one way or another supports a business in accomplishing the intended objectives, (Clarke, 2005). In today’s business world, information systems adoption is almost becoming a basic need due to its competitive nature. Globally, business has been defined by how well one adopts strategic information systems with the aim of covering wider geographical areas and accessing more clients.
Strategic information systems (SIS) assist in developing business effectiveness by varying ways in which business is led (Ward and Peppard, 2002). Hypothetically, we would argue that an information system is strategic in nature due to the fact that it bridges the gap between business and performance of firms generally. Generally most firms have tried to embrace good strategies that lead to improved performance and survival; others have invested heavily on information systems with a mindset of ripping maximum profits. Information systems are part of our daily lives and a typical example would be by the use of digital platforms to market end products. Customer relationship management (CRM) systems have been interlinked with current social media IT platforms to market goods and services across the country. This media includes but is not limited to Facebook, WhatsApp, LinkedIn, twitter, Instagram etc.

1.1.3 Performance of Firms

A firm’s Performance can be determined by its overall usage of available resources in order to achieve its goals. Resources range from one firm to another depending on its nature of business. According to (Brush, 1992) the valuation of business growth should embrace not only monetary processes, but integrate other measures such as employee contentment, collective assistance, goal realization, and value. It is the effect of all the firms’ processes and tactics (Aaltonen and Ikävalko, 2002). There is a huge gap in understanding the link between information systems and business performance, the perception and mindset of many managers is that these resources are costly and challenging to embrace. A good number of firms see the need to invest in strategies and information systems only when a need arises or when things get out of hand. For this
reason, they lack proper mechanisms to monitor performance; most of them close down at the initial startup stages.

1.1.4 Performance of Top 100 SMEs in Kenya

Small firms have continued to participate and contribute hugely in advancing the economy of Kenya. The sector therefore makes a significant contribution to Kenya’s economy; small firms fuel economic growth, employment creation, income generation and contribute immensely to the country’s GDP. The performance challenges of Kenya’s firms are not only limited in the areas of economy and finance, but also in business strategy change and use of present day strategic information systems. Firms that widen their market scope will survive depending on the strategies that they will adopt to cope with these challenges. The gap between business strategies and information systems is gradually narrowing down; this had led to firms rethinking on various ways of leveraging these resources in order to maximum profits.

1.2 Research Problem

In the past, most businesses used old technics to battle it through the market but this has changed in the current century. Old ways of doing business have proven to be a big challenge over the past couple of years, thus emerging firms need to adopt current techniques for survival. Wiseman (1988) highlights that businesses need to utilize information systems tactically to gain a substantial benefit. Wiseman argues that while the use of information systems may not constantly lead to competitive benefit, it can function as a significant instrument in the organization’s future goals.
There is a necessity for an effective methodology in the understanding the influence of business strategies, information systems and Firms performance in Kenya. Furthermore, a need for further research about Strategy, Information Systems and the way organizations relate there IS/business strategies is vital. (Tan, 1999) researched more on the observations of business leaders in relation to business-IT related alignment.

Understanding the influence of business strategies and information systems has proven to be a key challenge for many SME mangers/owners in Kenya and has proven to be a threat to performance. The Beliefs, expectations, values and assumptions tend to play a big role in understanding business strategies and IS by SMEs in Kenya. The research study answered the following research questions. Does the influence of business strategies and information systems have an impact on the performance on the Top 100 SMEs in Kenya?

1.3 Research Objectives

The objective of this study was to investigate on;

i. The influence of business strategies on the performance of Top 100 SMEs in Kenya.

ii. The influence of IS on the performance of Top 100 SMEs in Kenya.

iii. The influence of business strategies and IS on the performance of Top 100 SMEs in Kenya.
1.4 Value of the Study

This research is beneficial to all stakeholders of SMEs in making appropriate strategic decisions for their firms to enhance competitive advantage and performance. This study largely adds awareness to the Government of Kenya defining ways it would come up with the appropriate measures to improve the business environment for the SME sector in Kenya. The government will ensure that any formulated ICT policies promote the growth of the SME sector. The study would serve as a reference guide for future scholars on the topic and other associated topics; it would also benefit other researchers who embark on the same area of study.

Managers/owns of SMEs in Kenya can utilize the research to make better and wiser managerial decisions regarding implementing business strategies and information systems that are in line with their overall corporate strategies. They will also Preparing for any eventualities that may arise in the future that were nit foreseen; this avoids unnecessary tension within firms that instill fear amongst stakeholders. The environment keeps changing and adapting to newer demands from end users thus managers/owners should adopt with the environment.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

It was important to establish and elaborate influence or impact of business strategy and IS on the performance of the top 100 SMEs in Kenya. The literature review was organized into three main sections in relations to SMEs, the business strategy, information systems and the performance of SMEs.

2.2 Theoretical Foundation

The study was guided by the Porter's Theory of Competitive Advantage, the Technology Adoption Model (TAM) and the Resource Based Theory.

2.2.1 Porter's Theory of Competitive Advantage

Led by Porter (1980), the competitive forces methodology sights the significance of competitive strategy design as linking an organization to its internal and external setting. The approach can be used by a firm to discover a place in an industry from which it can best secure it in contrast to competitive forces or impact them in its favor (Porter, 1980). Porter’s five forces have been used for benchmarking an organization’s relative strength and weaknesses. Manager/owners should investigate on the SWOT analysis of their firms to establish the various forces that impact their business internally and externally. Information systems automation has played a big role at the business strategic level of an
organization. IT-enabled business strategies have contributed to the IT-led strategy for many organizations.

It is vital for firms to identify key strengths of their market position in order to leverage on their advantage. Due to the current environmental dynamics, most SMES in Kenya are forced to adapt ways and mechanisms of survival. Those that discovered their strengths will continue maximizing on it in order to attract more customers in their businesses. Competitive advantage allows one to be monopolistic in nature but at the same time having flexibility if business strategies and ideas in case there is a negative response from target clients. Another way to be competitive is to have unique products and services that are backed up with the right strategies and information systems. This allows an institution to focus on one product or service as opposed to being a jack of all trades in the market with the aim of achieving a positive performance.

2.2.2 Technology Acceptance Model (TAM)

Acceptance of technology has been greatly researched and various methods have been used to expound on how people adopted it and this was originally proposed by (Davis, 1986). TAM has demonstrated to be a technique that has assisted in expounding and envisaging consumer conduct of information technology (Legris, Ingham, & Collerette, 2003). (Davis, Bagozzi, Warshaw 1989) Propositions TAM to describe why consumers approve or reject ICT by using the (TRA) Theory of reasoned action. TAM deals with the circumstances touching the dissemination of revolutions and envisaging the assertiveness of would-be users towards the adoption of a new technology by aiming at understanding user views. The embracing of information systems in this study is made up of the
‘technology acceptance model’ which has been defined to arise from the concept of rational act and aims at envisaging the attitude of credible users towards a new technology by aiming on individual insights in evaluating performance of SMEs. Linking this to the conceptual framework, the information system is a variable that will play a big role in guiding the researcher in understanding its relationship to performance of top 100 SMEs in Kenya.

Based on (Forman and Goldfarb, 2006), Technology Acceptance Model (TAM) confirmed to be a vigorous methodology that regularly used to study user recognition of ICT. Its concept has been widely used in comprehending the implementation or consumption of internet (Gibbs, 2007; Davis 1989). The theory assists all stakeholders of an organization understand the importance and benefits of information systems. End users in Kenya have widely adopted various technological platforms that have become part of their daily lives, from Facebook/ WhatsApp/ LinkedIn among others etc. to air their views on various issues. This is a good sign that end users are slowly but gradually accepting and embracing information systems as part of their social lives.

2.2.3 The Resource Based Theory

Based on the resource based methodology which has it foundation from the economic theory (Penrose, 1959) and the initial strategy theory (Andrews, 1971; Selznick, 1957; Ansoff, 1965), the continued survival and competitiveness nature of a firm solely depends on the uniqueness of firms resources, that are long-lasting and, that are challenging to replicate and forge (Grant, 1991; Peteraf, 1993). Nevertheless, the resource-based focuses on critical issues resources that impact on a firm’s performance in
one way or another, i.e. those that are the root of the firms’ justifiable competitive advantages. A firm that is able to identify its key resources that fit in its industry can be more productive due to its market specialization tactics. A firm that is capable to create customized products that fit the environment is a complex but achievable task when proper resources are utilized.

According to (Barney, 1991) firms have a competitive edge above others if they continue utilizing resources tactically, these resources could be hard to replicate or copy, not easily available to all, sustainable and most importantly increase a firm worthiness. From the 1980s and onwards, information systems have been seen to make significant progress in the current business world. Subsequently, scholars began to concentrate on the alignment of information system experts and business owners/managers in improving performance of firms. According to (Fahy, 2000)” the fundamental features of the concept are: viable competitive advantage and greater outcomes; features and forms of advantageous resources in regards to strategic adoptions by business owners/managers. Combination of business strategies information system knowledge of SMEs can produce a bunch of co-specialized resources. The co-specialized set of strategic business, information system skills are capable of producing resources which are valued, occasional, hard to copy, and replace.

2.3 Business strategies and performance of Firms

Business strategies and Performance of firms is critical in determining the bottom line results of an organization. For an organization to deliver business value, it must have some fundamental principles and approaches towards the attainment of its goals and
ambitions. (Mintzberg et al, 2009) strategy can be seen as the 5 Ps. Competition has become complex and organizations need to perform a detailed business strategic analysis in order to understand competitive forces in its surrounding (Porter, 2008). The main aim of firms across the globe is to make profit; Organizations whose business is built on digitized information systems have turn out to be relatively dominant in the shortest time ever. Proper utilization of business strategies have created tones of wealth from Steve Jobs of Apple to the owner and founder of Facebook, Mark Zuckerberg to Kenya’s Safaricom, Equity Bank and many more. This mega firms have adapted according to the currents market demands and created unimaginable wealth within their countries. SMEs in Kenya have continued to the embrace current ways of doing business in order to improve performance of their institutions for the better future.

2.4 Information systems and performance of Firms

Information systems can sustain or form a business unit’s tactics (Callon, 1996, and Neumann, 1994). Information systems revolution has been brought about by several changes in the world, first and foremost was the emergence of a Global Economy, where information systems and globalization bring major contribution in opening up new opportunities with greater analytical power for business. Customers are able to shop online in 24hr Economy. Fierce completion has forced firms to become more involved in international business markets. The Second change is the Transformation of Industrial economies , where information and knowledge was noticed in 20th century, today people no longer work in factories or farms but in finance, supply chain, human resource or business intelligence e.g. in an ERP system for Airlines. Information has become critical
in organizations and helps them in defining their strategic plans, thus information systems are critical in a firms survival and ROI analysis. Thirdly is the Transformation of Business Enterprises, the new way of business is flattened and flexible as opposed to the structured, formal, tight division of labor, bureaucratic rules and centralized traditional ways of doing business in that it focuses on the quality of goods and services to customer, it therefore relies much on the immediate information fed to it. The new age business leaders rely on social and interactive commitments from employees to achieve maximum satisfaction for its customer. Lastly is the Emergence of the Digital Firms, where information and digital relationship between all stakeholders is critical. The corporate image of an organization is driven by digital platforms and organizations are more receptive to internal and external environs.

Managers/Owners of SMEs in Kenya can make judgement of areas to improve on once they have achieved some level outcome from utilization of ICT systems. The fact that information systems keep changing day by day, SMEs might not have the capacity to keep purchasing new systems on a monthly basis, but through understanding their business environment they can leverage on their current systems by deeply understanding their resources.

2.5 Alignment of Business strategies and IS on performance of Firms

It is vital for these institutions to have a benchmark for performance, (Haughton, 1999), evaluate their current position and what can be done to improve performance generally. Consumer demands in Kenya keep escalating as most of them are considering products that are affordable and have some quality standards. It is vital to understand the
alignment of a business strategy and information systems in relation to SMEs performance (Raymond and Bergeron, 1995). Evaluating the performance of SMEs can be a challenge; it can be measured via internal goals and external competition such as SMEs profits, growth etc. SMEs have been perceived to be informal in the way they conduct business, the measurement of performance of this sector is manual and does not follow a specific path. Due to lack of planning SMEs are latter forced to experience tough times in trying to measure performance and forces some to incur huge losses (Barnes, 1998).

It is essential for managers/owners of firms to appreciate and implement information systems and business strategies in their organizations in order to create unique products for their clients. Most firms are still struggling to understand the relationship of IS and business strategies, only to realize its importance when it is too late to salvage the institution. With the amount of business data created by firms is overwhelming, this data can be used to make organization wide decisions using proper tools like business intelligence tools. These tools rely on super-fast computer to analyze and transform raw data to information that can be relied on by key business decision makes. A number of supermarkets in Kenya are utilizing customer loyalty cards to entice new and old customers by offering points after purchase of goods. This kind of IS and business strategy within some supermarkets has won the hearts of many end users as well as benefiting some SMEs across the country.
2.6 Research Model

The Conceptual framework displayed in Fig.1 was established to broaden the influence of business strategy, information systems and performance of SMEs. The Resource-Based Theory (RBT) approach, which is thought to emanate from Penrose’s idea (1959) of the firm as an organized ‘bundle’ of resources, challenges the question of an organization’s aims and strategic performance (Barney, 1991). A firm that is able to raise sufficient funds is able to sustain its innovations and resources leading to its growth and expansion in the long run. (Del canto & Gonzalez 1999) subsequently, a firm that lacks the financial backing will strain in its initiatives (Teece & Pisano, 1994). Innovation has also been positively impacted by other technical elements such as production, manufacturing and engineering. These resources give firms an extra edge when it comes to business (Gatignon & Xuereb, 1997).

This relationship of strategy, information systems and performance of SMEs was explained using the notion of Strategic fit, where information systems and business strategies were both perceived to be mediating variables (Venkatraman, 1989). A mediating variable comes in independent and dependent variables.
In this case (Fig. 1) we had two scenarios, where scenario one involved the Information systems as the independent variable or input which influences the business strategy (mediating variable) and in turn influences the performance of SMEs (output or dependent variable). Scenario two, involves the business strategy (independent variable or input) influencing the Information systems (mediating variable) and finally influences the performance of SMEs (output or dependent variable). There was minimal significant variance whether the arrow moves from the business strategy towards the information systems or vice versa statistically speaking.

Figure 1: Conceptual Diagram
2.7 Empirical studies and Research Gaps

A couple of similar studies conducted on SMEs in Kenya primarily concentrated around the sector’s influence on the business in relations to returns, service and GDP (ICEG, 1999) though other readings dedicated research on access to funds (Aketon, 2007) and government procedure and strategy structures (ACEG, 2005). (Norman and Scadden, 2005) steered the investigation on a appropriate strategic prototypes for SMEs in New Zealand. They embarked on how an electric company can be affected by the use of strategies philosophies to have an edge in the market. The study concluded that business owners/manager in SMEs do not believe in strategic theories in their day to day operations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter illustrates the methodology that was used in data gathering and analysis. It described the, target population, research design, sampling design, data collection procedures / instruction, data analysis and finally the expected output.

3.2 Research design

The research design was descriptive survey. This study design involved defining the features of a specific individual or of a collection of variables (Kothari, 2004). It is used to determine how people feel about a particular issue by enabling them to describe their experiences. The purpose of a descriptive survey is to provide an exhaustive explanation of an occurrence or the connection between two or more phenomena. Data-gathering techniques will be precise as per the requirements of a descriptive study. This study adopted descriptive research design which involved; analysis of existing data /information, survey of data relating to program experiences, a preliminary outcome measures or tests that allowed to test if the research area is operating as intended and finally statistical analysis of data collected. The study aimed at investigating the influence of business strategies and information systems in relation to the dependent variable which is performance of top 100 SMEs in Kenya.
3.3 Population of the study

The target population of interest was the top 100 Mid-Sized companies in 2015 as per the report done by KPMG under Top 100 Mid-Sized company survey, Kenya. The names and addresses of the SMEs were obtained from the Kenya’s Top 100 mid-sized company’s website.

3.4 Sample design

Kothari (2004) describes a sample frame as a list of affiliates of the research populace from which an unsystematic illustration may be drawn. For this study, the researcher picked all the Top 100 mid-sized companies in Kenya as the sample size which is approximately as the sample frame. Sampling is a method of choosing a subset of the populace in which whole population is represented. Sampling was used to secure an illustrative group which enabled the researcher to attain material about a population based on (Mugenda and Mugenda, 2003). The respondents in the study were the staff managing the SMEs.

3.5 Data collection

The Data collection was mainly by use of questionnaire technique. (Kothari, 2004) a questionnaire entails of a bunch of queries produced or captured in an agreed order. The Questionnaires were both open and closed ended. Open ended questions provided the chance for self-expression openly and honestly. They allowed the respondents to give their ideas, concerns & feelings (Kenya Institute of Management (KIM), 2009). The closed questions made it easier and quicker for the researcher to record responses and
compare code and statistically analyze. The questionnaires contained Likert Scales which allowed for degrees of opinion, and even no opinion at all. The advantage is that they do not expect a simple yes / no answer from the respondent.

3.6 Data Analysis

Data obtained from the questionnaires document analysis was coded, organized, analyzed using SPSS for social sciences (SPSS). Descriptive statistics like mean, standard deviation, frequency distribution tables, and percentages was obtained then presented. Descriptive statistics aims at summarizing and describing the sample concerned in the study. Inferential statistics mainly involved the testing of correlation among the various variables. A relationship was deemed significant if the associated p value is at most 0.05. The multiple regression models was computed as $t = c_0 + c_1x_1 + c_2x_2$,

Where $t$ is the value of the Top 100 SMEs Performance variable,

$c_0$ is the Constant,

$c_1$ is Beta coefficient for $x_1$,

$x_1$ is the Business Strategies variable that is explaining the variance in $t$,

$c_2$ is the Beta coefficient for $x_2$,

$x_2$ is the Information Systems variable that is explaining the variance in $t$. 

20
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter deals with data analysis and interpretation. The analysis is of two types namely; descriptive statistics and inferential statistics. Descriptive analysis was used to describe the data and mainly involved frequency distributions, Percentage of the frequency. On the other hand inferential analysis involved regression analysis to find the relationship of the variables. A total of 100 questionnaires were dispatched. Out of this 91 of them were returned as shown in Table 1 and Figure 2.

Table 1 : Response Rate

<table>
<thead>
<tr>
<th>Questionnaire Status</th>
<th>Frequency</th>
<th>Percentage Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned</td>
<td>100</td>
<td>90.0%</td>
</tr>
<tr>
<td>Not Returned</td>
<td>91</td>
<td>10.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Figure 2 : Response Rate
4.2 Demographic Information of Respondents

The demographic information of the respondents covered in this study was: age and the level of education within the organization.

4.2.1 Age of Respondents

The respondent’s age ranged from 18 years and above. From Table 2 and Figure 3, majority of the respondents ranged from 31 - 40 years which was about 64%. Followed by 41 - 50 years with 16.5%, 18 - 30 years and 51 and above had a 9.9 representation.

This implies that due to the effort and intensity of the work that is involved in setting-up and operating SMEs, it may be assumed that age is a determinant for entry or operation in this sector.

Table 2: Ages of the Respondents

<table>
<thead>
<tr>
<th>Ages of the Respondents</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 - 30 years</td>
<td>9</td>
<td>9.9</td>
</tr>
<tr>
<td>31 - 40 years</td>
<td>58</td>
<td>63.7</td>
</tr>
<tr>
<td>41 - 50 years</td>
<td>15</td>
<td>16.5</td>
</tr>
<tr>
<td>51 and above</td>
<td>9</td>
<td>9.9</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.2.2 Highest Qualification Achieved

From Table 3, the highest qualification of the respondents had under graduate degrees which were represented by 61.5%.

Table 3: Highest qualification achieved

<table>
<thead>
<tr>
<th>Highest qualification achieved</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>19</td>
<td>20.9</td>
</tr>
<tr>
<td>Under Graduate Degree</td>
<td>56</td>
<td>61.5</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>16</td>
<td>17.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>91</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Research data
Figure 4: Highest qualification achieved

This indicated that for one to run an SME, a good educational background was necessary in order to understand the basics of business strategies, information systems and performance. This was further demonstrated using figure 4 above.

4.3 General information on the Respondent’s Organisations

The study sought general information about the SMEs where the respondents worked. Among the areas of interest were; position held in the firms and the number of employees.
4.3.1 Job position in the organisation

From Table 4 and Figure 5, 58.2% of the respondents held managerial position in the SMEs. This meant that this particular position was able to understand the need of having business strategies and information systems in realizing the goals of their firms. This group would also serve as a bridge amongst all the stakeholders.

Table 4: Position in the organization

<table>
<thead>
<tr>
<th>Position in the organization</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner manager</td>
<td>5</td>
<td>5.5</td>
</tr>
<tr>
<td>Manager</td>
<td>53</td>
<td>58.2</td>
</tr>
<tr>
<td>Supervisor</td>
<td>33</td>
<td>36.3</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research data

Figure 5: Position in organization
4.3.2 Number of firms employees

The larger number of employees within the targeted SMEs ranged between 10 - 50 employees with a 57.1% representation as indicated in Table 5 and Figure 6. These indicators largely conform to the common descriptions of an SME.

Table 5: Number of Firms employees

<table>
<thead>
<tr>
<th>Number of Firms employees</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - 50 employees</td>
<td>52</td>
<td>57.1</td>
</tr>
<tr>
<td>50 – 100 employees</td>
<td>39</td>
<td>42.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>91</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Research data

Figure 6: Number of employees
4.4 Business strategies

This analyses the first variable of the study which was to establish the influence of business strategies adopted by Top 100 Small and Medium Enterprises in Kenya in regards to their performance. A number of research studies have been pursued widely in regards to business strategies and performance of firms.

4.4.1 Business strategies utilisation by Top 100 SMEs

Out the 91 respondent’s interview, 100% agreed that they use business strategies in order to improve performance of their business as indicated in Table 6 below.

Table 6: Business strategies utilization

<table>
<thead>
<tr>
<th>Business strategies utilization</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research data

However they use different business strategies to achieve their objectives depending on a number of factors like type of products/services offered, level of understanding of the importance of strategies by managers/owners amongst others. Figure 7 indicates the different types of business strategies utilized by SMEs to achieve performance. Since top 100 SMEs in Kenya would want to remain at the peak, it would be wise for them to utilize strategies that benefit them in one way or another. This is a good indicating factor of formalizing their business to another level of growth.
The above Figure 4 point out that most of the respondents (65%) agreed that they utilize marketing as a business strategic tool. Other strategies, like extensive advertising, product quality, product pricing were also significantly utilized. This meant that top 100 SMEs were not only formalizing their businesses but working towards understanding their internal and external environment for survival.

**4.4.2 Business strategies and performance**

As stated earlier, business strategies have frequently been researched widely. The researcher here focused on various elements of performance in order to establish where
the business strategies utilized by the Top 100 SMEs in Kenya have really influenced performance. Figure 8, indicates that a most of the respondents (55%) to a great extent believe business strategies enhance performance of their firms. 40% to a great extent believe business strategies enhance business excellence followed by other indicator like company decisions, quality improvement and increased corporate image amongst others.

Figure 8: Business strategies utilization

Source: Research data

The above figure 8 indicates further that SMEs believe in business strategies and the impact they have on performance. Given the harsh environments and competitive nature of business, Top 100 SMEs continue thriving in the market with good business practices with the aim of improving business.
4.5 Information systems

Due to the current technology disruption, it was important for the researcher to understand the general perception towards information systems by top 100 SMEs in Kenya. According to Table 7, 100% of the respondents agreed that they have adopted information systems in their firms.

Table 7: Adoption of Information systems

<table>
<thead>
<tr>
<th>Adoption of IS</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research data

4.5.1 Knowledge of IS

Table 8 and Figure 9, indicates that 51.6% of the respondents have good knowledge regarding Information systems. However the knowledge may vary depending on the various types information systems they use. IS usage has changed the mindsets of managers/owners of (Top 100) SMEs in Kenya in that the operational business cost has gradually reduced over the years.

Table 8: Knowledge of IS

<table>
<thead>
<tr>
<th>Knowledge of IS</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>47</td>
<td>51.6</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>44</td>
<td>48.4</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research data
Figure 9: Knowledge of IS

4.5.2 Existing Information Systems

Information systems are vital in the daily operations of SMEs. It is vital for managers/owners of SMEs to take advantage of IS in their plans in order to have a competitive advantage and improve business targets.

From figure 10 as shown below, 67% of the respondents point out that they were using basic accounting packages for their daily operations. This was closely followed by web application usage of 61% i.e. use of websites, emails, twitter and many more in to market their products and services. Enterprise resource planning (ERP) software’s were lowly utilized mostly due the cost implication of acquiring them.
Figure 10: Information systems used

Source: Research data

4.5.3 IS influence on performance of firms

In the last few decades Information systems have been perceived to be inevitable when it comes to the business world. Business managers/owners are appreciating IS by investing heavily in current technology practices. The researchers here sort to establish how various performance indicators are influenced by information systems in a typical business environment.
Figure 11: IS influence on performance of a firm

Source: Research data

From Figure 11 above, competitive advantage was influence the most by information systems with a very great extent of 60%. 40% felt that IS improved access to information, 35% felt that IS improved communication among staff, 25% felt that IS improved decision making among others. It is with no doubt that IS enhances various aspects of performance in a firm; owners/managers have a responsibility to ensure the firm’s survival and existence through maximum utilisation of this resource. With the world moving towards a technology age, it would be deemed to be disastrous if manager/owners do not embrace technology.

4.5.4 IS and Business Strategy alignment

Alignment of information systems and business strategies is a major step towards influencing a firm’s performance. Alignment here refers to bridging the gap between IS
and business strategies by merging them together to achieve a common goal. If firms properly leverage these resources the game of business changes not only form a manual system but a force that disrupts the current ways of business in an organization. The researcher here seeks to establish the level of alignment of IS and business strategies in a Top 100 SMEs in Kenya. From Table 9, a majority of 61.5% of the respondents indicated that the IS and business alignment in their firms was good. This means that there was some belief and positive attitude towards these key resources.

Table 9: IS and Business Strategy alignment

<table>
<thead>
<tr>
<th>IS and Business Strategy alignment</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>5</td>
<td>5.5</td>
</tr>
<tr>
<td>Good</td>
<td>56</td>
<td>61.5</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>30</td>
<td>33.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>91</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Figure 12 also represents the satisfaction level of the alignment of business strategies and information systems. The appreciation of the alignment is vital ingredient towards transforming the SME world in Kenya. Business manager/owners need not struggle with simple and complex tasks that can be performed by machines in order to improve performance of their firms. Technology has spread like wildfire in Kenya and in particularly across the globe, more firms have merged their strategies with IS in order to rip more profits.
4.6 Performance of SMEs

Performance of SMEs can be measured by how well it maximizes its current resources, in this case the researcher used business strategies and information systems as the key resources.

4.6.1 Business strategies and IS growth

From Figure 8, the researcher sought to find out how an alignment of business strategies and IS influenced various performance indicators like new product and service growth, increase in branches, increased customer base among others. These indicators represent the progress SMEs make and can be used to sometimes determine performance.
From Figure 13 above, a majority of 44% of the respondents indicated that to a very great extent business strategies and information systems led to growth of new products and services. 34% felt that the two resources have increased their customer base amongst others. This is a clear indication that an alignment of both variables has an impact on performance on one way or another.

4.6.2 Influence of business strategies and/or IS on performance

The researcher here sought to establish the influence of performance by either implementing business strategies alone, IS alone or alignment of both business strategies and IS in regards to performance. The research will also guide in understanding how
performance of Top SMEs in Kenya would react when exposed to one or both of the mentioned variables in a bid to assist manager/owners in decision making.

![Figure 14: Business strategies and IS on firm’s performance](image)

**Source: Research data**

Based on the response, 85% of the respondents agreed that the implementation of both business strategies and information systems improved performance as opposed to implementing only one of the variables without the other as indicated in figure 14. It was clear that having an alignment of both products would result to an increased performance rate.
This study here sought to establish whether the Top 100 SMEs were willing to invest more on business strategies and information systems to enhance performance. 100% of the respondents agreed to the investment as indicated in Table 10.

4.7 Regression analysis

Finally, this section presents a discussion of the results of inferential statistics. The researcher conducted a multiple regression analysis so as to determine the relative importance of each of the variables. To find out the influence of business strategies and information systems of the Top 100 SME's performance in Kenya, the researcher applied the statistical package for social science (SPSS) to develop the regression analysis.

Table 11: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.371a</td>
<td>.477</td>
<td>.118</td>
<td>.37671</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Information systems, Business strategy

b. Dependent Variable: Top 100 SMEs performance

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of
variation in the dependent variable (Top 100 SMEs performance), that is explained by all
the independent variables (Business strategy and Information systems). The independent
variables that were studied, explain 47.7% of variance in effect of Business strategies and
Information systems as represented by the R Square. This therefore means that other
factors not studied in this research contribute 52.3% of variance in the dependent variable
as indicated in Tables 11. Therefore, further research should be explored to find out more
effects of Business strategies and Information systems on SMEs performance in Kenya.

Table 12 : ANOVAa

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.988</td>
<td>2</td>
<td>.994</td>
<td>7.006</td>
<td>.002b</td>
</tr>
<tr>
<td>Residual</td>
<td>12.488</td>
<td>88</td>
<td>.142</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.476</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Top 100 SME's performance.

b. Predictors: (Constant), Information systems, Business strategy

The significance is less than 0.05, thus indicating that the predictor variables, explain the
variation in the dependent variable which is Top 100 SME's performance as indicated in Table
12.
Table 13: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.415</td>
<td>.748</td>
<td>4.568</td>
</tr>
<tr>
<td></td>
<td>Business strategy</td>
<td>.281</td>
<td>.126</td>
<td>.225</td>
</tr>
<tr>
<td></td>
<td>Information systems</td>
<td>.372</td>
<td>.146</td>
<td>.257</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Top 100 SMEs Performance

b. Predictors: (Constant), Business strategy, Information systems

From the regression findings, the substitution of the equation;

\[ t = c_0 + c_1x_1 + c_2x_2 \]

becomes:

\[ t = 3.415 + 0.281x_1 + 0.372x_2, \]

Where \( t \) is the dependent variable i.e. Top 100 SMEs Performance,

\( x_1 \) is the first independent variable i.e. business strategies variable,

\( x_2 \) is the second independent variable i.e. Information systems.

According to the equation, taking all factors (Business strategies and Information systems.) constant at zero, Top 100 SMEs Performance will be 4.071. The data findings also show that a unit increase in Business strategies variable will lead to a 0.281 increase in Top 100 SMEs Performance. A unit increase in Information systems will lead to a 0.372 increase in Top 100 SMEs Performance as indicated in Tables 13.

4.8 Discussion of Findings

This section aims at looking at how the findings in study relate to the Porter's Theory of Competitive Advantage, the Technology Adoption Model (TAM) and the Resource Based Theory and compare the findings with other studies that have been carried out in
the areas of business strategies, information systems and performance of SMEs in Kenya. The discussion of the findings is intended to demonstrate the importance of the findings in collaboration to the existing knowledge and areas that require further attention by other researchers.

SMEs in Kenya have continued to compete for clients in order to establish a competitive edge amongst one another. Very few manage to survive in this competitive market and through the years continue dominating and pursue clients to adopt their products and services. Porter's Theory of Competitive Advantage continues to be a major impact in performance of SMEs in Kenya since business strategies and information systems give an organization extra advantage over others when utilized appropriately. With the current technological practises it is evident the majority of the respondents have embraced a positive attitude towards information systems. On the hand business strategies have been widely accepted and utilised by firms in market penetration in order to lure and maintain potential clients across various cultures and backgrounds. This was a clear indication that this theory had an overall impact on a SMEs growth and performance across Kenya.

According to (Forman and Goldfarb, 2006), Technology Acceptance Model (TAM) has proven to be a robust model that is frequently used to study user acceptance of ICT. Majority of the respondents agreed to have good knowledge regarding IS, although they have adopted different information systems based on their organizational needs. SME managers/owners have embraced information systems as a business facilitator in the achievement of their performance targets. Technological disruption has garnered some ground in the current world; managers/owners need to embrace it in order to maintain a
certain level in the competitive market. IS as a tool is a weapon that has been utilized by the business world to eliminate most of the manual work, this means that its acceptance has a positive impact on SME performance based on the research finding. Businesses will tend to shape their strategies in line with the technology resources they possess thus giving them an advantage over the others.

In this study the resource based theory compliments the Porter’s Theory of Competitive Advantage and the Technology Acceptance Model (TAM) by demonstrating the nature in which Top 100 SMEs in Kenya have continuously thrived to dominate the market. Despite the fact that SMEs utilize different resources based on a number of factors like industry analysis, those that mastered the art of good business have realized growth in business. A co-specialized set of business strategies and information system competence is capable of creating a resource that is valuable, rare, imperfectly imitate, and imperfectly substitute.

The study established that performance of top 100 SMEs in Kenya was positively impacted by business strategies and information systems. The regression analysis concluded that an increase in business strategies and information systems would ultimately result in increase in the Top 100 SMEs Performance in Kenya.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the findings of the study in a summarized state, deriving conclusions from the findings and further suggesting recommendations on the way forward. The study used questionnaires as the main source of the findings.

5.2 Summary of Findings

The objectives of this study were to investigate on the influence of business strategies and information systems on the performance of Top 100 SMEs in Kenya. The summary of the finding were divided into four i.e. demographic details of respondents, influence of business strategies, influence of information systems and performance of the Top 100 SMEs in Kenya.

5.2.1 Information on respondents and the SMEs

Majority of the respondents in the Top 100 SMEs visited were aged between 31-40 years with a greater number having achieved an undergraduate Degree. This age was appropriate since managing the Top 100 SMEs requires some experience due to their nature of work involved. Some level of advanced education was necessary in understanding the alignment of business strategies and information systems on performance of their organizations.
5.2.2 Influence of business strategies

From the findings, the most common strategic objectives of the SMEs were marketing strategies at 65.9%, this is due to the fact that SMEs are targeting more sales to increase revenue and ultimately improve performance. Other business strategies were Product Pricing strategy, Quality of product and Customer service strategy may have not being ranked highly probably due to cost implications depending on the type of products/services. On the other hand, there was no one particular business strategies that were overwhelmingly preferred by the SMEs in their effort to influence performance. Due to the nature of SMEs and the surrounding environment, the Top 100 SMEs utilize different business strategies that would eventually have an impact on performance generally.

5.2.3 Influence of information systems

From the findings, all the respondents believed that information systems should be part of business strategy implementation. Technology adoption has been seen in the recent past as progressive and it is an ingredient to a firm’s performance. A majority of 67% of the respondents indicated that they have adopted web application like websites, this was probably their main tool used in marketing their products. Other responses indicated that information systems enhanced competitive advantage among firms compared to other like communication among staff, access to information, and employee productivity amongst others. Information systems have a major impact on Top 100 SMEs performance in Kenya.
5.2.4 Influence of both business strategies and IS on performance

The researcher established that implementation and alignment of both business strategies and information systems influenced performance of the Top 100 SMEs in Kenya as opposed to implementing only one of the variables without the other. This was a clear indication that business strategies and information systems comprehend each other in order to improve Top 100 SME performance.

5.3 Conclusion

The SME sector has become part of life for many business men in Kenya due to its influence on their lives. The government together with other stakeholders must do everything in their capacity to ensure that this sector is not only viewed as informal, but is given the capacity like other top tier businesses to develop. The SME sector has come up as a major employer in the country due to the inability of the formal industry to absorb all professionals. The study found out that for SMEs to achieve positive growth; the gap between both business and IT people has to be narrowed. It is vital that for both groups to understand and get involved in decisions that affect business and information systems. The researcher therefore believes that knowledgeable and skilled staff are very important in the economy to successfully adopt and implement of business strategies and IS, since they will be able to develop relevant business solutions that are essential to the performance of the business. When implemented haphazardly, business strategies and information systems might add minimal value as expected. Having the right knowledge, people and resources is crucial in SMEs success. All the respondents visited agreed that business strategies and IS in place, had a positive influence on their firms performance.
5.4 Recommendations

The study confirms that business strategies and information systems are important to performance of SMEs. KPMG Top 100 SMEs used business strategies and information systems to address various issues, improve performance and also become more formal. Other firms can copy from the successful businesses by utilizing these resources to their advantage. Even informal businesses need to consider this very critically and actively implement business strategies and information systems with an aim of being more formal, organized and compliant with existing regulations.

On the other hand, managers and owners of SMEs need to adopt business strategies that help businesses achieve objectives and optimize processes. They should also setup information systems that meet current business needs and be competitive in today’s fast moving economy. SMEs should consider adoption of current technologies that align with existing business strategies in order to influence performance. The researcher recommends that SMEs should adopt business strategies and information systems otherwise the cost of not responding could be costly leading to minimal or no performance, thereby giving their competitors the opportunity to beat them in the market which could eventually lead to closure of their businesses. A positive culture needs to be adopted by all stakeholders of these SMEs for faster adoption of solutions. Knowledge is the answer to decision making, therefore the management/non-management need to be equipped with business strategies and information systems knowledge or surrounded by knowledgeable staff.
5.5 Suggestion for Further Research

This study was a survey on the influence of business strategies and information systems on the performance of Top 100 SMEs in Kenya; where the use of questionnaires limited the respondents in expression. Thus, there is a need to conduct a similar study using an interview schedule and focusing on all the SMEs in order to carry out an in-depth analysis. The study variables only accounted for 47.7% of performance of Top 100 SMEs in Kenya.

By understanding their business strategies and IS in their firms, SMEs in Kenya need to come up with innovative ways that are tailored for their market, this bridges the gap of all stakeholders in satisfying their demands and preferences. Further to this a more detailed study can be conducted to establish the other factors or variables that contribute towards performance of SMEs in Kenya.
REFERENCES


APPENDICES

APPENDIX I: INTRODUCTION LETTER

TO: WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: REQUEST TO UNDERTAKE RESEARCH AT YOUR ESTABLISHMENT

I am an MBA (Master of Business Administration) student specializing in Strategic Management at University of Nairobi in the School of Business. Subsequently I am expected to undertake a research project in order to fulfill all requirements of the University. It is in this regards I am conducting a survey on “The influence of business strategies and information systems on the performance of Top 100 SMEs in Kenya”.

I humbly appeal to you to authorize me to undertake interviews in your establishment to gather the required information. I guarantee you that this information will be taken in strict confidence and will be utilized purely for academic purposes and your name will not be mentioned in the report.

Your co-operation will be highly appreciated and thank you in advance.

Yours faithfully,

Mark M. Muema
APPENDIX II: QUESTIONNAIRE

SURVEY ON THE INFLUENCE OF BUSINESS STRATEGIES AND INFORMATION SYSTEMS ON THE PERFORMANCE OF TOP 100 SMES IN KENYA

General Instructions

The main interest of this study is to investigate the influence of business strategies and information systems on the performance of Top 100 SMEs in Kenya. Kindly complete all statements.

Your response will be completely anonymous.

SECTION A: GENERAL INFORMATION

(Please tick one answer only)

1. What is your Age?

   18 – 30 years ( ) 31 – 40 years ( ) 41 – 50 years ( ) 51 and above ( )

2. Highest qualification achieved?

   Diploma ( ) Under Graduate Degree ( ) Post Graduate ( ) PhD ( )

   Others (please specify-----------------------------------------------)
3. Your job position in the company:

Owner manager ( ) Manager ( ) Supervisor ( ) Employee

4. How many employees do you have in your organization?

Less than 10 ( ) 10 - 50 employees ( ) 50 - 100 employees ( )

Above 100 employees ( )

SECTION B: BUSINESS STRATEGY (Please tick one answer only)

5. Have you adopted any business strategies for your organization in the last five years?

Yes ( ) No ( )

6. What form of business strategies have you adopted for your organization/business? (You can tick more than one).

<table>
<thead>
<tr>
<th>Market strategy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers differentiation</td>
<td></td>
</tr>
<tr>
<td>Product pricing</td>
<td></td>
</tr>
<tr>
<td>Cost control</td>
<td></td>
</tr>
<tr>
<td>Quality of the product</td>
<td></td>
</tr>
<tr>
<td>Extensive Advertising</td>
<td></td>
</tr>
<tr>
<td>Product and service innovations</td>
<td></td>
</tr>
<tr>
<td>Customer service</td>
<td></td>
</tr>
</tbody>
</table>
### 7. Please specify the extent business strategy implementation enhances the following in your business. Use a scale of 1 to 5, where: 1= no extent; 2 = little extent; 3 = moderate extent; 4 = great extent and 5 = very great extent

<table>
<thead>
<tr>
<th>Business aspect</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business excellence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve corporate image</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improving the company Direction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION C: INFORMATION SYSTEMS (Please tick your answer)

8. Have you adopted any information systems for your organization in the last five years?

   Yes ( ) No ( )

9. What is the level of information systems knowledge of business managers/people within your organisation?

   Excellent ( ) Good ( ) Satisfactory ( ) Below Average ( ) Poor ( )
10. What forms information systems do you have in place? (You can tick more than one)

<table>
<thead>
<tr>
<th>Websites and Mobile applications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP (Enterprise Resource Planning) e.g. Sage,</td>
<td></td>
</tr>
<tr>
<td>Oracle, SAP etc.</td>
<td></td>
</tr>
<tr>
<td>Basic Accounting Packages e.g. Excel, Access,</td>
<td></td>
</tr>
<tr>
<td>POS etc.</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>------------------------</td>
</tr>
</tbody>
</table>

11. Please indicate the extent information systems implementation enhances the following in your organization. Use a scale of 1 to 5, where: 1= no extent; 2 = little extent; 3 = moderate extent; 4 = great extent and 5 = very great extent.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easier access to information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faster making decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simplifying business processes and removing unnecessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased Competitive advantage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved employee productivity or business efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>faster communication among staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

58
12. In your opinion, how would you rate the alignment of the Information systems to Business strategy in your Organisation?

Excellent ( )  Good ( )  Satisfactory ( )  Below Average ( )  Poor ( )

SECTION D: PERFORMANCE (Please tick your answer)

13. Have past business strategies/information systems investments in your organisation returned higher or lower benefits (business value) than other non-business strategies/information systems investments?

Much higher ( )  Higher ( )  Average ( )  Lower ( )  Much lower ( )

14. To what extent do you think that business strategies and information systems have led to the following form of growth in your organisation? A scale of 1 to 5, where; 1= no extent; 2 = little extent; 3 = moderate extent; 4 = great extent and 5 = very great extent.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening of new branches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New products and services development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth in customer base</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. What is the extent of agreement with the following statement related to the influence of business strategies, information systems and performance of your firm? A scale of 1 to 5, where; 1= strongly disagree; 2 = disagree; 3 = neutral; 4 = agree and 5 = strongly agree.
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of business strategies alone has improved performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of Information systems alone has improved performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of both business strategies and Information systems has improved performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Do you plan to invest more in business strategies and Information Systems to enhance your business performance?
Yes (  ) No (  )

17. In your opinion, what other ways has business strategies and information systems implementation influenced performance in your organisation?
-------------------------------------------------------------------------------------------------------------------------------------
                                               
Your Name (Optional) ---------
Name of Organization) ------------------------------------
Department) -----------------------------------------------
Signature) ------------------Date) -----------------------------

Thank you again for your support and participation.
APPENDIX II: KENYA TOP 100 SMEs - 2015

1. PHARMAKEN LIMITED
2. PROFESSIONAL CLEAN CARE LTD
3. IZMIR ENTERPRISES LTD
4. WARREN CONCRETE LTD
5. BONFIRE ADVENTURES LIMITED
6. SUPERIOR HOMES KENYA LTD
7. LEAN ENERGY SOLUTIONS LTD
8. SUPERBROOM SERVICES LTD
9. SOFTWARE TECHNOLOGIES LTD
10. HIPORA BUSINESS SOLUTIONS
11. WELL TOLD STORY LTD
12. AMEX AUTO & INDUSTRIAL HARDWARE LTD
13. DATAGUARD DISTRIBUTORS LTD
14. WAUMINI INSURANCE BROKERS LTD
15. PINNACLE (K) TRAVELS & SAFARIS LTD
16. TROPIKAL BRANDS A LTD
17. RUSHAB PETROLEUM LTD
18. ALLWIN PACKAGING INTL. LTD
19. D&G INSURANCE BROKERS LTD
20. SHEFFIELD STEEL SYSTEMS LIMITED
21. COAST INDUSTRIAL & SAFETY SUPPLIES LIMITED
22. NOVEL TECHNOLOGIES EA LTD
23. POWERPOINT SYSTEMS EA LTD
24. MACHINES TECHNOLOGIES (2006) LTD
25. LOGISTIC SOLUTIONS LTD
26. HAJAR SERVICES LTD
27. SUPREME PHARMACY LIMITED
28. NORTH STAR COOLING SYSTEMS LTD
29. UNITED EAST AFRICA WAREHOUSES LTD
30. JO WORLD AGENCIES LIMITED
31. RAVENZO TRADING LIMITED
32. GENERAL CARGO SERVICES LTD
33. MPPS (1998) LTD
34. KISIMA ELECTRO MECHANICALS LTD
35. BTB INSURANCE BROKERS LTD
36. SPECIALIZED ALUMINIUM RENOVATORS LTD
37. SPENOMATIC LTD
38. BLUEKEY SOFTWARE SOLUTIONS (K) LTD
39. MANDHIR CONSTRUCTION LTD
40. ASTRAL INDUSTRIES LTD
41. EXON INVESTMENTS LIMITED
42. EXPRESS COMPANY LTD
43. RILEY SERVICES LIMITED
44. IMPAX BUSINESS SOLUTIONS
45. MIC GLOBAL RISKS INSURANCE BROKERS LTD
46. PRAFULCHANDRA & BROTHERS LTD
47. ZEN GARDEN LTD
48. ARK CONSTRUCTION LIMITED
49. HOMESCOPE PROPERTIES LTD
50. TRIDENT PLUMBERS LTD
51. SOLLATEK ELECTRONICS (K) LTD
52. AIRTOUCH COOLING SYSTEMS LTD
53. RILEY FALCON SECURITY
54. WOTECH KENYA LTD
55. CIRCUIT BUSINESS SYSTEMS LTD
56. SILVERBIRD TRAVEL PLUS LTD
57. GENERAL AUTOMOBILE CORPORATION LTD
58. HOSPITALITY SYSTEMS CONSULTANTS
59. TOTAL SOLUTIONS LTD
60. NDUGU TRANSPORT CO. LTD
61. NAPRO INDUSTRIES LTD
62. DEVSONS INDUSTRIES LTD
63. DUNE PACKAGING LIMITED
64. KANDIA FRESH PRODUCE SUPPLIERS LIMITED
65. KENCONT LOGISTICS SERVICES LIMITED
66. COMPULYNX LTD
67. SMART BRANDS LIMITED
68. FURNITURERAMA LTD
69. MASTER FABRICATORS LTD
70. EXECUTIVE HEALTHCARE SOLUTIONS LTD
71. EDUCATE YOURSELF LTD
72. ORBIT ENGINEERING LTD
73. KENYA BUS SERVICE MANAGEMENT
74. EUROCON TILES PRODUCTS LTD
75. HYDRO WATER WELL (K) LTD
76. TYPOTECH IMAGING SYSTEMS
77. BAGDA AUTO SPARES LTD
78. STATPRINT LIMITED
79. OIL SEALS AND BEARINGS CENTRE LTD
80. NATIONWIDE ELECTRICAL LTD
81. KENBRO INDUSTRIES LTD
82. CUBE MOVERS LIMITED
83. NEWLINE LIMITED
84. SPECIALISED HARDWARE LIMITED
85. NAIROBI ENTERPRISES LTD
86. FARMPARTS LIMITED
87. SOLOH WORLDWIDE INTER-ENTERPRISES LIMITED
88. DEEPA INDUSTRIES LIMITED
89. RELIABLE CONCRETE WORKS
90. AVTECH SYSTEMS LIMITED
91. BELL ATLANTIC COMMUNICATIONS LTD
92. IDEAL MANUFACTURING CO. LTD.
93. EMOMENTUM INTERACTIVE SYSTEMS LTD
94. PALMHOUSE DAIRIES LTD
95. GACHICHIO INSURANCE BROKERS LTD
96. SYNERGY GASES (K) LTD
97. IRON ART LIMITED
98. KISIMA DRILLING (EA) LTD
99. DE RUITER EA LIMITED
100. ROY TRANSMOTORS LIMITED

Source: KPMG East Africa and the Nation Media Group