# THE ROLE OF ENTREPRENEURIAL MANAGEMENT ON PROMOTION OF INTRAPRENEURSHIP IN THE SMALL AND MEDIUM MANUFACTURING ENTERPRISES IN KENYA

# JOSEPHINE MUMBUA MUTISO

# **DOCTOR OF PHILOSOPHY**

(Entrepreneurship)

JOMO KENYATTA UNIVERSITY OF
AGRICULTURE AND TECHNOLOGY

# The Role of Entrepreneurial Management on Promotion of Intrapreneurship in the Small and Medium Manufacturing Enterprises in Kenya

Josephine Mumbua Mutiso

A Thesis Submitted in Partial Fulfilment for the Degree of Doctor of Philosophy in Entrepreneurship in the Jomo Kenyatta University of Agriculture and Technology

# **DECLARATION**

This Thesis is my original work and has not been so University	ubmitted for a degree in any other
Signature	Date
Josephine Mumbua Mutiso	
This Thesis has been submitted for examination wi supervisors.	th our approval as the University
Signature	Date
Dr. Patrick K. Ngugi, PhD	
JKUAT, Kenya.	
Signature	Date
Dr. Thomas A. Senaji, PhD	
KEMII Kenya	

# **DEDICATION**

This Thesis is dedicated to my husband Peter, children Victor, Philip, Terry and to my parents.

#### **ACKNOWLEDGEMENT**

It is through God's grace that I have come this far, therefore my foremost gratitude goes to Him. I am highly indebted to my supervisors, Dr. Patrick K. Ngugi for his immense support, guidance and encouragement in the entire process, and Dr. Thomas A. Senaji for his guidance, input and patience in putting together a meaningful thesis. My husband and children have been patient, understanding and supportive throughout the study period and I sincerely thank them. My father was crucial in this journey for prodding me from time to time to join the PhD programme.

My gratitude also goes to the management at JKUAT NCBD and the entire JKUAT fraternity for providing a conducive environment for completion of this thesis. I also sincerely thank all my colleagues and friends who encouraged me in one way or another.

# **TABLE OF CONTENTS**

DECLARATION	II
DEDICATION	111
ACKNOWLEDGEMENT	IV
TABLE OF CONTENTS	V
LIST OF TABLES	IX
LIST OF FIGURES	XII
LIST OF APPENDICES	XIV
ACRONYMS AND ABBREVIATIONS	XV
OPERATIONAL DEFINITION OF TERMS	XVII
ABSTRACT	XIX
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	11
1.3 Research Objectives	12
1.4 Research Hypotheses	13

	1.5 Justification of the Study	13
	1.6 Scope of the Study	14
	1.7 Limitations of the Study	14
(	CHAPTER TWO	15
I	LITERATURE REVIEW	15
	2.1 Introduction	15
	2.2 Theoretical Review	15
	2.3 Conceptual Framework	25
	2.4 Empirical Review	37
	2.5 Critique of Existing Literature	42
	2.6 Summary of Literature	45
	2.7 Research Gaps	47
(	CHAPTER THREE	49
F	RESEARCH METHODOLOGY	49
	3.1 Introduction	49
	3.2 Research Design	49
	3.3Target Population	51

3.4 Sample Size and Sampling Technique	52
3.5 Data Collection and Instruments	57
3.6 Pilot Study	57
3.7 Data Analysis and Presentation	60
3.8 Measurement of variables	61
CHAPTER FOUR	66
RESEARCH FINDINGS AND DISCUSSION	66
4.1 Introduction	66
4.2 Response Rate	66
4.3 Results of the Pilot Study	67
4.4 Demographic Description of Respondents	71
4.5 Descriptive Statistics on Study Variable	77
4.6Statistical Modelling	100
4.7Optimal Model	125
CHAPTER FIVE	126
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	126
5.1 Introduction	126

APPENDICES	168
REFERENCES	139
5.5 Areas for Further Research	137
5.4 Recommendation	136
5.3 Conclusion	134
5.2 Summary of Study Findings	126

## LIST OF TABLES

Table 3.1: Kenya's Manufacturing Firms registered with KAM as at June 201551
Table 3.2: The Sample Size   56
Table 4.1: Response Rate
Table 4.2: Proportion of SMMEs in Manufacturing Sector and SMMEs Response         Rate       67
Table 4.3: The Study Variables' Cronbach Alpha Components    69
Table 4.4: Test for Multicollinearity    70
Table 4.5: Relationship with the Enterprise    76
Table 4.6: Percentage profit set aside for Research and Development.    78
Table 4.7: Age of Current Production Equipment    80
Table 4.8: Training of employees   81
Table 4.9: Budget for Marketing    82
Table 4.10: Targets on Increase in Profits
Table 4.11: Targets on Increase in Market Share
Table 4.12: Presence of Feedback Mechanisms in Place    86
Table 4.13: Level of Risk Taking by Management

Table 4.14: Promotions as a Result of New Ideas within the Years 2011 to 201588
<b>Table 4.15:</b> Monetary Reward for New Idea Contribution    89
<b>Table 4.16:</b> Shareholding given to Employees for New Idea Generation90
<b>Table 4.17:.</b> Grants given for Employees Individual Projects    91
Table 4.18: Levels of Management.    92
<b>Table 4.19:</b> How often Management gets Direct Information from Lower Levels93
Of Management93
Table 4.20:. Expectation of Employees to await Management Direction Before         Acting
<b>Table 4.21:</b> Expectation of Employees to Always Abide by Laid Down Procedures95
<b>Table 4.22:</b> Inclusion of Employees to Key Production and Marketing Decisions96
Table 4.23: What Gives Rise to New Opportunities    97
Table 4.24: Number of Times the Firms Upgraded Production Equipment/Process         since Inception       98
<b>Table 4.25:</b> Products not given to the Market that Firms can Rely on
Table 4.26: Percentage Increase in Market Share.    100
Table 4.27: Linear Regression analysis model results for commitment of Resources         on promotion of intrapreneurship       106

Table	4.28:	Regression analysis model results for management's need for	•
		achievement on promotion of intrapreneurship	.111
Table		Regression model results for reward system on promotion of intrapreneurship	
Table		Regression analysis model results for entrepreneurial management Structure on promotion of intrapreneurship	
Table		Multiple regression model results for entrepreneurial management on promotion of intrapreneurship	

# LIST OF FIGURES

<b>Figure 1.1:</b> Comparing and Combining Key Roles of Managers and Entrepreneurs9
Figure 2.1: Basic Expectancy Model. 21
Figure 2.2: The Conceptual Framework
Figure 2.3: Strategic Renewal and Organizational Change
Figure 4.1: Gender of the Respondents
<b>Figure 4.2:</b> Age of the Respondents
<b>Figure 4.3:</b> Number of Years Worked in the Enterprise
<b>Figure 4.4:</b> Number of Years the Enterprise has Been in Existence
<b>Figure 4.5:</b> Opportunities Exploited by Management Yearly Within 2011 to 201585
Figure 4.6: histogram on normality test on Commitment of resources
<b>Figure 4.7:</b> Scatter Plot on Effect of Commitment of resources on Promotion of Intrapreneurship
<b>Figure 4.8:</b> Histogram on normality test on Managements need for achievement 107
Figure 4.9: Scatter Plot on Management's Need for Achievement on Promotion of  Intrapreneurship
<b>Figure 4.10:</b> Histogram on normality test on Reward System
<b>Figure 4.11:</b> Scatter plot of Reward System on Promotion of intrapreneurship113

Figure	4.12:	Histogram	on	Nor	mality	Test	on	Entrepreneuria	l manage	ment
	st	ructure								117
Figure	4.13:	Scatter	plot	on	entrep	reneu	rial	management	structure	and
	in	trapreneurs	ship							118

## LIST OF APPENDICES

Appendix 1: Questionnaire/Interview Guide	168
Appendix II: Sample Size Calculation Table	175
Appendix III: Results of Factor Analysis	176

#### **ACRONYMS AND ABBREVIATIONS**

**AECT** - Association for Educational Communications and Technology

**ANOVA** - Analysis of Variance

**CR** - Commitment of Resources

EC - European Commission

**EMS** - Entrepreneurial Management Structure

**GDP** - Gross Domestic Product

**IFAC** - International Federation of Accountants

**ILO** - International Labour Organization

**INT** - Intrapreneurship

**KAM** - Kenya Association of Manufactures

**KPMG** - Klynveld Peat Marwick Goerdeler

**KIPPRA** - Kenya Institute for Public Policy and Research and Analysis

**KSHS** - Kenyan Shillings

MNA - Management's Need for Achievement

MSE - Micro and Small Enterprise

**NAM** - National Association of Manufacturers

**OECD** - Organization for Economic Co-operation and Development

**ROK** - Republic of Kenya

**ROSA** - Republic of South Africa

**ROU** - Republic of Uganda

**RS** - Reward System

**SME** - Small and Medium Enterprises

**SMMES** - Small and Medium Manufacturing Enterprises

SPSS - Statistical Package for Social Sciences

**UN** - United Nations

**UNIDO** - United Nations Industrial Development Organization

**USA** - United States of America

**USBLS** - United States Bureau of Labour Statistics

#### **OPERATIONAL DEFINITION OF TERMS**

Intrapreneurship

**Manufacturing** 

Also referred to as corporate entrepreneurship, is the entrepreneurial behaviour within incumbent organizations (Jong, Parker, Wennekers, & Wu, 2011; Antonic & Antonic, 2011).

**Entrepreneurial Management** 

This is the type of management that helps firms outperform the more administrative ones by being strategic oriented, opportunity driven, committing resources, growth oriented, having an entrepreneurial culture, putting in place entrepreneurial management structures and having a reward philosophy that compensates employees (Kuhn, Sassmannshausen, & Zollin, 2010). It is also achievement oriented (Niuwenhuizen, 2008).

Entrepreneurial Management Structure A flat and organic structure with multiple

informal networks. The informal networks are flexible and intended to encourage and create enabling condition for employees to seek and create opportunity, thus focused on rapidly detecting and acting rapidly on environmental changes (Kuhn, Sassmannshausen & Zollin, 2010).

The mechanical, physical, or chemical transformation of materials, substances, or components into new products (USBLS, 2014).

xvii

#### **Need for Achievement**

A tendency to choose and persist at activities that hold a moderate chance of success or a maximum opportunity of personal achievement satisfaction without the undue risk of failure (Okhomina, 2010).

**Reward System** 

This is a structured method of evaluating and compensating employees based on their performance (Holmes, Carvalho & Powers, 2010).

Resources

All assets, organizational processes, capabilities, organizational skills, management skills, information and knowledge, categorized into tangible, intangible and financial (Laosirihongthong, Prajogo & Adebanjo, 2014).

#### **ABSTRACT**

The manufacturing sector in Kenya has over the years experienced a lag in its growth as statistics show thus necessitating a need to improve its performance. The small and medium manufacturing enterprises are the majority in the sector and form part of the SME sector, which in general is an important part of the country's economy as it generates over 60% of employment in the economy, but faces a myriad of challenges. Practicing intrapreneurship has been known to improve growth and profitability in firms, but SMEs have not fully embraced it. Entrepreneurial management as opposed to administrative management is necessary for any firm because it is pro-active, risk- taking and opportunity driven. This type of management supports intrapreneurship which is of great value to a firm. This study was therefore aimed at examining the role of entrepreneurial management on promotion of intrapreneurship in Small and Medium Manufacturing Enterprises (SMMEs) in Kenya. The objectives of the study were to determine how commitment of resources, management's need for achievement, reward system entrepreneurial management structure, promote intrapreneurship in the SMMEs. A preliminary study was carried on a representative sample of 254 managers or entrepreneur owner managers from the manufacturing firms registered under Kenya Association of Manufacturers using stratified random sampling, from which 145 firms participated. Out of the 145 firms, 133 firms were found to be SMMEs. Data was collected from 114 either managers or entrepreneur owner managers who successfully participated in the study. Pilot testing was undertaken on 10% of the sample to establish the validity and reliability of the quessionnaire as the instrument of data collection using Cronbach Alpha. Descriptive and correlational research designs were used for the study. Factor analysis was also used to determine the suitability of the variables to the research. The use of linear regression was determined by tests of multicollinearity, scatter plots and normality tests. Linear regression analysis was used to establish the relationship between the independent variables and dependent variable. The study hypotheses were tested using the significance of the p values which led to the rejection of the null hypotheses and to the acceptance of the alternative hypotheses. The findings of the study showed entrepreneurial management significantly promoted intrapreneurship in SMMEs in Kenya. Given their importance, SMMEs should embrace this type of management so as to improve their performance through intrapreneurship. This would make their contribution to the growth of the economy of Kenya to be more significant. Based on the findings, further areas of research were recommended for example in the areas of policy whereby the Government of Kenya can include entrepreneurial management in its curricular of training entrepreneurs.

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background to the Study

The aim of this study was to find out the role of entrepreneurial management on promotion of intrapreneurship in the small and medium manufacturing enterprises (SMMEs) in Kenya. The study was in particular focused on commitment of resources, management's need for achievement, reward system and entrepreneurial management structure as the independent variables which play a role in the promotion of intrapreneurship in these enterprises. Manufacturing is a key sector in not only the local but also the global economy. Its importance is not limited to adding value but also creates jobs and drives innovation for long-term sustainable economic growth. This is both for emerging and developing economies in the world (Kennedy, 2013).

According to UNIDO (2015), the world manufacturing sector has continued to struggle in its growth as a result of the global financial crisis of the year 2009, and this has resulted in the developing countries being the main engine in the growth of the global manufacturing. The pace of the growth is entirely not encouraging as it has over the past few years decelerated. The sector is also in transition in many countries and faces several challenges that are significant to its continued performance as pointed out by the Chartered Institute of Management Accountants (2010). It is for these reasons that measures should be undertaken to reduce the challenges defacing the sector. Most of the worlds manufacturing is undertaken by the SME sector as affirmed by the Edinburg Group (2012) that SMEs constitute about 95% of all the enterprise across the world, but according to Katua (2014), have unique challenges which hinder their growth and innovativeness.

Management plays an important role in overcoming challenges facing an organization and therefore becoming a strong link in its performance. Management's role is critical in the direction and purpose of an organization for example through goal setting, motivation, effective plans and support for innovation among others (Sullivan, 2011). An organization's management should constitute an entrepreneurial approach to issues. It should therefore combine entrepreneurial behaviour like being innovative, risk taking and creative, with administrative functions, among others, for the growth of the organization (Smith, Hampson, Chaston & Badger 2003).

One way to enhance an organization's performance is through intrapreneurship, which has been linked to a firm's performance of increased profits, with those firm's that practice it turning in better results (Kolokavic, Sisek, & Milovanovic, n.d). Entrepreneurial management approach and commitment especially by top management within an organization is required for intrapreneurship (Hisrich, Peters and Shepherd, 2010).

#### 1.1.1 Small and Medium Scale Enterprises (SMEs)

There is no uniformity in defining SMEs (Beyene, 2002). According to IFAC (2010), the European Union defines SMEs as those made up of enterprises employing fewer than 250 persons. The Micro and Small Enterprises Act (2012) of Kenya defines micro enterprises as those with one to nine people and an annual turnover that does not exceed five hundred thousand shillings. Small enterprises under this Act are those with ten to fifty employees with an annual turnover of between five hundred and five million shillings (ROK, 2012).

This Act is however silent on the medium enterprises. The Act goes further to define a micro enterprise in the manufacturing sector as that where the investment in plant and machinery or the registered capital of the enterprise does not exceed ten million shillings. A small enterprise in the manufacturing sector is that with an investment in plant and machinery as well as the registered capital of the enterprise that is between ten million and fifty million shillings.

Though SMEs are variously defined in the world, they are recognized as the key drivers of economic growth. They are considered to constitute over 90% of the enterprises in most economies especially developing ones, as well as being the main generators of 60% of employment in most developing economies(Joshi, n.d; ILO, 2007; Fjose, Grünfeld, & Green, 2010). In Kenya as per Economic Survey 2015, the sector created 693 jobs (ROK, 2015). SMEs also stimulate entrepreneurial activity and skills, in addition to providing flexibility and quick adaptation to the changes experienced in market demand and supply conditions. Still, SMEs help in the diversification of economic activities, contribute significantly to trade, both local and international, and help in creating social cohesion (Elasrag, 2013).

SMEs are also viewed to be a crucial component of an economy's industrial vibrancy (Elasrag, 2013). This is further emphasized by Mitchell 2011 by noting that the countries and regions that are highly reliant on existing and mature industries would ultimately experience economic decline, bringing about chronic net job loss. To counter this, small enterprise start-ups help to keep the economy afloat. As a result economies that highly thrive, and are fast growing have more than high small enterprise start up rates, as well as large SME sectors (Beck, Demirguc-Kunt, & Levine, 2005)

According to Kuratko 2003, the United States had achieved its highest economic performance in the last ten years as a result of the fostering and promotion of entrepreneurial activity which as pointed out by Elasrag (2013) is stimulated by SMEs. Further, the newly industrialized countries like South Korea, Malaysia and Taiwan have experienced development and economic growth because they accorded entrepreneurship the right conditions to flourish (Nafukho, Machuma & Muyia, 2009).

In addition, the SME sector is important in provision of goods and services, as well as a driver in competition promotion and innovation. This is further supported by a great utilization of raw materials locally available in an economy (Taiwo, Ayodeji & Yusuf, 2012). SMEs also provide linkages for the large enterprises, corporations and

multinationals, either by being the ultimate customers or the distributors. This is especially in developing countries where customers may be difficult to access especially in the rural areas. Local distribution is therefore provided by SMEs which are in a better position to cost effectively reach the customers.

In recognition of the important role played by the SME sector, the Government of Kenya has over the years come up with policies and programmes to help strengthen this sector. For example MSE Act (2012) came to formulate a framework for the MSE sector, by proposing a creation of bodies to support the growth of the sector, while Kenya's Vision 2030 proposes development of at least five SME industrial parks in major cities (ROK, 2007).

#### 1.1.2 Global Perspective of Manufacturing in SMMEs

The United States of America's 12% GDP is accounted for by its manufacturing sector, while it employs about 9% of the countries workforce (NAM, 2015). However, as posited by Levinson (2015), it is important to note that even though the USA's manufacturing output growth has over the last decade outperformed that of most European countries and Japan, it has continued to lag behind that of China, Korea and other Asian counties. Also, the USA's share of global manufacturing activity declined from 30% in 2002 to 17.4% in 2012, while it was displaced by China as the largest manufacturing economy in the year 2010.

According to Klynveld Peat Marwick Goerdeler (KPMG) International (2015), China's growth in its GDP slowed down as from the year 2013to 2014 to stand at 74% partly due to challenging environment within the manufacturing sector. The contribution to GDP is 13.9% lower than that of the service sector which stands at 73% (Taborda, 2015). China's manufacturing sector is dominated by SMMEs as pointed out by Ni (2015). The SMMEs make goods of low technology leading to low profit margins, thus needing innovativeness and improvement.

The bulk of manufacturing in USA is dominated by SMMEs which need to be productive, continue to be innovative and engage in product improvement (Kifle, 2016). A report by Stone and Associates (2013) indicates that the small and medium sized manufacturers in USA should play a critical role in exports, but this has been largely played by the large enterprises. There is also under performance in exports in the sector as a whole as compared to other developed nations because of reliance on the large domestic market but which currently offers limited growth due to intense competition and increased imports.

The firms in USA that rely on international sales are less vulnerable to the volatility in the domestic demand. SMMEs can therefore benefit from exports but they are constrained in terms of resources and lack management of capacity in manufacturing especially in expertise for international trade (Kifle, 2016). In Africa, Fjose, Grunfeld and Green (2010), SMEs constitute about 95% of all firms in the Sub-Saharan Africa. The manufacturing sectors in these countries face challenges for example the manufacturing sector in South Africa contributes significantly to its economy but its importance declined from 19% in 1993 to 17% in 2012 (ROSA, 2015).

Tanzania's manufacturing sector continues to lag behind those of the countries in the region in terms of both quantity and quality of the industrial goods that are produced and exported. The economy relies more on the agricultural sector, the extraction sector and low value added manufacturing. Value added manufacturing is especially confined in a few low technology sectors thus opening the country's industry to international competition vulnerability including making the county to be one of the least industrialized in the world (UNIDO, 2012).

In Uganda the manufacturing sector has over the years been struggling and has experienced a slow growth below the sub-Saharan average (ROU, 2010). The sector's contribution to Uganda's GDP lags behind that of other regional countries like Kenya, Tanzania and Burundi, even though ahead of Rwanda (KIPPRA, 2014). In Kenya, the

manufacturing sector constitutes 70% of the industrial sector's contribution to Gross Domestic Product (GDP), and is recognized by the Kenya Vision 2030 as a key driver for realizing a sustained annual GDP growth of 10%. In spite of these, the sector has over the years continued to perform poorly and continues to lag behind the overall economic growth by 1.9% (KAM, 2015). Small and medium manufacturing enterprises form the bulk of this sector in Kenya (KIPPRA, 2014).

#### 1.1.3 Small and Medium Manufacturing Enterprises in Kenya

Small and medium scale manufacturing is an important segment in the SME sector. Small scale production is characterized by high labour involvement thus helping to reduce the high levels of unemployment. Most of these enterprises do not require intensive capital investment, thus easier to set up and operate than the large manufacturing enterprises (Tarus & Nganga, 2013). According to the Kenya Association of Manufacturers (KAM) (2012) Kenya's industrial sector is comprised of manufacturing, mining and quarrying and construction activities. This sector contributes 14% to the Gross Domestic Product (GDP). The greatest share of industrial production is accounted for by manufacturing activities at 9.4%, that is approximately 70% of the total industrial sector contribution to the GDP (KIPPRA, 2013). The manufacturing sectors overall goal is to increase its GDP contribution to at least 10% per annum. The contribution of the manufacturing sector to the total formal employment in Kenya is 13%, while the informal manufacturing accounts for 20% of the informal employment (KAM, 2012).

The sector has a high untapped potential to contribute more to both the GDP and employment (KIPPRA, 2013), but in spite of the sector's importance to Kenya's economy, it has over the years continued to experience a lag. As well, even though the formal employment in this sector increased by 2.9% in the year 2014, the real output in the same year was 3.4% as compared to 5.6% in 2013, thus a decrease (ROK, 2015). As a result of the recognition of the role played by this sector and to counter the lag,

Kenya's Vision 2030 proposes several strategies to raise the sector's contribution of manufactured goods to the Central and East African regional market, targeted at 15%.

#### 1.1.4 Entrepreneurial Management

There is a significant difference between entrepreneurial management and non entrepreneurial management as pointed out by Smith, Hampson, Chaston and Badger (2003). Entrepreneurial managerial behaviour promotes a culture of creativity and risk-taking, creates flat informal structures, and promotes strategy so as to take advantage of the opportunities that are identified. Non entrepreneurial managerial behaviour on the other hand emphasizes planning, control, monitoring, evaluation, and formalized organizational structures. According to Gürbüz and Aykol (2009), through entrepreneurial management, firms are driven and motivated by opportunity which they seize irrespective of the resources in their possession. Mechanisms which include structure, culture and people are developed to support this. Further, entrepreneurial management is an opportunity driven, proactive and action-oriented mode of management balancing an organization's innovation abilities with efficient and effective use of resources, for creation and sustenance of successful organizations (Hortoványi, 2012).

Teece (2012) posits that the entrepreneurial management necessary for a business to have dynamic capabilities is related to other managerial activity although different. These dynamic capabilities are, opportunity identification and assessment, resource mobilization to take advantage of the opportunity thus getting value, and continued renewal. This is from the fact that entrepreneurship is about sensing and understanding opportunities, getting things started, and finding new and better ways of putting things together. Entrepreneurial management is therefore not about refining and maintaining the existing procedures.

According to Casson, Yeung, Basu and Wadeson (2006), entrepreneurial firms are innovative, proactive and risk taking. Entrepreneurial management should therefore be proactive which is important for a firm's performance. Procativeness has a positive impact on a firm's ability to perceive opportunities (Martínez & Moreno, 2011). It however requires planning. These plans and actions require to be initiated before either a threat or an opportunity occurs. A proactive manager is able to think ahead and take the lead in problem prevention. This is opposed to reactive management that focuses on current situations as a result of changes that have occurred already (Rasmussen, 2012). Management must also have the ability to handle various personalities, tasks and situations. One of these is the ability to empower the employees under them so that they feel motivated for improved performance (Sunday & Somoye, 2011).

It is the position of Morris, Kuratko and Covin (2010) that management and entrepreneurship are different. A manager ensures that there is an efficient and an effective use of the resources that they control. An entrepreneur on the other hand is concerned with what can be and not with what is. Managers should therefore become entrepreneurs. The entrepreneur manager should be able to combine the key roles of a manager and an entrepreneur as shown in figure 1.1.

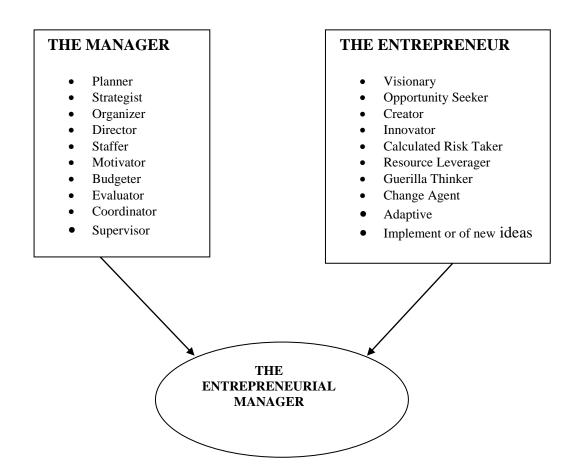


Figure 1.1: Comparing and Combining Key Roles of Managers and Entrepreneurs (Morris, Kuratko & Covin, 2010)

Intrapreneurship needs a firm's management support to work and be effective. This can take many forms like through facilitation of activities involving encouraging employees to; articulate their ideas, while recognizing and being supportive of these ideas, solve a firm's problems in innovative ways, be proactive in seeking opportunities, provision of the necessary expertise and resources, which act as seed money for kick-starting the innovative ideas. This requires the institutionalization of entrepreneurial activities within an enterprise's system and processes (Scheepers, Hough & Bloom, 2008).

#### 1.1.5Intrapreneurship

Intrapreneurship has been variously defined by various scholars and researchers. Labels used include corporate entrepreneurship, entrepreneurial orientation, corporate venturing (Jackal, 2010; Nath, 2005; Maes, 2003). Literature shows that the most commonly used label is corporate entrepreneurship. Intrapreneurship has also been defined as the entrepreneurial behaviour exhibited by the already established organizations through innovative ways like new venturing, organizational transformation or revitalization as a result of strategic renewal (Kahkha, Kahrazeh & Armesh, 2014). Merwe and Lotz (2013) define intrapreneurship as visionary directing an organization wide reliance on entrepreneurial behavior to continually and purposefully create new businesses, activate innovation or renewal within existing business so as to remain competitive.

Despite the inconsistency in defining and explaining intrapreneurship, its importance to a firm has been emphasized over time. To mention but a few, there is an immense and intense competition among firms that complicates the competitive landscape. The firms operate in a macro environment that is characteristic of rapidity in technological progress in many fields that render obsolescence to customer problems and current solutions. This is further compounded by explosive industrial growth experienced in some sectors, while others experience recession like conditions that lead to restructuring. These challenges lead to firms getting out of business if they do not continually adapt to the changing business environment. One way to achieve this is through intrapreneurship (Ramachandran, Devarajan & Ray, n.d). Intrapreneurship can therefore be said to be an important tool for revitalizing, transforming and improve the performance of an organization ((Kahkha, Kahrazeh, Armesh, 2014)

#### 1.2 Statement of the Problem

SMEs in the manufacturing sector in Kenya are faced with a number of challenges which, as pointed out by Gathogo (2013) include lack of innovative capacity, slow to embrace new technology, constraints in accessing capital and inadequate management capacity. Gathogo (2013) still posits that despite SMMEs' importance to the economy, they have since Kenya's independence performed poorly with some having to close down due to inability to remain competitive and operate profitably. SMMEs form over 70% of the manufacturing sector in Kenya (KIPPRA, 2013), and in general, the sector grew by 3.4% in 2014 as compared to 5.6% in 2013 (ROK, 2015), while its growth of 3.1% lags behind the overall economic growth of 5% (KAM, 2015). Further, the sector's share of exports to the global market at 0.02% compares unfavourably with that of South Africa at 0.03%, Malaysia at 1.3% and Singapore at 2.4% (KIPPRA, 2013).

Promotion of intrapreneurship which is for all firms of all sizes and increases a firm's performance, can partly address these challenges Mokaya (2013). Further, Ragui and Wainaina (2013) argue that intapreneurship is the way forward for SMEs, and should be adopted to ensure their growth. It also rejuvenates and redefines organizations to create and sustain competitive superiority, and improves their growth and profitability, therefore it is important for SMEs to embrace intrapreneurship for them to remain competitive (Schmelter, Mauer, Borsch & Brettel, 2010). Promotion of intrapreneurship if encouraged in SMEs is a strategy to overcome challenges facing the sector (Kahkha, Kahrazeh & Armesh, 2014). In spite of these recommendations, Shariatmadari, Hajimohammadian, Mahdi and Jarad (2012) point out that most SMEs face challenges in promoting intrapreneurship.

Few or no studies have directly linked entrepreneurial management to promotion of intrapreneurship. Sejde, Veenker and During (2013) recommended that studies be undertaken on the role of management or the entrepreneur owner on intrapreneurship enhancement in SMEs. However, attention by management and scholars on a firm's

ability to undertake intrapreneurship have. large firms do not face as many challenges as the SMEs (Fini, Grinmaldi, Marzocchi, Sobrero, 2012; Naldi, Achtenhagen & Davidsson 2015). This study therefore sought to address these gaps by undertaking an empirical study on the role played by entrepreneurial management on promotion of intrapreneurship in SMMEs in Kenya.

#### 1.3 Research Objectives

#### 1.3.1 General objective

The aim of the study was to examine the role of entrepreneurial management on promotion of intrapreneurship in the small and medium manufacturing enterprises in Kenya.

#### 1.3.2 Specific Objectives

The specific objectives of the study were;

- 1. To determine the role of commitment of resources on promotion of intrapreneurship in SMMEs in Kenya.
- 2. To examine the role of management's need for achievement on promotion of intrapreneurship in SMMEs in Kenya.
- 3. To assess the role of reward system on promotion of intrapreneurship in SMMEs in Kenya.
- 4. To establish the role of entrepreneurial management structure on promotion of intrapreneurship in SMMEs in Kenya.

#### 1.4 Research Hypotheses

- 1. H<sub>a</sub>: Commitment of resources has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.
- 2. H<sub>a</sub>: Management's need for achievement has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.
- 3. H<sub>a</sub>: Reward system has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.
- 4. H<sub>a</sub>: Entrepreneurial management structure has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.

#### 1.5 Justification of the Study

The study will be of great importance to entrepreneurs and managers in the SME sector, especially those in the manufacturing sector. The results of the study will give them knowledge on how to entrepreneurially manage their enterprises to attain intrapreneurship for their survival, profitability and growth.

Given the important role played by the SMMEs in the economical growth of country, the findings of the study will help the policy makers and other support services to come up the relevant training of the entrepreneurs in the sector. This would greatly enhance the performance of the SMMEs for growth.

The study would also be of great benefit to other researchers and scholars as it would form a basis for further research in the sector. It would also serve as a reference material thus providing an empirical contribution to the study of intrapreneurship in small and medium manufacturing enterprises and the SME sector in general.

#### 1.6 Scope of the Study

The study focussed on the Small and Medium Manufacturing Enterprises registered with the Kenya Association of Manufactures. The enterprises are placed in sectors therefore enabling a representation of each sector. Since KAM is an organization registered in Kenya, representing Kenyan manufacturing organizations, results were able to be generalized to the SMMEs in Kenya and the rest of the world, especially the developing countries.

The study was in particular confined to the role of entrepreneurial management on promotion of intrapreneurship in SMMEs in Kenya, under four independent variables namely commitment of resources, management's need for achievement, reward system and entrepreneurial management structure.

#### 1.7 Limitations of the Study

There was a level of resistance by some respondents in giving the information required. This was mitigated by assuring them that the study was purely for academic purposes and would be treated with utmost confidentiality, and that the results would be availed to them in case they required to know the outcome. Another limitation was that of failure by the respondents to fully comprehend some of the questions, which was mitigated through taking them through the questionnaire and explaining the questions in detail.

The classification of the SME sector in Kenya can be by either the number of employees, or the financial turnover in Kenyan Shillings, or the value of the capital or a combination of two or the three factors. Most of the respondents considered the financial information to be confidential information thus declined to give it. Thus the study relied mostly on the number of employees to determine whether a firm is within the SME sector and not a large enterprise.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviewed the relevant literature by various scholars and researchers in the area of Entrepreneurial management and intrapreneurship in enterprises, with a specific focus on SMMEs. It is anchored on theoretical review, conceptual framework and the empirical review which informed this study. The chapter specifically reviews entrepreneurial management as operationalized in the conceptual framework as commitment of resources, management's need for achievement, reward system and entrepreneurial management structure as independent variables, and the dependent variable as promotion of intrapreneurship. The chapter also points out the research gaps and areas as well as providing a detailed critique of the past empirical studies and literature.

#### 2.2 Theoretical Review

A theory is defined by Cherry (2015) as a "well-established principle that has been developed to explain some aspect of the natural world". A theory is further explained to be as a result of repeated observation and testing. Facts, laws, predictions, and tested assumptions that are widely accepted are incorporated in the theory. A theoretical framework helps a researcher to limit the scope of data relevant to the study by focusing on specific variables and viewpoint, facilitates concepts and variables' understanding. It must therefore demonstrate an understanding of theories and concepts that are relevant to the research topic (Labaree, 2013). The theoretical review for this study is based on the relevant theories which underpin commitment of resources, management's need for achievement, reward system and entrepreneurial management structure as variables playing a role on promotion of intrapreneurship in SMMEs in Kenya.

These theories as discussed are resource based theory, McClelland's need for achievement theory, Herzberg's motivation theory, the expectancy theory of motivation, structural contingency theory and Schumpeter's innovation theory.

#### **2.2.1 Commitment of Resources**

Commitment of resources by management to promote intrapreneurship is underpinned by resource based theory. Resource based theory as discussed below explains the need for development and commitment of resources that are heterogeneous, not easy to imitate, and supportive of a firm's competitive advantage.

#### **Resource-Based Theory**

Jay Barney in 1991 came up with the resource based view of the firm, and is considered by many scholars as the father of the modern resource based theory of the firm (Wüstenhagen,2008). The basic condition of resource-based theory is heterogeneity. Even if firms are competitors in the same industry, they may possess different types of resources and capabilities, thus a firm's ability to sustain superior resources is the key to competitive advantage. These resources include all assets, organizational processes, organizational skills, management skills, information and knowledge. The resources enable a firm to engage in the appropriate strategies for improvement of effectiveness and efficiency (Wüstenhagen, 2008).

However, the attributes that make resources sustain competitive advantage for a firm are rareness, worthiness (valuable), imperfectly mobile and non-substitutable. When a firm's resources and capabilities are immobile and not imitable, it becomes difficult and costly for its competitors to develop and acquire them, thus the firm's competitive advantage is sustained (Perrigot & Pénard, 2013). When entrepreneurs possess a rare insight into a resource's value and others do not, those with the insight act upon the unexploited opportunities. This gives them a competitive advantage (Reddy & Rao, 2014).

Difference in the performance of the firms even when they compete in the same industry, can be both as a result of the differences in their resources, as well as the decision of the managers on the acquisition and deployment of these resources (Sirmon, Hitt, Ireland & Gilbert, 2011). The resource based theory expects the management of a firm to make a strategic choice to identify, develop and deploy key resources in order to capitalize on the returns.

A firm can formulate strategies that take advantage of external opportunities by exploiting or utilizing internal capabilities or available resources. One way a firm can allocate and utilize its resources is by spending money on research and development, marketing, hiring of managers with backgrounds and profiles that match the firm's business strategy among others (Perrigot & Penard, 2013). From the insights of this theory it is important that management within SMMEs not only provide but also utilize and allocate the available resources for stimulating intrapreneurship within the firm. Striving to develop a unique and rare resources would position a SMME at an advantageous competitive position within the market it operates in. The resource based theory leads to the first research hypothesis which is, commitment of resources has a significant role on promotion of intrapreneurship in SMMEs in Kenya.

#### 2.2.2Management's Need for Achievement

Management's need for achievement is explained by McClelland's high need for achievement theory. This theory explains that achievement oriented individuals are motivated by desire to accomplish that which they have set to achieve. The achievement is made possible by formulating goals that are challenging but realistic and achievable.

# McClelland's High Need for Achievement Theory

McClelland in 1961 came up with the high need for achievement theory, which states that individuals who portray this tendency are motivated by the achievement, set realistic, attainable but challenging goals, seek feedback for improvement, and push themselves to do well for attainment of a feeling of accomplishment (Stewart & Roth, 2007; Okhomina, 2010). Entrepreneurs are perceived to be more achievement oriented than the population in general. A manager needs to be entrepreneurial to portray a high need for achievement. According to Kuratko, Ireland, Covin and Hornsby (2005), managers are forced to be entrepreneurial by a combination of circumstances.

An entrepreneur is one who can envision the future and be able to recognize the emerging patterns that represent untapped opportunities. Innovations are then formulated to exploit these opportunities which are pursued regardless of the controlled resources. There should therefore be a balance between management and entrepreneurship. Thus managers must become entrepreneurs (Morris, Kuratko & Covin, 2010)

Marvel, Griffin, Hebda and Vojak (2007) go further to opine that, one way management can support intrapreneurship is by being a champion for innovative ideas. High need for achievement individuals are more oriented to innovative and energetic activities requiring planning for the future. SMMEs due to the challenges that they face would highly benefit from managers who possess and champion innovative ideas. Managers who feel responsible for task outcomes would be successful, and would prefer tasks that involve skill and effort as well as provided clear performance feedback, in addition to the tasks being of moderate challenge and risk (Collins, Hanges & Locke, 2004). This theory instigated the second research hypothesis that management's need for achievement has a significant role on promotion of intrapreneurship in SMMEs in Kenya.

# 2.2.3 Reward System

The reward system independent variable is reinforced by two theories namely Herzberg's motivation theory and the expectancy theory of motivation. Herzberg's motivation theory explains two types of motivators namely intrinsic and extrinsic motivators. The expectancy theory of motivation explains that employee's performance matches the rewards expected.

## **Herzberg's Motivation theory**

Herzberg came up with two-factor theory of motivation also known as motivation-hygiene theory in 1959 (Hong & Waheed, 2011). Intrinsic motivators which according to Herzberg are the motivation factors cause motivation when available while extrinsic motivators which are the hygiene factors cause dissatisfaction or lower motivation when absent (Hong & Waheed, 2011).

Intrinsic motivators which are within the job context are less tangible and more emotional, while extrinsic motivators are more tangible basic needs. According to Achakul and Yolles (2013), extrinsic motivation inspires an individual to work in response to a factor separate from the work itself, which leads to a separate income. This can be in terms of either/or reward, benefit, recognition, commission and salary. This is opposed to intrinsic motivation which inspires an individual to engage in work for its own sake, either because it is of interest, enjoyable or satisfying. Dermer (2007), points out that over the years there have been suggestions that focusing on extrinsic motivation only reduces the intrinsic motivation. Marvel, Griffin, Hebda, & Vojak (2007), in their study found out that a reward and recognition system was the most outstanding in the motivation category.

Amar (2004) defines motivation as a term that is associated with the forces acting on a person causing him to act in a certain way. It can be described as a pattern of thinking that helps stimulate an individual's behaviour (Achakul & Yolles, 2013). It is important

to understand the dynamics of motivation so as to understand and identify the drivers of peoples' acts in certain ways. Behavioural changes which are as a result of either internal or external stimuli portray motivation (Amar, 2004).

An individual's motivation to assume the risks that are associated with entrepreneurial activity can be driven by an appropriate reward system as pointed out by Marvel, Griffin, Hebda and Vojak(2007). Also, organizations have to provide an environment for intrapreneurship by stimulating, supporting and protecting intrapreneurs (Morris, Kuratko & Covin, 2010). Intrapreneurship in SMMEs can be encouraged by an effective reward system that considers goals and results.

### The Expectancy Theory of Motivation

The expectancy theory was developed by Victor Vroom in 1964 as a cognitive process theory of motivation pegged on people's believe that the effort put at work matches the performance achieved, which in turn should match the rewards received(Lunenburg (2011). People are motivated by the belief that much effort brings about good performance which in turn attracts good rewards. Vroom identified four assumptions that encourage people as they join organizations which are; (i) employees join organizations with expectations such as motivations, their needs and past experiences, thereby influencing how they react to the organization, (ii) employees consciously choose how to behave based on their expectancy calculations, (iii) employees have different expectations from the organization, from which, (iv) they choose among alternatives for optimal personal outcomes.

These assumptions result to three key elements of expectancy motivation theory, namely expectancy, instrumentality and valence (Parijat & Bagga, 2014). Expectancy estimates the probability of a job related effort resulting in a particular level of outcome or performance. It ranges between 0 and 1, that is if employees believe that their effort will not bring the desired outcome, the expectancy is 0, while if they believe that their effort

will result in a significant or best performance, then the expectancy is 1. Instrumentality means that performance will be rewarded for example with promotion, increased salary, bonuses and other positive motivation, and is between 0 and 1 as well.

Better performance or results in this case become instrumental in gaining the rewards. Therefore, if the employee believes that better performance results in a reward, the instrumentality has a value of 1, and if not, then it is 0. Valence on the other hand is between -1 and +1 and measures the value or the attractiveness of the rewards. It can vary from employee to employee thereby resulting in to preferences. If an employee strongly prefers a certain reward, then valence is positive and if not, it is negative. Fatigue and stress can be outcomes of increased work efforts and these tend to produce a negative valence, unlike other positive motivation which include like salary increase, promotion and bonuses. The three lead to the equation; Motivation = Expectancy x Instrumentality x Valence (Lunenburg, 2011; Parijat & Bagga, 2014). Figure 2.1 explains the three elements.

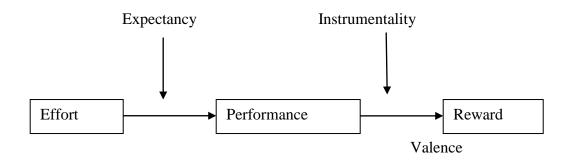


Figure 2.1: Basic Expectancy Model (Lunenburg, 2011).

Employees in SMMEs would be motivated if their efforts lead to improved performance, thus proving their expectation of more effort brings the desired result. Moreover, if this improved performance is rewarded by either promotion, increased salary, bonuses or other forms of reward, these employees would do a lot more for the firms. The reward in this case should be that which attracts general acceptance by the employees. The two theories give rise to the third research hypothesis that reward system has a significant role on promotion of intrapreneurship in SMMEs in Kenya.

## 2.2.4 Entrepreneurial Management Structure

The entrepreneurial management structure as an independent variable is explained by the structural contingency theory. This theory argues that organizations should adapt to their environments as there is no single structure that fits all organizations. The structure should therefore be flexible to fit the changing environment.

### **Structural Contingency Theory**

Lawrence and Lorsch in the 1960's came up with the structural contingency theory which states that there is no best way or single structure to organize an organization. Instead the structure is dependent on the situation or circumstances at hand (Donaldison, 2013). It is an organizational behaviour study approach which claims that individual organizations adapt to their environments (Soylu, 2008). According to this theory, no single type of management structure can be applied to all organizations. Organization's effectiveness will therefore be dependent on matching these contingent factors like the technology type, the volatility of the environment, the organization size, organizational structure features as well as its information system (Islam & Hu, 2012).

Organizational contingency assumes that the interaction between structural dimensions of work design and contingency factors influences how an organization adapts and performs within its environment. The organization's internal functioning should

therefore be linked and correlated to the demands and changes of the external environment (Soylu, 2008; Leweling, 2007). SMMEs exist in an environment that is fast changing in terms of competition and technology, and need a management structure that is flexible enough to make decisions that are contingent to the changes of the moment. Long (2016) posits that contingency plans should be a part and parcel of small businesses to enable efficient continuation of operations when faced with difficulties and challenges. It is important then that SMMEs' managers be guided by their perception of the environment to select contingency factors like culture, strategy, task uncertainty, size and technology, which in turn influence the organization structure that leads to superior performance.

The contingency variables and structure should fit to avoid lower performance. Any change in the contingency variables means that the structure is out of fit, necessitating the organization to undergo structural change so that the fit between the contingency variables and structure can be regained. Managers have to consistently select the appropriate contingency factors to fit the organization's current environment (Soylu, 2008).

It is the assumption of the structural contingency theory according to Donaldson (2005), that low uncertainty tasks are performed better by a centralized hierarchy as it is simple, quick and cheaply allows close coordination. When innovation and other factors increase task uncertainty, then there is need to loosen control and introduce participatory and communicative structures. The result of this is reduction in structural simplicity and raised costs but the benefits of innovation are enjoyed as a reward (Donaldson, 2005). This theory informs the fourth research hypothesis that entrepreneurial management structure has a significant role on promotion of intrapreneurship in SMMEs in Kenya

# 2.2.5 Intrapreneurship

Schumpeter's innovation theory supports promotion of intrapreneurship in SMMEs. The theory states that innovation is doing things differently and brings new combinations, thus destroys the old economy while creating a new one. This scenario results in a new economic value which is necessary for the survival of the firm.

## **Schumpeter's Innovation Theory**

Schumpeter (1885-1950) introduced the concept of innovation and its role in entrepreneurship and economic growth by stating that innovation was the only function which was fundamental in history. It was the view of Schumpeter that entrepreneurs are those who carry out new combinations (innovation), and that change should be discontinuous and revolutionary (Sledzik, 2013).

Innovation and entrepreneurship occupy and play an important role in the development of the economy in the world. Innovation according to Schumpeter as pointed out by Sledzik (2013) is doing things differently in the economic realm, and further positions that more money and making profits would be as a result of innovations to the financial systems. It is therefore imperative that anyone who seeks to make profits must be innovative. Innovation causes creative destruction (Hawkins & Davis, 2012).

Sledzik 2013 further points out that Schumpeter viewed innovation as a process of industrial mutation that continually revolutionarizes the structure of the economy from within. The innovation continuously destroys the old economy as well as continuously creating a new one. SMMEs would for this reason greatly benefit from innovation as this would introduce new products, processes or even new markets in turn increasing their profitability. New combinations would force entrepreneurial SMMEs to go against the trends, thus creating a new economic value. This value is a culmination of combining factors of production in new ways thus doing things differently, which could either be

new ways of supplying, producing, distributing, or organizing which defy resistance and induce cycles of adjustment that are value creating (Hawkins & Davis, 2012).

## 2.3 Conceptual Framework

Kothari (2004), defines conceptual framework as a guiding tool to researchers in their inquiry. It consists of concepts placed within a sequential and logical design. Based on literature and personal experience, conceptual framework provides structure and content for the whole study (Vaughan, 2008). It helps in identifying the research variables as well as aiding in clarification of relationships among the variables.

Figure 2.2 on conceptual framework gives the independent variables as commitment of resources, management's need for achievement, reward system and entrepreneurial management structure and the dependent variable as promotion of intrapreneurship. These will guide the study in establishing the relationship between them.

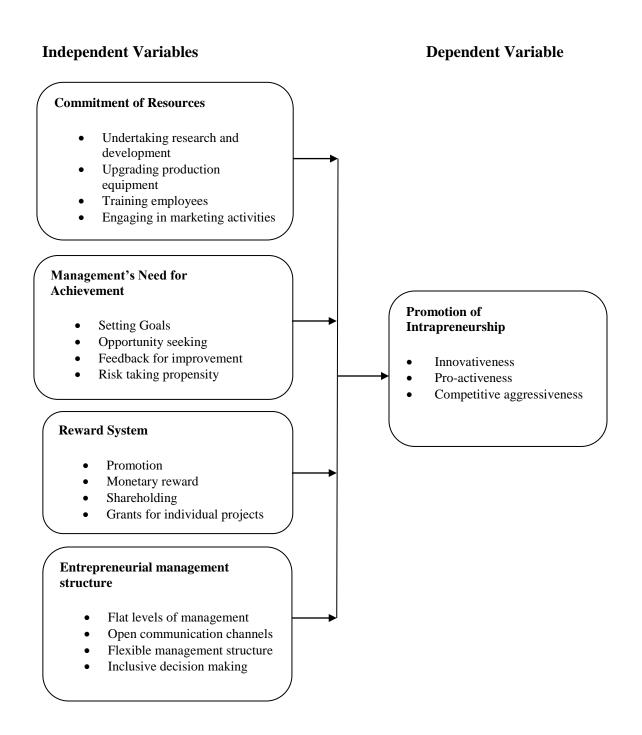


Figure 2.2: The Conceptual Framework

#### 2.3.1 Commitment of Resources

One way to enhance organizational intrapreneurship is by providing resources to intrapreneurs. These resources should be appropriate to support the development of intrapreneurship ideas (Morris, Kuratko & Covin, 2010). A firm's ability to sustain and utilize key superior resources is the key to competitive advantage. These resources enable a firm to engage in the appropriate strategies for improvement of effectiveness and efficiency (Elango, 2003). The resources include all assets, organizational processes, capabilities, organizational skills, management skills, information and knowledge. They can be categorized into tangible, intangible and financial resources. The tangible and intangible resources are those that the firm owns or controls. A firm is said to be capable if it has the ability to combine and exploit the available resources through the developed organizational routines to achieve the set objectives (Laosirihongthong, Prajogo & Adebanjo, 2014).

Bridoux (n.d) conceptualizes that a firm's strategy is conditioned by its resources and competitive environment. The strategy of the firm as well as its performance, in turn have an effect on the resources and the competitive environment. In the due course, these interactions create new resources for the organization. Resources that are able to sustain a firm's competitive advantage are strategic resources. For a firm to engage in intrapreneurship, it is important for it to continuously acquire and develop new resources, reconfigure resources in new ways. This way, the firm is in a better position to exploit new opportunities (Hayton & Kelly, 2006). Areas to allocate resources include acquiring or improving the production equipment which helps lower the production cost as pointed out by Singh and Mahmood (2015). Production equipment is considered as a major asset by manufacturing firms therefore a tendency to continually improve them in order to remain competitive through lowering of production cost (Yang, 2014).

An employee of a firm can be made entrepreneurial through provision of adequate resources and support. This is especially for the employees who detect an opportunity that is exploitable (Fayolle, 2007). However employees with entrepreneurial tendencies exhibit a higher level of human capital. This human capital could be in the form of skills which can be gained through training (Dizgah, Gilninia, Alipour & Asgari, 2011). Knowledge, capabilities and risk taking by entrepreneurial employees within a firm support intrapreneurship (Liu & Wang, 2012). Training develops employees' knowledge and skills which makes them to b emore innovative and productive (Aguinis & Kraiger, 2009).

Kuhn, Sassmannshausen, and Zollin (2010) are of the opinion that, one way to differentiate between entrepreneurial management and administrative management within an enterprise is how each utilizes the resources controlled. The argument is that entrepreneurial management is opportunity driven and is geared towards the pursuant and exploitation of opportunities irrespective of resources controlled. Administrative management on the other hand tends to use resources in the best or most efficient way possible on given purposes or achievement of organizational goals, by objective setting and coordinating people (Morris, Kuratko & Covin, 2010; Boone & Kurtz, 2015).

Entrepreneurial management is innovative and can be propagated by allocating resource to research and development which produces innovative products that can compete favourably in the global market as established by Kinkel, Wengel and Lay (2005). Also, according to Bowen (2012), firms that fund research and development continue to be innovative.

An entrepreneurially oriented firm is also that which practices entrepreneurial marketing (Schindehutte & Kuratko, 2014). Entrepreneurial marketing involves innovativeness, proactiveness and risk taking, therefore an important function of enhancing entrepreneurial orientation of a firm (Kraus, Harms & Fink, 2009). Thus allocating huge resources to marketing activities enables the firm to stay competitive through acquisition of customer equity and increased market share Tirreni (2005).

# 2.3.2 Management's Need for Achievement

Okhomina (2010) defines the need for achievement as a "tendency to choose and persist at activities that hold a moderate chance of success or a maximum opportunity of personal achievement satisfaction without the undue risk of failure". According to Stewart, Carland, Carland, Watson, and Sweo (2003) as quoted by Carraher, Buchanan and Puia (2010), it is high need for achievement that influences an individual to take an entrepreneurial position that produces more achievement satisfaction. It predisposes one towards entrepreneurial activity. Need for achievement oriented individuals have a belief that the outcome of their behavour is controllable.

Individuals who portray a high need for achievement also seek reliable feedback on their progress which motivates them on their entrepreneurial efforts (Wu, Matthews & Dagher, 2007; Okhomina, 2010). Need for achievement is associated with entrepreneurs who need to perform well at challenging tasks, setting goals to perform them as well as seeking feedback on performance (Chell & Ozkan, 2014).

Achievement motivation is therefore imperative for high performance. This motivation can present itself in form of challenging goals and tasks to achieve the set goals, and whose feedback helps in skills improvement (Chell & Ozkan, 2014). Opportunity seeking which is a core aspect of intrapreneurship (Botha & Nyanjom, 2011), is also an aspect favourable with high need for achievement individuals.

Need for achievement portrays a strong sense of responsibility to finding solutions to problems (Ratzburg, n.d), and perseverance through the setbacks inevitable in the entrepreneurial process (Shane, 2003). Problem solving is one of the key functions of a manager whereby the situation is analyzed and the problem identified, alternative ways of dealing with the problem developed and the course of action decided upon (Omukoro, 2009). It is for this reason that management above all else should be entrepreneurial by being multi-skilled for example in technical skills, people skills and conceptual skills among others (Sunday & Somoye, 2011). This way management becomes effective for performance of an organization which needs to be managed through activities like high levels of staff involvement as well as motivation (UN, 2009).

According to Nieuwenhuizen (2008), an achievement oriented manager is innovative and if this is combined with decision making responsibility, the manager is as much an entrepreneur as the owner of the enterprise. Innovativeness is one of the key roles of entrepreneurs in SMEs (Marcati, Guido, & Peluso, 2008). Innovation is also an important aspect both for the survival of any business and enabling achievement of high levels of competitiveness in the market (Lwamba, Bwisa & Sakwa, 2013). Innovativeness is one of the important dimensions of intrapreneurship as pointed out by Karacaoglu, Bayrakdarog and San (2013).

### 2.3.3 Reward System

Reward or compensation can be divided into non-monetary, direct and in-direct compensation (Fogleman & McCorkle, 2009). Non-monetary includes any benefit that is received by an employee from the employer or the job but has no tangible value, for example security in the job, praise and recognition, growth opportunity. Promotion of employees for example gives them an opportunity for career growth and can be used by management to promote employees' satisfaction thus improved performance (Sarwar & Abugre, 2013).

Direct compensation includes the basic wage, performance based pay for example bonuses, and as pointed out by Marvel, Griffin, Hebda and Vojak (2007), has in some instances known to motivate employees more. Indirect compensation are the programs that an employer is legally required to provide to the employees, for example retirement programs, healthcare insurance, paid leave. Howard and Dougherty (2004) point out that an organization can have a competitive advantage as a result of reward systems. The employees are motivated to improve performance, thus enhancing an organization's performance and productivity. For these reward systems to work, they should be strategically designed to link activities and work outcomes that are supportive of the organization's strategic direction. This way the organization's strategic goals are fostered.

Among others, the aim of a reward and compensation system is to reward employees as per the value created, serve as motivation to employee's engagement and commitment as well as developing a culture of high performance (Armstrong, 2007). It must therefore be strategic so as to address for the longer-term the value of people in what they do and achieve.

Giving employees shareholding is a long-term incentive which gives employees an incentive to be more innovative and raise their productivity (Kauffman, 2006; Rix & Flint, 2013). Further, Motivation is a process for giving people's behaviour purpose and direction. Motivators are therefore an integral part of the work employees perform (Rahim & Daud, 2012).

For firms to remain entrepreneurial, employees with outstanding contributions should be rewarded. This fosters the spirit of innovation among them as well as encouraging them to have a responsibility for significant achievement (Gautan & Verma, 1997). It is therefore important that for a firm's management to play the entrepreneur role well, it should be capable of analysing the firm's development possibilities and implement the necessary supportive changes which may include employee encouragement to contribute

individual ideas (Cieslinska, 2007). Employees can be encouraged through directly financing their innovative ideas which is a supportive infrastructure for intrapreneurship (Zhao, 2013).

#### 2.3.4 Entrepreneurial Management Structure

Kuhn, Sassmannshausen and Zollin (2010) have the opinion that management structure is one of the dimensions of entrepreneurial management, and go ahead to differentiate between administrative management structure and entrepreneurial management structure. This difference is brought about mostly by how the two types of management use and control their resources. The administrative management structure leans towards formal and complex hierarchy with highly routinized work under clear roles and responsibilities.

On the other hand, entrepreneurial management structure tends to be organic with multiple informal networks. These informal networks are flexible and intended to encourage and create enabling conditions for employees to seek and create opportunity, thus focused on rapidly detecting and acting rapidly on environmental changes (Kuhn, Sassmannshausen & Zollin, 2010).

Burns (2011) further posits that the need for tight management control decreases as firms that are entrepreneurial move away from centralized hierarchical forms to flatter structures that facilitate horizontal communication channels. There is introduction of autonomy and for better entrepreneurial performance, but where a firm has decreased entrepreneurial activity, the need for controls increases. According to Finch, Hansen and Alexander (2010), one way to encourage employees to be more effective and perform better, is to appreciate them through more regular consultation, listening to them more and taking action based on their suggestions.

Including employees to decision making indirectly motivates them to be more productive as they feel recognized and appreciated (Irawanto, 2015; Ezennaya, 2011). Further, for firms to be successfull in intrapreneurship there should be an establishment of favourable organizational system with a supportive organizational structure, job design, supportive job rotation and freedom and flexibility given to employees to manage their own work and solve problems (Srivastava & Agrawal, 2010).

It is therefore necessary for management style to fit the structure of the organization and vice versa (Burns, 2011). It is for this reason that for entrepreneurship to continue within a firm, flatter organic structures are necessary for effective entrepreneurial management style. The organizational structure of an organization is one of the most effective factors on the establishment of different dimensions of entrepreneurial orientation (Shoghi & Safieepoor, 2013).

# 2.3.5 Promotion of Intrapreneurship

Scheepers, Hough and Bloom (2008) point out that many authors refer to firm level entrepreneurial orientation as indicative of intrapreneurship. This orientation has three dimensions, which can be referred to as the dimensions of intrapreneurship. These three dimensions are innovativeness, pro-activeness and risk-taking. However, other authors go on to add two more, which are autonomy and competitive aggressiveness thus becoming five dimensions of intrapreneurship (Morris, Schindehutte& Allen 2005; Kreiser, Marino & Weaver 2002).

Most firm's find it hard to maintain and keep up the initial entrepreneurial spirit that was of help in the start-up stage (Ramachandran, Devarajan & Ray, n.d.). For these firms to survive and remain relevant, continual innovation and being entrepreneurial is required. One way to do this is by embracing intrapreneurship.

Senaji and Kamau (2013) point out that firms need to intensify intrapreneusrhipin order to realize improved performance outcomes. An organization's high performance level can be linked to a high level of intrapreneurial intensity (Mokaya, 2013).

The SME sector as pointed out by Ragui and Wainaina (2013) needs to practice and promote intrapreneurship. This is because even though the SMEs contribute to the growth of a country's economy, they are faced by a myriad of challenges. The Sessional Paper No.2 of 2005 identifies a number of challenges which need to be addressed for these enterprises to operate profitably (ROK, 2005). This situation is not made any better by globalization and liberalized trade that have not only brought new opportunities but also increased the challenges for these enterprises to compete at a global level (OECD, 2004). Only a small section of SMEs has the ability to identify and exploit the global opportunities as well as the challenges and especially those in developing countries.

Intrapreneurship activities in this case have been known to improve growth and profitability in an organization. The impact of these activities may increase over time depending on the firm's competitive environment (Nath, 2005). Some of the intrapreneurship activities include willingness to take risks, pro-activeness, radical product, service and process innovations, new businesses that create revenue streams. These activities can be utilized to examine the propensity of a firm towards entrepreneurial behaviour (Lawson, 2014).

Intrapreneurship according to Aktan and Bulut (2008), impacts positively on financial performance of a firm, and firms with high intrapreneurship levels exhibit a high performance. It is not only financial performance improvement, but also improved internal efficiencies and higher employee morale (Kolokavic, Sisek & Milovanovic, n.d). It is also a tool for business development, revenue growth and profitability enhancement, the more reason that businesses should be encouraged to embrace intrapreneurship in their operations (Nkosi, 2011).

Firms that practice and promote intrapreneurship may engage in strategic renewal which may above all else involve innovation (Ramachandran, Devarajan& Ray, n.d; Gibson 2013), and also firms with an established intrapreneurial orientation pursue innovation (Botha & Nyanjom, 2011). Urbancová (2013) points out that innovativeness needs managements support for it to thrive. This should be sustained innovation which may not be as a result of a single discrete event (Morris, Kuratko & Covin, 2010). Gibson (2013) defines strategic renewal as "the act of dynamically adjusting business models and strategies to the deep changes in the external environment".

Strategic renewal is defined by Kuratko (2014) as that which is concerned with organizational renewal that involves major strategies as well as structural changes. A firm going through a strategic decline will be at a weakened position to compete effectively thus requires a renewal process. Strategic renewal may not be just the transformation of organizations by renewing the key ideas on which they are built, but that which represents a repositioning that is fundamental to the organization's competitive space (Morris, Kuratko & Covin, 2010).

"Strategic renewal includes the process, content, and out-come of refreshment or replacement of attributes of an organization that have the potential to substantially affect its long-term prospects" (Argawal & Helfat, 2009). Entrepreneurial efforts within an organization that bring about substantial changes to its strategy, business model and organizational structure, constitute strategic renewal. Strategic renewal is an important factor in intrapreneurship process. Spector (2007), strategic renewal is the alteration of an organization's strategy, which can either be incremental (expansion into new products, service lines or dramatic improvements in the current lines), or transformational (redefining customer expectations, industry dynamics, and the basis for competition). This is done with an aim of regaining competitive advantage that is sustainable. Renewed strategy implementation will require the leaders of an organization be engaged in a process of change as depicted by figure 2.3.

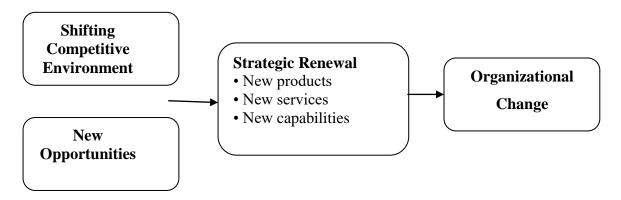


Figure 2.3: Strategic Renewal and Organizational Change (Spector, 2007)

Morris, Kuratko and Covin (2010) further argue that it is only when there is a fundamental repositioning by the firm to remain competitive, that new strategies can be seen to constitute strategic renewal. Porter in (1985) pointed out that at the heart of any strategy is competitive advantage. Therefore the imitation of a firm's strategy should be made difficult by some barriers. However since over time barriers become surmountable by the competitors, it is necessary that firms continually invest in improving their positions.

One way to continually invest is to engage in a sustained promotion of intrapreneurship which improves a firm's competitive advantage (Moris, Kuratko & Covin, 2010). Porter (1990) still posits that firms achieve competitive advantage through acts of innovation, which is done by approaching it in its broadest sense that includes new technologies and new ways of doing things. On the other hand, intrapreneurship, if adopted by the Kenya's SMMEs, would come in to support one of Kenya's Vision 2030 strategies of strengthening SMEs to become tomorrow's key firm's by improving their productivity and innovation (ROK, 2007).

According to Williams (2009), pro-activeness enables a firm to be entrepreneurial by predicting future changes, needs and demands thus developing new products or services that may not be related to the current operations. This enables introduction to the market of new products and services ahead of the competitor (Diefenbach, 2011). Still a firm should strive to portray intrapreneurship through competitive aggressiveness by its ambition to challenge and dominate its competitors. This can be attained through improving the firm's position and performance in the market place which ensures more market share (Kosta & Nicolaidis, 2011; Azami, 2013).

#### 2.4 Empirical Review

#### **2.4.1** Commitment of Resources

Mensah (2013) did a study in Ghana on strategic resources and performance of rural SMES. The study was made on 150 retail SMEs in the Western Region of Ghana. The focus of the study was on how both external and internal resources affect the performance of the SMES. The study divided the internal resources into tangible and intangible while the external resources were viewed as suppliers, customers and competitors. The two types of resources were the independent variables.

Performance which was the dependent variable in this study was viewed as profits, stock turn over and customer satisfaction. Tangible resources studied were cash, stock and employees, while the intangible resources were experience, education, open hours and processes. The study found out that cash, experience and opening hours, were the resources that affected performance the most. This study strengthened the resources based theory that the resources of a firm act as its source of competitive advantage.

Another study was undertaken by McGlone (2014) investigating into factors which contribute to entrepreneurial activities within the financial services industry. The study focused on six factors namely management support, work discretion, organizational boundaries, rewards reinforcement, time availability and climate variables, as

prerequisites of corporate entrepreneurship within the financial services industry in Ireland, by focusing on one of the well known international services company in Dublin. Management support in this study was looked at that which provided encouragement, support and resources especially finances, to employees to enable them scout for, pursue and develop creative as well as entrepreneurial initiatives within the organization. The study concluded that management support, which includes allocating resources to employees, was an important and key driver for intrapreneurship activities in the industry.

# 2.4.2 Management's Need for Achievement

Okhomina (2010) did a study on how supportive environment moderates the relationship between entrepreneurial orientation and psychological traits on 315 dealers and owners of used car lots in the United States of America. The psychological traits studied were need for achievement, internal locus of control, tolerance for ambiguity.

The high need for achievement scored a higher mean score (5.88) than either the internal locus of control (5.70) or the tolerance for ambiguity (5.24). The study also found that supportive environment positively moderated the relationship between psychological traits and entrepreneurial orientation. The study also gave credence to the view that high need for achievement as well as other psychological traits enhance the entrepreneurial orientation of a firm.

Rishipal and Jain (2012) undertook a study titled "Need for achievement an antecedent for risk adaptiveness among entrepreneurs" by looking at a sample of 100 entrepreneurs, 50 from large scale enterprises and 50 from small scale enterprises. The results of the study showed that need for achievement among entrepreneurs greatly influenced the degree of their risk adaptiveness. However, the degree for need for need for achievement among small scale entrepreneurs was less than that of large scale entrepreneurs. The explanation given for this scenario was that mostly small scale entrepreneurs are

beginners and may lack the potential, capability, exposure and experience for resource management and how to conduct business, therefore showing a high degree of need for achievement but not adaptive to risk taking. The entrepreneur thus in the small scale enterprise is fearful of the challenging, unknown and uncertain future business environment.

### 2.4.3 Reward System

Bau and Dowling (2007) in Germany did a study on the impact of reward and incentive systems on entrepreneurial firms. A survey of 1,500 entrepreneurial firms was contacted but only 59 of these either responded or filled a usable questionnaire. The focus was on firms that were not more than seven years old with at least 20 employees, but not specific to SMES.

The response of 59 represented only 3.9% of the targeted population of 1,500, which was inadequate. The study used independent variables as the company age in years at the time of survey, age of employees, firm size measured by sales and number of employees, employees' age, education level, and gender. The dependent variables of the study were incentives arising from the work itself, social incentives, incentives by internal organizational environment, direct and indirect financial rewards.

The results of Bau and Dowling (2007) study were that the social incentives were rated higher than all the others as the most important. Incentives provided by the work itself were rated second, incentives as a result of internal organizational environment were third. The weakest were the financial incentives with the direct financial incentive rated higher than the indirect financial incentive. The study concluded that because entrepreneurial firms are characterized by limited resources and a higher degree of uncertainty and risk, the emphasis was on non financial reward and incentive system than on financial. Another important finding was the matching of education level with financial reward and incentive. Those companies with high university graduate

employees had a more sophisticated reward and incentive system. Therefore those wanting to run their operations competitively in competing with the large integrated companies, it was important to focus on the financial rewards preferred by the university graduate.

Scheepers (2011), did a study on the relevance of rewards on motivation of intrapreneurs, investigating the rewards used by organizations in motivation of intrapreneurs in both service and information and communication technology firms in South Africa. The study explored several rewards in order to determine the ones that intrapreneurs valued. The conclusion of the study was that intrapreneurs mostly valued formal acknowledgement, social incentives and the organizational freedom of employees.

Schhepers (2011) study concluded that money was not the most important factor in encouraging entrepreneurs. Entrepreneurial firms, therefore, based on this study should offer more social incentives, support and offer formal acknowledgement to their employees. Organizational freedom should as well be availed to enable employees make decisions on how to achieve goals that are job related.

## 2.4.4 Entrepreneurial Management Structure

Shoghi and Safieepoor (2013) undertook a study on the effects of organizational structure on entrepreneurial orientation of employees in the metal industries of Kaveh Industrial City of Iran. The study pointed out that organizational structure is one of the most important and effective factors that help in facilitation of entrepreneurship in organizations. The study looked at the constructs of organizational structure as complexity, formalization and centralization. In particular the study found that organizational structures that are not complex and consistence with the criteria for the organization lead to improved organizational entrepreneurship. Where there are strict and rigorous rules, the entrepreneurial orientation decreases. It is therefore important,

that organizations implement a flexible entrepreneurial structure if entrepreneurial activities are intended. In Turkey Alpkan, Bulut, Gunday, Ulusoy, and Kilic (2010) undertook a study to investigate innovative performance of companies as a result of both the direct and interactive effects of organizational support and human capital. It looked at the organizational support variables as management support for generation and development of new ideas, allocation of free time, work discretion, performance based reward systems and tolerance for risk taking.

Human capital was looked at as both a moderating variable to organizational structure, and a direct influence on the innovative performance of firms. The study was carried out on 184 manufacturing firms in Turkey. The results of the study were that organizational support has a positive impact on innovative performance of the firms. This was especially so for the management support and tolerance for risk taking, which were found to be the drivers that strongly influenced innovativeness.

The study byAlpkan, Bulut, Gunday, Ulusoy, and Kilic (2010) found that when human capital was interacted with organizational support not to produce high levels of innovative performance especially when they are both high. However, when organizational support was high and human capital was low, the innovative performance was high. The explanation for this finding was that there appeared to be in existent either other resources or antecedents beyond human capital and organizational support interaction, necessary to reach higher innovativeness levels. Human capital on its own was found to have a positive impact on innovative performance.

# 2.4.5 Promotion of Intrapreneurship

Lwamba, Bwisa and Sakwa, (2013) did a study on exploring the innovativeness dimension of corporate entrepreneurship on financial performance of manufacturing firms in Kenya. Innovativeness was the independent variable which was operationalized by product innovativeness, process innovativeness and organizational innovativeness. Financial performance was the dependent variable operationalized as profits and sales.

The study was focused on 200 manufacturing firms within Nairobi County, with 186 firms of these responding. The study concluded that innovativeness is fundamental to the financial performance of a firm. The conclusion was that managers of firms should therefore embrace innovativeness for firms to experience financial performance. This study reinforced the importance of intrapreneurship to improved firm performance.

Duarte (2011) undertook a study to analyse management strategies so as to evaluate the degree of entrepreneurship portrayed by the management of a firm through the use of innovation, risk and proactive strategies. The study was undertaken on a group of 251 industrial and construction firms in Portugal. Proactivity was found to be the only one in the firm's, leading to the conclusion that intrapreneurship was very low in the firms. The firms were found to portray risk averse and lack of innovativeness. The management style was found to be weak thus the rates of intrapreneurship.

### 2.5 Critique of Existing Literature

The study by Mensah (2013) linked availability and utilization of resources to high performance of SMEs. It gave credence to the view that commitment and utilization of the available resources enables a business to enhance its competitive advantage. However the study focused on 150 SMEs owned by rural traders mainly in the retail sector. Sehgal (2008) posited that retail sector is differentiated from the manufacturing sector in that retail is a distribution channel of the manufactured products.

Manufacturing is the process through which raw materials are turned into finished products. The investment focus is different for both. The retail sector invests on the merchandise flowing through it while manufacturing sector invests on the raw materials and equipment for manufacture. It is important to note that the study did not link resource utilization to promotion of intraprenurship but to the SME's performance.

McGlone (2014) study investigated factors which contribute to entrepreneurial activities and was based on the financial services industry in Ireland. The study used the corporate entrepreneurship climate instrument to collect data from the respondents. It was also based on a single financial services company in Dublin, Ireland, while it used purposive sampling to identify the respondents. The variables which it investigated are different from those that the researcher investigated except for the reward system. McGlone study was neither in the manufacturing sector nor was it in the SME sector so the results cannot be generalized in these sectors.

The study undertaken by Rishipal and Jain (2012) on the need for achievement as an antecedent for risk adaptiveness among entrepreneurs was a comparative study between the large and the small scale sector. The study does not also specify which specific sectors or industries it focused on. The focus was on two variables, being need for achievement and risk adaptiveness of entrepreneurs, thus it did not relate need for achievement to intrapreneurship in firms. The results of this study cannot be generalized to small and medium scale enterprises in Kenya as the researcher did not compare them to large manufacturing enterprises. Rishipal and Jain (2012) study used the risk adaptiveness test and achievement motive test, which this study did not use.

The study by Scheepers (2011) on the relevance of rewards on motivation of intrapreneurs in encouraging intrapreneurship, although an empirical study was conducted on South African firms in the service and information sector, and communication sector. The study apart from being undertaken on 119 service firms and 101 communication firms, did not classify the firms in terms of size, which is either

SMEs or large enterprises. Data was obtained through telephone interviews and was mainly on a likert scale from 1 (strongly disagree) to 9 (strongly agree). Intrapreneurship was studied from three dimensions of innovativeness, pro-activeness and risk-taking, while rewards system was the only independent variable with fifteen constructs. The study clearly deviates from the one the researcher undertook and therefore cannot be generalized to Kenyan SMMEs.

The study by Alpkan, Bulut, Gunday, Ulusoy and Kilic (2010) concluded that there is a positive relationship between management support and innovative performance. Innovativeness as a result of entrepreneurial management is a dimension of intrapreneurship that the researcher sought to establish. The study by Bau and Dowling (2007) brings out support to the importance of reward system in enhancing the entrepreneurial spirit of a firm. The results of the study cannot however be generalized to include firms in developing countries especially on the financial rewards. The study also points out that since it is based on German firms, the national cultural bias is a possible limitation especially in human resource management and organizational behaviour. The response rate of the study was very low at 59 firms of 1500 firms targeted for the study thus representing 3.9%. It did not indicate whether small and medium scale manufacturing firms were part of the study.

The study by Lwamba, Bwisa, and Sakwa (2013) supports the view that the innovativeness of corporate entrepreneurship positively affects performance of a firm. It was however focused on manufacturing firms in general without differentiating whether they were Large or Small and Medium Scale. It focused on Nairobi County only which may not form a good basis of generalization since they are not in a rural setting. The sampling technique was simple random sampling with every manufacturing firm having an equal chance of participating in the study. The manufacturing sectors in Kenya were therefore not adequately represented in the study. It also did not specifically focus on SMMEs and was not on entrepreneurial management and promotion of intrapreneurship.

Mokaya (2013) did a study on theoretical perspectives, approaches and outcomes of corporate entrepreneurship. The study concluded that firm performance and corporate entrepreneurship are closely related. Firms nurturing organizational structures and values that favour and encourage entrepreneurial orientations are more likely to post better performance results than those which do not. Those firms that have high intrapreneurial intensities in particular experience high performance levels. This study was however a secondary research and did not focus on any particular entrepreneurial segment.

#### 2.6 Summary of Literature

This chapter reviewed the theories which explain the variables to the study. Resource based theory explains the importance of resources to an organization, and how decision by managers on the acquisition and utilization of these resources is important to the exploitation of the external opportunities (Simon, Hitt, Ireland & Gilbert, 2011). The resource based theory brings forth the first hypothesis. The second hypothesis was instigated by McClelland's high need for achievement which states that individuals with a high need for achievement are pushed to do well so that they can attain a feeling of accomplishment, with entrepreneurs portraying this aspect more than the population in general (Stewart & Roth, 2007). The third hypothesis was anchored on two theories the first one being Herzberg's two-factor motivation theory also known as motivation-hygiene theory.

Intrinsic motivators are within the job why extrinsic motivators or the hygiene factors are outside the job. The second theory is the expectancy theory of motivation which states that individuals are motivated by the belief that the effort put at work matches performance which in turn attracts the appropriate rewards (Lunenburg, 2011). The fourth hypothesis was informed by structural contingency theory that states that no single management structure is applicable to all organizations, therefore should be tailored on the contingency factors affecting the organization (Soylu, 2008).

The empirical review strengthened the view of the resource based theory that a firm's resources act as its source of competitive advantage. There is also a positive relationship between a high need for achievement as a psychological trait and entrepreneurial orientation of a firm (Okhomina, 2010). Moreover, a manager who is achievement oriented is innovative which is one aspect of survival of any business. A reward system is also positively related to the performance of entrepreneurial firms with the direct financial reward rating higher than the indirect financial reward. The social incentives rank higher as per the study undertaken by Bau and Dowling (2007).

The study undertaken by Shoghi and Safiepoor (2013) has the view that management structure is one of the most important and effective factors that help in facilitating intrapreneurship in organizations and especially structures that are neither complex nor rigid. The study by Lwamba, Bwisa and Sakwa (2013) innovativeness dimension of intrapreneurship with improved financial performance, thus reinforcing the view that intrapreneurship is necessary for any firm. There is also need by the SMEs to practice intrapreneurship for them to overcome the various challenges facing them and become competitive (Ragui & Wainaina, 2013).

The critique brought out the shortcomings of the studies for example the study by Mensah (2013) was based on SMEs owned by rural traders in the retail sector and this sector is different from the manufacturing sector. The study by Bau and Dowling (2007) was undertaken on German firms a developed country which is different from a developing country, while the study done by Lwamba, Bwisa and Sakwa (2013) focused of one dimension of intrapreneurship and based on manufacturing firms in general without specifically focusing on SMMEs. The study by Alpkan, Bulut, Gunday, Ulusoy and Kilic (2010) linked management support to innovativeness which is a dimension of intrapreneurship.

The research gaps that were identified include the fact that most of the studies undertaken have tended to greatly focus on the large enterprises ignoring the SME sector. There is also scarcity of studies linking entrepreneurial management to intrapreneurship within a firm and specifically to intrapreneurship within SMMEs. It is therefore necessary to undertake a comprehensive study to establish the role of entrepreneurial management on SMMEs.

# 2.7 Research Gaps

Manufacturing is one of the key important sectors in Kenya as it contributes to 14% of the Gross Domestic Product (KAM, 2015). The formal employment in the year 2014 increased by 2.9% in this sector (ROK, 2015). However, the contribution of this sector to GDP has continued to stagnate at 10% despite its high yet untapped potential to contribute more to both the GDP and employment (KIPPRA, 2013). The sector is comprised of more than 70% SMMEs (KIPPRA, 2013), which according to Gathogo (2013) have continued to perform poorly since Kenya's independence and some have had to close down due to inability to remain competitive and operate profitably. Intrapreneurship increases firms performance and can be practiced by firms of all sizes.

The studies that have been undertaken on intrapreneneuship have tended to focus on the large firms. According to Naldi, Achtenhagen and Davidsson (2015), there has been increased attention on international intrapreneurship and not much is known about firm-level entrepreneurship undertaken by established small and medium-sized enterprises. Internationally, even though Sakhdari, Burgers and Davidsson (2014) did an attention-based view study of the moderating role of entrepreneurial management in the relationship between absorptive capacity and corporate entrepreneurship in Iran and Australia, it was neither specifically focused on SMEs nor on SMMEs. Entrepreneurial management in this case was constituted as strategic orientation, resource orientation, management structure, reward philosophy, growth orientation and culture.

Though three of these constructs are part of what this study sought to establish their role on promotion of intrapreneurship, the study used a moderating variable of absorptive capacity.

In Kenya, several studies have been undertaken on intrapreneurship but focused on the large enterprises. Mokua and Ngugi (2013) looked at the determinants of corporate entrepreneurship in the banking industry in Kenya. The determinants in this study were entrepreneurial culture, strategy, rewards and organization culture. Even though the study concluded that the availability of these determinants was crucial for there to be intrapreneurship, it was neither on small firms nor on SMMEs.

The study by Lwamba, Bwisa and Sakwa (2013) focused on the innovativeness dimension of corporate entrepreneurship on financial performance of manufacturing firms in Kenya. The study did not specifically focus on SMMEs, which face challenges unique to the SME sector in general, for example they may lack capacity and could be financially constrained, therefore lumping them together in a study could produce biased data. The study even though focused on the manufacturing sector did not look at what brings out intrapreneurship within a firm. This study therefore sought to fill the identified gaps and those pointed out in the criticism of the existing literature, by establishing the role of entrepreneurial management on intrapreneurship in SMMEs in Kenya.

Duarte (2011) study was based on 251 firms in manufacturing and construction in Portugal. The environment of the firms in Portugal is not the same as the environment in Kenya thus results cannot be generalized to the Kenyan situation. Also competitive aggressiveness to indicate promotion of intrpreneurship which part of the current study was not part of the areas studied by Duarte (2011).

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discusses how the research was undertaken by focusing on the process, the tools and procedures which were used. In particular, it shows the population and explains how the sample was selected as well as discussing the data collection instrument, processing and the procedures that were used to analyze the data so as to achieve the objectives of the study. Pilot study which is an important aspect for testing the validity and reliability of the research instrument is discussed under this chapter.

## 3.2 Research Design

The study was conducted using both descriptive and correlational research designs. According to Elahi and Dehdashti (2011), descriptive research is appropriate when the objective is to determine the degree of the relatedness of the variables. It is proper to use this type of research design if the research objectives; portray social or physical phenomena characteristics, determine the degree of the association of variables, and make predictions in regard to the occurrence of social or physical phenomena. Descriptive research design can either be quantitative or qualitative, and can often utilize elements within the same study, and explains the way things are in the phenomenon or the population being studied (Knupfer & McLellan, 2001; Joy, 2014).

Correlational research design uses empirical evidence to describe the relationship among variables. It is used to establish if there is a relationship between two variables, as well as the direction and the magnitude of the relationship (Cohen, Manion & Morrison, 2005). The two research designs were therefore used to determine the role of entrepreneurial management on promotion of intrapreneurship in the small and medium manufacturing enterprises in Kenya.

## 3.2.1 Research Philosophy

This research leaned towards the positivist's research philosophy. Positivism uses quantitative tools and techniques that emphasize measuring and counting. It emphasizes empirical data and scientific method (Jakobsen, 2013). According to Trochim (2006), positivism's position is that the goal of knowledge is to describe the phenomenon that is being experienced, by sticking to what is observable and measurable. It is the position of positivism as pointed out by Cohen, Manion and Lawrence (2007) that science provides the clearest ideal of knowledge.

There are several assumptions that underpin the scientific faith as Cohen, Manion and Lawrence (2007) continue to point out. First is the assumption of determinism which means that events have causes and are determined by other circumstances. In this case science believes that the causal links can eventually be uncovered and understood. Under this assumption, scientists formulate laws so as to account for the occurrences in the world thereby gaining a firm basis for prediction and control.

The second assumption as per Cohen, Manion and Lawrence (2007) is empiricism which avers that experience derives certain kinds of reliable knowledge, thus scientifically a theory or a hypothesis is justified by the nature of the empirical evidence that supports it. The third assumption is the principle of parsimony, that is explaining phenomena in the most economical way possible, for example accounting for a phenomenon by use of two concepts rather than three, or preferring a simple theory to a complex one.

The fourth and final assumption is generality, meaning that scientists are able to begin with the observations of the particular, and then generalize their findings to the world at large. The research on the role of entrepreneurial management on promotion of intrapreneurship in the SMMEs in Kenya was based on hypotheses that were tested on a sample, data analyzed, and the results generalized on the rest of SMMEs in Kenya.

# **3.3 Target Population**

The study population was the small and medium scale manufacturing enterprises in Kenya. Banerjee and Chaudhury (2010) explain a population to be the entire group about which some required information is to be ascertained. This is the group that the study takes a sample from and generalizes to (Trochim, 2006). The study specifically targeted those SMMEs registered with the Kenya Association of Manufacturers. There are seven hundred and fifty two (752) manufacturing firms registered with KAM as of June 2015 (KAM, 2015) as shown in table 3.1.

Table 3.1: Kenya's Manufacturing Firms registered with KAM as at June 2015

Sector	Population	
Chemical & Allied	79	
Energy, Electricals & Electronics	45	
Fresh Produce	11	
Food & Beverages	187	
Leather & Footwear	9	
Metal & Allied	83	
Motor Vehicle & Accessories	51	
Paper & Board	74	
Pharmaceutical & Medical Equipment	24	
Plastics & Rubber	77	
Textile & Apparels	64	
Timber, Wood & Furniture	19	
Building, Construction & Mining	29	
Total	752	

(Source: KAM, 2015)

#### 3.4 Sample Size and Sampling Technique

Latham (2007) defines a sample as representative selection of the population. Sampling is the selection of a portion of the population that truly represents the said population. It involves selection of units from the population of interest, which forms the sample. Generalization of results back to the population from which that sample was chosen from is made possible (Trochim, 2006).

A sampling frame is a listing of the accessible population from which the sample is drawn (Trochim, 2006). The sample frame for this study was the KAM Directory 2015 for those SMMEs registered with Kenya Association of Manufacturers. According to Kothari (2004), some of the characteristics of a good sample design are that the sample should be truly representative, result in a small sampling error, and whose results of study can be in general applied for the universe with a reasonable level of confidence.

The sample size should neither be too big nor too small but optimum, that which fulfils efficiency, representativeness, reliability and flexibility requirements (Kothari, 2004). A big sample size is more reliable and precise but costly in terms of resources, while a small sample size would be unreliable. According to Kasiulevicius, Sapoka and Filipaviciute (2006), statistically for the central limit theorem to hold, a sample size of greater than 30 is needed for normal theory approximations for measures like the standard error of the mean. The sample size increases with the degree of statistical confidence and precision required (Turner, 2003). It is common practice for most studies for the confidence level to be set at 95% and a precision of +/- 5% (Turner, 2003; Gupta, 2012).

KAM's directory does not however differentiate the firms in terms of size. According to KIPPRA (2013), the SME sector constitutes over 70% of the manufacturing firms in Kenya. The Micro and Small Enterprises (MSE) Act 2012 defines the MSE sector as those firms with an annual turnover not exceeding Kshs 5,000,000/= and not more than

50 employees. This sector as per the MSE Act includes the manufacturing sector where investment in machinery and plant does not exceed Kshs 50,000,000/= (ROK, 2013).

Wanjau, Gakure and Kahiri (2012) define Small and medium manufacturing enterprises in Kenya's manufacturing sector as those with up to 100 fulltime employees and annual sales turnover not exceeding Kshs 150 million. It is evident that a common definition of an SME does not exist in Kenya as pointed out by Guitard (2007), in the report on SME trade finance, reviewing of facilities available in Kenya. The report therefore adopted the SME Solution Center's definition of a formally registered entity, 5 to 150 employees and a turnover of below US dollars 5 million. In the absence of a common definition for SMEs in Kenya, this study adopted the World Bank's definition of an SME as given by Berisha and Pula (2015), as the one with 10 to 300 employees and an annual sales not exceeding US dollars 15 million.

A representative sample was obtained using the stratified random sampling with a proportional allocation of each stratum. In random sampling, each item in the population has a probability of selection same as any other item in the population. Stratified sampling on the other hand is used for data which does not constitute a homogenous group but is heterogeneous. The population is divided into subgroups with common characteristics, when representatives from each subgroup need to be part of the sample. Random or systematic samples are then computed from each subgroup (Kothari, 2004; Westfall, 2008).

At least 30% of the population is adequate to form the sample size as pointed out by Mugenda and Mugenda (2003). According to Hill (2012), at least 10% sample size of the population is adequate in descriptive research, while for a small population, 20% should form the sample. The sample size for this study was determined using the sample table developed by Krejcie and Morgan in 1970 as shown in appendix two.

The population for this study was 752 therefore the sample size at 95% confidence level is 254 thus 34% of the population. This is based on the following formula by Krejcie and Morgan (1970).

$$s = X^2NP(1-P) \div d^2(N-1) + X^2P(1-P).$$

Where,

s = required sample size.

 $X^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N =the population size.

P= the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

The formula gives the sample as per the following statistical calculation;

$$\frac{3.841*752*0.5*0.5}{0.05*0.05*751+3.841*0.5*0.5}$$

$$\frac{722.108}{1.8775 + 0.96025}$$

$$\frac{722.108}{2.83775}$$

$$= 254$$

Since SMMEs in each sector were not out rightly identified this sample formed the preliminary research from which the final sample was identified. This method was used by Ngugi (2012) to determine the sample of the small and medium family enterprises in Kenya from the larger sample of the small and medium enterprises. Questionnaires were finally administered only to those managers or entrepreneur owner managers in registered manufacturing firms with 10 to 300 employees. The simple random stratified random sampling is represented in Table 3.2.

**Table 3.2: The Sample Size** 

Sector		Population (Firms)	Sample Size
Chemical & Allied		79	27
Energy, Electricals	&	45	15
Electronics			
Fresh Produce		11	4
Food & Beverages		187	63
Leather & Footwear		9	3
Metal & Allied		83	28
Motor Vehicle	&	51	17
Accessories			
Paper & Board		74	25
Pharmaceutical	&	24	8
Medical Equipment			
Plastics & Rubber		77	26
Textile & Apparels		64	22
Timber, Wood	&	19	6
Furniture			
			10
Building, Construction	&	29	
Mining			
Total		752	254

#### 3.5 Data Collection and Instruments

Data for this study was collected through a questionnaire. Both open-ended and closed-ended question format were used. The data collection method was interviewer administered questionnaire, to the managers or entrepreneur owners of the firms. The advantage of this method even though time consuming, is that it allows probing and clarification where the interviewer feels that the answer given is either not adequate or not clear. It therefore gives in depth information on the structured questions asked during the interview, and the response rate is high (Ngugi, 2012). To give support to this data collection method, the questions were designed in a clear and simple language understandable by the average person.

Since the questionnaire, as the data collection instrument was filled on both the dependent and independent variables by the managers or the entrepreneur owners, the instrument may be subject to common method bias or variance. According to Chang, Witteloostuijn and Eden (2010), common method variance occurs when a researcher uses self report questionnaires to collect data at the same time on both the independent and dependent variables from the same source or participants. The result may be an internal false consistency or an obvious correlation among variables, which calls for remedies to be provided either before or after the use of the questionnaires. One way to address this before data collection is by mixing the order of questions and designing questions that are not vague, as well as encouraging the respondents to be as honest as possible as there is no right or wrong answer. This is the remedy that was used for this research.

#### 3.6 Pilot Study

Cargan (2007) describes a pre-test or a pilot study as a means of checking whether the study can be undertaken and provide data that is accurate. Its role is to examine the feasibility of an approach intended for use in a larger scale study (Leon, Davis&

Kraemer, 2011). Pilot studies pretest the research instruments such as the questionnaire (Gumbo, 2014). Kimberlin and Winterstein (2008) posit that the quality of an instrument used in research in terms of reliability and validity can be known through undertaking a pilot test. This identifies sources of error in an instrument thereby reducing these errors.

The pilot test was undertaken on 10% of the sample that is 25 firms. According to Mugenda (2008), 10% of the sample is adequate for pilot test. A split test method was used whereby questionnaires were divided into two halves of even and odd question numbers. Data from each half was separately analysed and the two results correlated to determine the reliability of the study instrument in consistently measuring the variables. A correlation coefficient of 0.7 indicates that the instrument is reliable. According to Korb (2012), split test is the most important reliability type of evidence for questionnaires.

After undertaking the pilot study, some questions were found to be ambiguous and others abit complex thereby not getting clear answers from the respondents. According to Choi and Pak (2004), an ambiguous question may lead to respondents understanding the question in a manner that was not intended, leading to answering a question that was not intended. This necessitated changing and simplifying some of the questions so as to make them understandable. The questionnaire was also shortened to avoid apathy by the respondents while answering the questions.

To explain the questions deeply and in a clear manner, well trained research assistants were used so as to clarify the questions that were seemingly not understandable to some of the respondents. This was especially the case with those firms run by foreigners not acquainted with English as their first language. Other terms were found to be too academic thus further clarification was provided which helped get the necessary response.

# 3.6.1 Validity of Research Instrument

Validity concerns itself with the meaningfulness of research components so that the research can measure what it intends to measure (Drost, 2011). Validity requires that an instrument be reliable, though it can be reliable without being valid. It is the extent to which the test results' interpretations are warranted (Kimberlin & Winterstein, 2008). This study was guided by face, content and criterion types of validity as discussed by Kimberlin & Winterstein (2008), and Drost (2011).

Face validity is not determined through statistical analysis but depends on face value judgmental view of one who is checking the instrument to determine whether it will measure what it is supposed to measure. Content validity on the other hand is determined by experts in the field, and this study was reviewed by experts to determine its validity. Criterion validity determines the correlation of constructs that are supposed to be correlated, and this study brought out this. All the above were done to ensure that the instrument was valid.

#### 3.6.2 Reliability of Research Instrument

Reliability according to (Drost, 2011) is the extent to which measurements can be repeatable if performed by different persons on different occasions. It is the degree to which measures are free from error thus yielding consistent results, therefore it involves consistency and reproducibility of test scores (Thanasegaran, 2009). Repeatability or stability overtime, and internal consistency are types of reliability estimation. It is important to determine internal consistency before a test is undertaken so that validity can be ensured.

Although there are various methods of measuring internal consistency, the most commonly used is coefficient alpha with the most widely used being Cronbach's coefficient alpha (Thanasegaran, 2009). This was developed by Lee Cronbach in 1951 as a measure of internal consistency of a test or scale, and normally expressed as a

number between 0 and 1. A reliability coefficient of 0.7 and above is generally accepted to be appropriate, and the higher the score is the more reliable it is. It is commonly used when multiple-item measures of a concept or construct are employed, as it requires only one test administration as opposed to test-retest reliability (Mohsen & Dennick, 2011).

## 3.7 Data Analysis and Presentation

This study involved both qualitative and quantitative data. As Kothari (2004) points, after the questionnaires are received back the raw data should be edited and cleaned for any errors or omissions and correction made where possible. This was done to ensure data's accuracy and consistency with other gathered facts. Coding and classification was done for efficient analysis of the data. The data was fed into a computer and analysis made using Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were used in the analysis. Descriptive statistics describe and summarize the data in a meaningful way using tables and bar charts, while inferential statistics draw conclusions on the analyzed data thus helping in generalization. Predictions or inferences based on the results of the analysis were made and the results generalized on the population of study given that the test sample was part of the population.

Factor analysis was used to statistically determine the suitability of all the variables to the study. The collected data was also tested for the assumptions of the various analytical models for example the diagnostic for the use of linear regression requires that the data is normally distributed and no multicollinearity, and these were established. The results of the data analysis were presented by the use of bar graphs, pie charts, percentages and frequencies.

#### 3.8 Measurement of variables

In testing the variables, relevant statements which established the relationship between the variables were used. Intrapreneurship, (innovativeness, pro-activeness and competitive aggressiveness) was the dependent variable, while the independent variables were commitment of resources (undertaking research and development, upgrading production equipment, training employees and engaging marketing activities), management's need for achievement (setting goals, opportunity seeking, feedback for improvement and risk taking propensity) reward system ( promotion, monetary reward, shareholding and grants for individual projects), and entrepreneurial management structure (flat levels of management, open communication channels, flexible management structure and inclusive decision making). Linear regression analysis in this case was used to determine the strength and the significance of the relationship between the dependent and each of the independent variables.

## 3.8.1 Linear Regression Analysis

Both simple and multiple regression analysis were undertaken to determine the effect of the dependent variable(s) on the independent variable. Simple regression analysis uses only two variables namely the independent variable which causes the behavior of the other variable known as the dependent variable (Kothari, 2004). For this study, each of the independent variables under entrepreneurial management was individually regressed against the dependent variable promotion of intrapreneurship. This was achieved under each specific objective by fitting the respective model.

**Objective 1**. To determine if commitment of resources has a role on promotion of intrapreneurship in SMMEs in Kenya.

The function specification for this objective was

INT= 
$$f(CR, \varepsilon)$$

The equation for this model was  $Y=\beta_0+\beta_1 x_1+\epsilon$ 

**Objective 2:** To examine the role of management's need for achievement on promotion of intrapreneurship in SMMEs in Kenya.

The function specification for this objective was

INT= 
$$f(MNA, \varepsilon)$$

The equation for this model was  $Y = \beta_0 + \beta_2 x_2 + \epsilon$ 

**Objective 3**: To assess the role of reward system on promotion of intrapreneusrhip in SMMEs in Kenya.

The function specification for this objective was

INT= 
$$f(RS, \varepsilon)$$

The equation for this model was Y =  $\beta_0 + \beta_3 x_3 + \epsilon$ 

**Objective 4**: To establish the role of entrepreneurial management structure on promotion of intrapreneurship in SMMEs in Kenya.

The function specification for this objective was

INT= 
$$f(EMS, \varepsilon)$$

The equation for this model is  $Y = \beta_0 + \beta_4 x_4 + \varepsilon$ 

## **Multiple Regression Analysis**

Multiple regression analysis was used in the study to establish the overall effect of the independent variables on the dependent variable. Sekaran (2009) points out that multiple regression analysis is undertaken by jointly regressing the independent variables against the dependent variable to explain the variance in it, forming a multiple correlation (multiple r). Overall, it is done to determine the simultaneous effect of a number of independent variables on a dependent variable, that is the dependent variable's variance brought about by several predictors. The independent variables in the study namely commitment of resources, management's need for achievement, reward system and entrepreneurial management structure were regressed against the dependent variable intrapreneurship. This was in accordance with the general objective of the study.

The function specification for the general objective was.

INT= 
$$f(CR, MNA, RS, EMS, \varepsilon)$$

The equation for this model is  $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$ 

Where;

Y= Promotion of Intrapreneurship (INT)

 $X_1$ = Commitment of Resources (CR)

X<sub>2</sub>= Management's Need for Achievement (MNA)

 $X_3$ = Reward System (RS)

 $X_4$ = Entrepreneurial Management Structure (EMS)

 $\beta_0$  = Constant Term

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$ = coefficients of commitment of resources, management need for achievement, reward system and entrepreneurial management structure respectively.

 $\varepsilon$ = error term

## 3.8.2 Hypotheses Testing

According to Kothari (2004), a hypothesis is an assumption or some supposition that can either be disproved or proved, by objective verification and testing. Research hypotheses are formal questions intended for resolving a phenomenon, and are either propositions or set of propositions which explain the occurrence of a specified group of phenomena. Research hypotheses are often predictive statements that have capability of being tested by scientific methods relating an independent variable to a dependent variable. For this study, the t-test was used and the statistical significance of the coefficient determined. If t-value was found to be significantly different from zero, and a p-value less than 0.05, then the alternative hypothesis was accepted and the null hypothesis rejected.

A t-test was used to test the hypotheses. A t-test is a test statistic which is a standardized value calculated from the data of the sample in testing of hypothesis. The data is compared to the expected result of the null hypothesis. If the t-value equals zero, then the results of the sample equal the null hypothesis (Frost, 2016). In a t-test, the greater the magnitude of t-value, the greater the evidence against the null hypothesis in stating that there is no significant difference. This leads to the rejection of the null hypothesis and to the acceptance of the alternative hypothesis. The probability values which go hand in hand with the t-test should be lower than the stated significance for the null hypothesis to be rejected. In this study, the stated significance level was 0.05. The higher t-value, the lower the p-value and greater the evidence that the null hypothesis should be rejected (Runkel, 2016)

#### **CHAPTER FOUR**

#### RESEARCH FINDINGS AND DISCUSSION

#### 4.1 Introduction

The main focus of the study was to determine the role of entrepreneurial management on promotion of intrapreneurship in the small and medium manufacturing enterprises in Kenya. The independent variables were commitment of resources, management's need for achievement, reward system and entrepreneurial management structure. The chapter presents the results of data analysis, under which empirical findings were analysed using descriptive statistics, correlations and multiple regression analysis. The chapter captures the response rate results, characteristics of the respondents, descriptive analysis of the study variables and inferential analysis.

# **4.2 Response Rate**

The study involved a preliminary study to identify the SMMEs from the larger sample of 254 firms registered with KAM. Out of these, 145 firms were reached representing 57% of the sample as shown in table 4.1. This was found to be adequate based on Mugenda and Mugenda (2003) who state that a response rate of 50% is adequate, 60% response rate is good, while if the response rate is 70% and above is considered to be very good.

**Table 4.1: Response Rate** 

Firms Registered with KAM	Population	Sample Size	Response	Percentage of Response
Manufacturing	752	254	145	57%

## 4.2.1 Proportion of Small and Medium Manufacturing Enterprises

As shown in table 4.2, the preliminary study identified that 91.7% (133) of firms out of the 145 reached to be SMMEs and this formed the final sample for the research. These findings were found to be in line with those of ILO (2007) and Fjose, Grünfeld and Green (2010) who state that SMEs constitute over 90% of all the enterprises in the economies especially the developing ones. It can therefore be implied that SMMEs in Kenya form over 90% of the firms in the manufacturing sector. Out of the 133 questionnaires administered by targeting either the managers or entrepreneur owners of the SMME firms, 85.7% (114) were adequately completed therefore forming about 86% response rate which is very good according to Mugenda and Mugenda (2003).

**Table 4.2: Proportion of SMMEs in Manufacturing Sector and SMMEs Response Rate** 

Firms Registered with KAM	Sample Response	SMMEs Frequency	Percentage of SMMEs Frequency Response (%)	SMMEs Sample Response	Percentage of SMMEs Sample Response (%)
Manufacturing	145	133	91.7	114	85.7

## 4.3 Results of the Pilot Study

After undertaking and analysing the pilot study data, some questions were found to be ambiguous and others abit complex thereby not getting clear answers from the respondents. According to Choi and Pak (2004), an ambiguous question may lead to respondents understanding the question in a manner that was not intended, leading to answering a question that was not intended. This necessitated changing and simplifying some of the questions so as to make them understandable. The questionnaire was also shortened to avoid apathy by the respondents as they answered the questions.

## **4.3.1 Construct Validity Test**

According to Drew and Rosenthal (2003), construct validity is viewed by many researchers as that which encompasses all the other forms of validity, and which is the extent to which the measure used effectively measures the construct it intends to measure. Through face validity, face value judgment which is the view of the person checking the research instrument was established, while content validity which depends on the view of experts in the field was also undertaken. Criterion validity determines the correlation of the constructs that are supposed to be correlated as pointed out by Kimberlin and Winterstein (2008). All the above was done to determine the validity of the instrument.

## 4.3.2 Reliability of the Data

Reliability of a research instrument is undertaken to determine the internal consistency of the instrument. A reliable research instrument should produce consistent results over time even when used by different researchers on different occasions. Cronbach coefficient alpha was used to test reliability in this case. If the reliability coefficient is 0.7 and above, then the reliability is strong, while if it is 0.6 and below, it is weak (Thanasegaran, 2009; Drost, 2011). Table 4.3 shows that the variables were all consistent with alpha values greater than 0.7 which is the recommended alpha value for reliability, therefore all were accepted.

Table 4.3: The Study Variables' Cronbach Alpha Components

Composite variable	Cronbach	Number	of
	alpha	items	
Commitment of resources	0.774	4	
Reward system	0.731	4	
Entrepreneurial management	0.765	4	
structure			
Management's need for	0.830	4	
achievement			
Intrapreneurship activities	0.720	4	

## **4.3.3 Factor Analysis**

Factor analysis was taken to determine the number of variables to be used for the study. It is used in reducing the number of variables by checking whether the variables of interest are linearly related to a smaller number of factors that are unobservable, by determining the variables which show a relationship. Factor analysis helps remove redundancy and duplication from variables that are correlated (Mayer, 2006).

According to Tabachnikand Fidell (2007), factor analysis should have factor loadings of 0.3 or greater. If lower than 0.3, the relationship between the variables is very weak. The main objective of this study was the relationship between commitment of resources, management's need for achievement, reward system and entrepreneurial management structure on promotion of intrapreneurship in SMMEs in Kenya, and these are the variables that were subjected to factor analysis. The results of the factor analysis whose factor loadings were found to be 0.3 and above are presented in appendix III.

## 4.3.4 Test for Multicollinearity of the Independent Variables.

The variables were subjected to a multicollinearity test to determine if they were independent of each other. Multicollinearity is present when there is high correlation between two or more predictor variables, which means they would be explaining more or less the same variability in the analysis. The high correlation hampers the individual coefficients from producing estimates that are reliable, leading to non-statistical significance of the predictor variables (Joshi, 2012).

Virtual inflation factors (VIF) is used to determine the level of correlation. The higher the VIF the higher the correlation. As shown by table 4.4, the test of multicollinearity showed virtual inflation factors (VIF) greater than 1 and less than 3 which was sufficient to conclude that the sub-variables were independent of each other (uncorrelated). VIF gives the variance of the inflation. Usually for independence of variables VIF should range between 1 and 3

**Table 4.4: Test for Multicollinearity** 

Model		Collinearity Statistics	
		Tolerance	VIF
	(Constant)	-	-
	RA	0.964	1.037
OVERAL MODEL	MNA	0.838	1.194
	RS	0.906	1.104
	MS	0.830	1.205

## 4.4 Demographic Description of Respondents

# **4.4.1** Gender of the Respondents

The gender of the respondents is represented by figure 4.1. It shows that the male headed firms outnumbered those headed by females by 58% to 42% thus 16% difference. In terms of ownership this finding is supported by a study carried out in Mongolia by the World Bank in 2013 which showed that the percentage of SMEs owned by women was 38.9% thus leaving those owned by men to be 61.2% (IFC, 2014). Another study carried out in 2012 on the top 50 Fortune 500 firms found that women CEOs account for only 24% in these firms, a fact which spilled over to the SME sector with 32% of these being headed by females (Machado & Melo, 2014).

Also, in 2012 the share of small business ownership by women in the United States was 36% (Lichtenstein, 2014). For this study the implication is that male managers were engaged in the belief that they perform better than women in management and leadership positions. This implication is supported by Underdahl, Walker and Woehr (2014), who point out that male managers are believed to be better managers and leaders thus more preferred as compared to women.

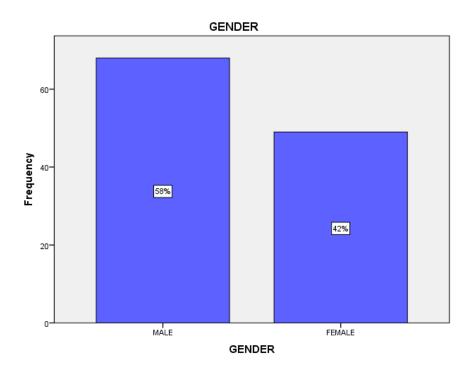


Figure 4.1: Gender of the Respondents

#### 4.4.2 Age of the respondents

The age of the respondents was deemed to be crucial in determining the age bracket of managers or entrepreneurial owner managers of SMMEs. As shown in figure 4.2, the cluster was between 30-40 years at 63%, followed by 41-50 years at 30%, then 51-60 years at 5% while below 30 years was the lowest with 2%. This slightly differs with the scenario in the United States whereby the age group of business owners was found to be shifting towards the older age groups. Lichtenstein (2014) found that between 2007 and 2012, business owners of 50 years and over had an increase from 46 percent to 50.9 percent, while the small business owners of age 35 to 49 had decreased from 38.8 percent to 33.2 percent.

A survey undertaken in Canada in 2011 showed that majority of owners of small and medium enterprises were between the ages of 50-64 years at 48.4%. Further, the findings of the study are supported by a study undertaken on eighteen countries by Cardona and Morley (2013), established that the average age of managers was 39.8 years. Since the majority of the respondents in this study were employee managers, the implication is that SMMEs engage young managers perceiving them to have an advantage over the older ones as they are viewed to be more innovative. Other reasons why this is the case as pointed out by Zenger and Folkman (2015) are that young managers welcome change, are inspiring, receptive to feedback, continuously seek improvement, set challenging goals and focus on attaining results for the set goals.

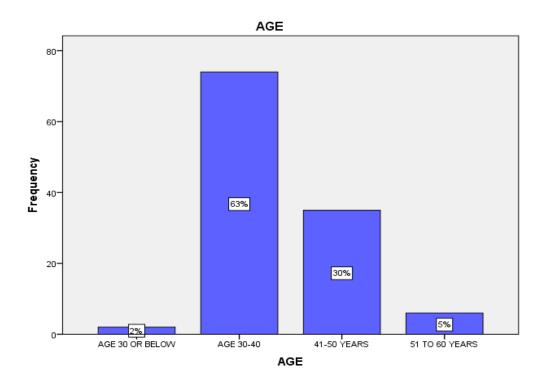


Figure 4.2: Age of the Respondents

# 4.4.3 Number of Years with the Enterprise

The study sought to find out the number of years the respondents had been with the enterprise. Figure 4.3 shows that majority of the respondents indicated that they had been with the firm for between 1-5 years at 56%, followed by those who had been with the firm for 6-10 years at 26%, 11-15 years were 5%, above 15 years were 4%, while those with below 1 year were 9%.

Since most of those who responded were employee managers, the findings correspond to those undertaken in the USA by the Bureau of Labour Statistics (2014), where it was found that the average tenure of employees was 4.6 years. Bureau of Labour Statistics (2014) also established that the tenure for the older employees was higher than that among the younger ones, at 10.4 years for those between 55-64 years as compared to 3 years for ages 25-34 years. These findings are strengthened by this study as majority of those who responded were between 30-40 years. Zenger and Folkman (2015) point out that when an employee's period of engagement in an organization is long, there is tendency for complacency and maintaining the status quo. It is therefore in order for this study that managers in SMMEs did not stay for long to avoid complacent behaviour so that there could be rejuvenation for intrapreneurship, by innovation stimulation as a result of new ideas.

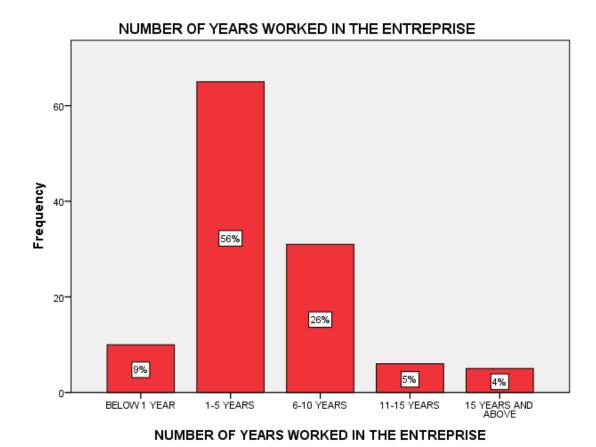


Figure 4.3: Number of Years Worked in the Enterprise

## 4.4.4 Relationship with the Enterprise

The study collected information from either the owner or manager of the firms because it was felt that they were better placed to respond to the sought information. As shown by table 4.5, out of 114 who responded to this question, (113) 99.1% indicated they were employee managers while only 1 (0.9%) indicated to be an owner manager. This would mean that the owners of the SMMEs preferred hiring managers to be in charge of the enterprise as well as managing the critical areas, which gives them flexibility to attend to other businesses instead of being entirely tied down by the enterprise.

**Table 4.5: Relationship with the Enterprise** 

Relationship with the Enterprise	Frequency	Percent
		(%)
Owner Manager	1	0.9%
Employee Manager	113	99.1%
Total	114	100.0

#### 4.4.5 Firm's Existence

As given by figure 4.4, the study established that the number of years the enterprise had been in existence was dominated by those between 11-20 years at 34.19%, followed by those between 21-30 years at 26.50%, then by those below 10 years at 13.68%, then by those between 31-40 years at 12.82% same as those above 40 years at 12.82%. From the findings, it cannot be said that there is a range of duration that is not represented. The range of the years chosen are all represented, therefore they are in support the findings by (Cook, Campbell & Kelly, 2012)who established that firms continued to fail almost at the same rate in all the years of existence. The results of the study therefore show that SMMEs are represented in all the age brackets considered.

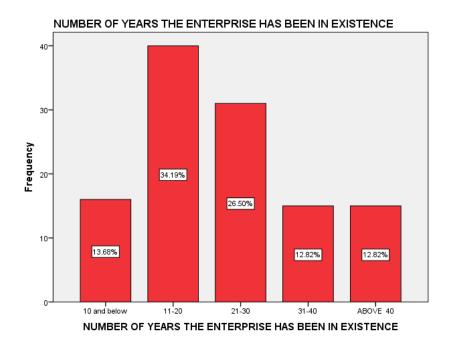


Figure 4.4: Number of Years the Enterprise has Been in Existence

## 4.5 Descriptive Statistics on Study Variable

#### 4.5.1 Commitment of Resources

The study sought to find out the role of commitment of resources on promotion of intrapreneurship in SMMEs in Kenya, under four constructs namely research and development, production equipment, training and marketing. Literature reviewed and as supported by resource based theory established the importance of commitment of resources to intrapreneurship.

#### **Commitment of Resources to undertake Research and Development**

From table 4.6, 3.5% did not set aside each year any profit percentage for research and development, 28.9% set aside between 1%-3% of profits, 35.1% set aside 4%-6%, 21.9% set aside 7%-9% while 10.5% of the firms set aside above 10%. The results show that the majority of the firms value the importance of research and development in

performance survey in Germany that concluded that innovation is highly correlated to research and development. Firms that engaged in intensive research and development produced innovative products which were more competitive in the global market thus experiencing above average growth in employment (Kinkel, Wengel & Lay, 2005).

Further, Bowen (2012) in a study undertaken for the National Science Board of the USA established that even though investing in research and development was not equal to innovation, there was a great likelihood of innovations in businesses that performed or funded research and development. This means that management in SMMEs in Kenya value the input of research and development in promoting intrapreneurship through innovations. It can therefore be said that management within SMMEs in Kenya promotes intrapreneurship through commitment of resources to research and development to come up with new products.

Table 4.6: Percentage profit set aside for Research and Development.

Profit Percentage	Frequency	Percent (%)
None	4	3.5
01-03%	33	28.9
04-06%	40	35.1
07-09%	25	21.9
Above 10%	12	10.5
Total	114	100.0

# **Commitment of Resources to Upgrade Production Equipment**

In checking whether firms committed resources for acquiring new production equipment, the results presented by table 4.7 show majority of the firms provided the resources, as 47(41.2%) were 5 years and below, 43(37.7%)between 6-10 years, 19(16.7%) between 11-15years,4(3.5%) were between 16-20 years, and only 1(0.9%) was above 20years. This study conforms to the one undertaken by Yang (2014) who pointed out that manufacturing firms consider production equipment as one of the assets that are major in the production process. For this reason, there is tendency for the firms to continually improve the equipment so as to remain competitive and attain their production goals as they seek customer satisfaction thereby increase profits.

Other reasons for production equipment upgrade or replacement are to lower overall cost of production, improve quality, performance delivery, develop products of high quality that have shorter lead times. Singh and Mahmood (2015) in their study on Malaysian manufacturing firms established that SMEs, that kept up to date process equipment lowered their operation costs by quick and efficient production. Management within SMMEs in Kenya therefore values the upgrade of the production equipment which would increase productivity as well as lowering the production cost.

However, the study also established that majority of the firms at 94.02% felt that the production equipment that they had was not sufficient for the production process. This implies that even though resources were allocated for acquiring of new production equipment, the resources were not enough to acquire sufficient equipment, thus management in SMMEs would do better by ensuring that enough resources are provided for acquiring of the sufficient equipment.

**Table 4.7: Age of Current Production Equipment** 

Age		Frequency	Percent(%)	
	5 yrs and below	47	41.2	
	6-10 yrs	43	37.7	
	11-15 yrs	19	16.7	
	16-20 yrs	4	3.5	
	Above 20 yrs	1	0.9	
	Total	114	100.0	

## **Commitment of Resources to Training of Employees**

Table 4.8 shows that most of the firms committed resources for training of employees. This in recognition that training enhanced the employees' knowledge and skills thus promoting intrapreneurship. The response was that 1(0.9%) very rarely trained their employees, 31(27.2%) rarely trained their employees, 70(61.4%) often trained their employees while 12(10.5%) very often trained their employees. None failed to take their employees for training.

The statistics led to the conclusion that management in SMMEs allocated resources for training. This outcome supports the view of Aguinis and Kraiger (2009) that employees who were trained and their skills developed were more innovative and productive than those who were not trained, thus the more reason why firms engage skilled employees and continue to upgrade them. Shaheen, Naqvi & Khan (2013) established that there was a significant relationship between employee and organizational performance. Still, training acts as a motivator for employees since they feel knowledgeable in the areas of operation. Out of this realization, SMMEs in Kenya therefore value training thus were found to allocate resources to it.

**Table 4.8. Training of employees** 

Response	Frequency	Percent (%)	
Very rarely	1	.9	
Rarely	31	27.2	
Often	70	61.4	
Very often	12	10.5	
Total	114	100.0	

## **Commitment of Resources to Marketing Activities**

Table 4.9 gives the percentage of the firms which allocated a budget for marketing. The table shows that those firms which had a budget are more at 53.1% as compared to those which did not have a budget for marketing at 46.9%. This shows that the SMMEs valued marketing in promotion of intrapreneurship. According to Tirreni (2005), firms allocate huge resources to marketing initiatives so that they can stay competitive. Managers in these firms allocate a marketing budget that they can utilize to gain customer equity, which translates into an increased market share.

Schindehutte and Kuratko (2014) point out that firms with a strong entrepreneurial marketing orientation have a strong entrepreneurial orientation. Marketing initiates and triggers new entrepreneurial events, sponsors innovations, and pushes for their acceptance. This then means that marketing function is crucial in enhancing the entrepreneurial spirit of a firm, thus promoting intrapreneurship. For this reason, SMMEs in Kenya were found to promote intrapreneurship through allocation of resources to marketing activities.

**Table 4.9: Budget for Marketing** 

Response	Frequency	Percent(%)	
Yes	61	53.1	
No	53	46.9	
Total	114	100.0	

## 4.5.2 Management's Need for Achievement

The study sought to establish the role of management's need for achievement on the promotion of intrapreneurship. This was done under four constructs namely setting goals, opportunity seeking, feedback for improvement and risk taking propensity.

## **Setting of Goals by Management**

Entrepreneurs who have a high need for achievement set goals. Achievement motivation is a desire to achieve targets and this pushes those individuals with a high need for achievement to set achievable goals. The tables 4.10 and 4.11show that management in SMMEs had clear goals to achieve thus implying that goal setting supports intrapreneurship in SMMEs.

The two tables show targets were put in place in terms of increase in profits and market share. Wu, Matthews and Dagher (2007) in the study on prospective entrepreneurs in USA propose that entrepreneurs should set goals that are in alignment with their need for achievement. Those with high need for achievement set up moderate, realistic and achievable goals which act as a motivation rather than a discouragement.

As can be seen from table 4.10, majority of the respondents had set profit targets at an increase of 1-25% in the considered years of 2011 to 2015. This was followed by those who set their profit increase goals at 26%-50%. Those who set their profit increase goals at 51%-75%, were the third, the fourth were those who did not set any profit increase

goal. Those who set at 71%-100% were the least in all the years. The implication is that management in SMMEs set profit goals that were challenging but achievable.

**Table 4.10: Targets on Increase in Profits** 

Increase	2011	2012	2013	2014	2015
in					
Profits.					
None	1(0.9%)	2(1.8%)	3(2.6%)	2(1.8%)	-
1-25%	70(61.4%)	66(57.9%)	61(53.5%)	59(51.8%)	57(50%)
26-50%	38(33.3%)	40(35.1%)	43(37.7%)	46(40.4%)	51(44.7%)
51-75%	5(4.4%)	6(5.3%)	6(5.3%)	6(5.3%)	5(4.4%)
71-100 %	-	-	1(0.9%)	1(0.9%)	1(0.9%)

Table 4.11 shows that majority of the respondents had set targets at 1-5% and 6-10% of increase in market share. These targets were followed by those at 11-15%, while those who set market share at over 15% and those who did not set were the minority. The above results support Singh (2011), who pointed out that individuals who are achievement oriented set targets that are moderately difficulty but at the same time easily achievable, which acts as a motivator in achieving their objectives. They try to avoid leaving the outcome to chance. This scenario implies that the respondents in the SMMEs set targets increase in profits and market share that they could achieve rather than leave it to chance.

**Table 4.11: Targets on Increase in Market Share** 

Market	2011	2012	2013	2014	2015
Share					
None	3 (2.6%)	1(0.9%)	1(0.9%)	-	-
1-5%	51(44.7%)	48(42.1%)	46(40.4%)	44(38.6%)	46(40.4%)
6-10%	53(46.5%)	57(50%)	58(50.9%)	61(53.5%)	57(50%)
11-15%	7(6.1%)	8(7%)	8(7.0%)	7(6.1%)	9(7.9%)
Over	-	-	1(0.9%)	2(1.8%)	2(1.8%)
15%					

## **Opportunity Seeking by Management**

The study sought to know whether the mangers/entrepreneur owners were drawn to new opportunities by looking at the number of opportunities that they had exploited within a range of five years. As shown by figure 4.5 majority indicated that they had exploited four and above new opportunities at 63%, 26% exploited three, 20% exploited two opportunities while only 1% exploited one opportunity.

According to Zhao (2006) entrepreneurs are opportunity seekers and being innovative provides them with an instrument for success, therefore the results of this study support this. Further Botha and Nyanjom (2011) point out that opportunity seeking and recognition is the core aspect of intrapreneurship and resources should be allocated to pursuance of opportunities if a business has to thrive. Management within SMMEs in Kenya support these scholars views as results show that they seek opportunities thus promoting intrapreneurship.

# HOW MANY NEW OPPORTUNITIES HAS MANAGEMENT EXPLOITED YEARLY WITHIN THE LAST FIVE YEARS?

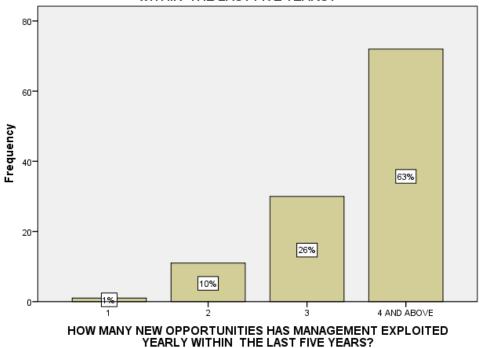


Figure 4.5: Opportunities Exploited by Management Yearly Within 2011 to 2015

## Feedback for Improvement by Management

According to McClleland (1965) as quoted by Okhomina (2010), entrepreneurs are motivated by getting feedback for improvement so that they can measure their performance. This feedback should be reliable and measurable. People with a high need for achievement do not desire compliments on their personal characteristics as much as they appreciate information about their work achievement. This is what helps them perform better (Chapman, 2009). From table 4.12, it was established that the respondents had incorporated feedback mechanisms thus implying that they valued feedback on their performance.

Those SMMEs which had incorporated feedback mechanisms were 78 % as compared to 20.2% which sought feedback only when required or being the initiative of either the customer or the employees. Those that spontaneously sought feedback were 1.8%.

The results are in alignment with Chell and Ozkan (2014), who bring out and support the argument that entrepreneurs with a high need for achievement have a desire to perform well at tasks that are challenging, constantly seek feedback on their performance, as they take responsibility for their actions. The feedback enables them to attempt new ways accomplishing the tasks before them. The feedback should be positive and reliable to enable the measurement of the outcome of their activities. The positive feedback pushes and motivates them to strive further towards the attainment of their goals (Wu, Matthews & Dagher, 2007). These results show that management in SMMEs in Kenya value feedback for improvement thus promoting intrapreneurship.

**Table 4.12: Presence of Feedback Mechanisms in Place** 

Response	Frequency	Percent(%)
Spontaneous	2	1.8
Only When Required	6	5.3
Part of the System	89	78
Initiative by either Employees or Customers	17	14.9
Total	114	100.0

#### **Risk Taking Propensity of Management**

Table4.13 shows the risk taking propensity of the managers/manager owners. Risk taking propensity is one of the key dimensions of entrepreneurial behaviour as affirmed by Noer, Idrus, Hadiwijoyo and Wirjodirdjo (2011) in the study on personal characteristics that influence university students to choose entrepreneurship as a career option in

Indonesia. The risk taking should however be moderate as entrepreneurs are not gamblers but are either calculated risk takers or moderate risk takers (Diefenbach, 2011).

The results show that calculated risk takers were 19(16.7%), moderate risk takers 28(24.6%), low risk takers 28(24.6%), high risk takers 23(20.2%), while those who were risk averse were 16(14%). These findings are consistent with those of Kriticos, Fossen and Calliendo (2008) who undertook a study on entrepreneurs in Germany which concluded that those entrepreneurs who were high risk takers and risk averse experienced high failures as compared to the other risk categories. Management within SMMEs in Kenya can therefore be said to portray the entrepreneurial risk taking which promotes intrapreneurship as pointed out by Zhao (2013).

Table 4.13: Level of Risk Taking by Management

Risk Taking Level	Frequency	Percent (%)
Calculated	19	16.7
Low Risk Taker	28	24.6
Moderate Risk Taker	28	24.6
High Risk Taker	23	20.2
Risk Averse	16	14.0
Total	114	100.0

## 4.5.3 Reward system

## **Promotion of Employees**

The study also sought to know the number of promotions effected within a span of five years as a result of new idea contribution. Promotion, which gives the employees the opportunity for career growth, is recognized as one of the reward systems valued by employees and isused to enhance employee satisfaction thus contributing to high employee performance (Sarwar &Abugre, 2013).

The results as given by table 4.14 show that those firms which had effected above 15 promotions were 42(36.9%) followed by those which had effected between 11-15 promotions at 31(27.1%), 6-10 promotions at 14(12.2%), 1-5 promotions at 23(20.3%), while only 4(3.5%) did not offer any promotion as a result of new idea generation. Ozutku(2012) brought out promotion as one of the rewards used by organizations to reward quality work. The implication is that SMMEs valued promotion as a type of reward for their employees as a result of new idea generation.

Table 4.14: Promotions as a Result of New Ideas within the Years 2011 to 2015

Promotions	Frequency	Percent (%)	
None	4	3.5	
1-5	23	20.3	
6-10	14	12.2	
11-15	31	27.1	
Above 15	42	36.9	
Total	114	100.0	

## **Monetary Reward to Employees**

Monetary reward is a form of extrinsic reward that can include cash payments, bonuses and any other of monetary reward availed to employees to motivate them in their work. According to Marvel, Griffin, Hebda & Vojak (2007), extrinsic motivation system which includes monetary rewards tends to motivate employees more. The results of table 4.15 show that this type of reward system was popular with SMMEs. The response was that none failed to give monetary reward 8(7%) hardly gave any monetary reward, 38(33.3%)

often gave monetary reward, 56(49.1%) very often gave monetary reward while 12(10.5%) considered the reward to be part of the employees' work therefore not given.

The results are in agreement with those of Sarwar and Abugre (2013) who found that monetary reward was rated highly when looking at the factors that were considered as an encouragement to employees within the service sector in Ghana. Management in SMMEs in Kenya can therefore be said to value monetary reward as one of the rewards to motivate employees to be entrepreneurial, which promotes intrapreneurship.

**Table 4.15: Monetary Reward for New Idea Contribution** 

Monetary Reward	Freque	ncy Percent
		(%)
None	-	-
Hardly	8	7.0
Often	38	33.3
Very Often	56	49.1
Considered as Part of Employees Work	12	10.5
Total	114	100.0

## **Shareholding Given to Employees**

In seeking to find out if the firm gave shareholding to employees in recognition of new ideas, the study established some firms used shareholding as a reward mechanism. Those firms which gave no shareholding were 41(35.9%), followed by those firms that gave three shareholdings were 37(32.5%), followed by those which gave two shareholdings at 13(11.8%), and those who gave above three at 13(11.8%) and the last being those who gave one shareholding at 10(8.8%).

Key employees can be offered shareholding in the business so that they can share in the success if the business becomes successful, especially in the realization that monetary reward's motivational power begins to wear off as employees get used to the current compensation (Kauffman, 2006). This scenario increases employees' innovativeness and commitment to the business, which raises the productivity (Rix & Flint, 2013). From the results therefore as shown by table 4.16, majority of firms recognized shareholding as a form of reward for employees who came up with new ideas for intrapreneurship so as to retain them within the business.

Table 4.16: Shareholding given to Employees for New Idea Generation

Shareholding	Frequency	Percent (%)	
None	41	36.0	
1	10	8.8	
2	13	11.4	
3	37	32.5	
Above 3	13	11.4	
Total	114	100.0	

## **Grants for Employees' Individual Projects**

In looking at the rewards that were used to motivate employees for intrapreneurship in SMMEs, the study sought out to establish if grants had been given to employees to undertake own projects within the firm. As shown on table 4.17, it was established that most of the firms gave grants as only 3(2.6%) did not give any grants, another 4(3.5%) had given grants to one employee, 13(11.4%) to two employees, 41(36%) to three employees, 53(46.5%) to more than three employees.

According to Zhao (2013) financing employees' innovative ideas is a form of supportive infrastructure for intrapreneurship and should go hand in hand with monetary incentives given directly to the intrapreneur if innovative and entrepreneurial spirit is to be maintained. It is for this reason then that SMMEs in Kenya value advancing grants to encourage employees to be more entrepreneurial within the firm.

**Table 4.17. Grants given for Employees Individual Projects** 

Number of Employees	Frequency	Percent (%)	
None	3	2.6	
1	4	3.5	
2	13	11.4	
3	41	36.0	
Above 3	53	46.5	
Total	114	100.0	

## **4.5.4 Entrepreneurial Management Structure**

## **Flat Levels of Management**

The study further sought to establish if the levels of management within SMMEs in Kenya were flat. Those who had three levels were 3(2.6%), followed by those at four levels at 51(51.3%), while majority were those with five levels and above at 52.6%. According to Burns (2011) entrepreneurial firms tend to move away from centralized hierarchical forms to flatter structures, which facilitate horizontal communication. Tight management controls also decrease, and flexibility is introduced as firms become more entrepreneurial and move away from centralized hierarchical forms to flatter structures (Urban, 2010).

Shoghi and Safiepoor (2013) in their study on metal industries in Iran found that the complexity of the levels affected the entrepreneurial orientation of employees. The preference was flatter, organic and non complex structures which increase innovativeness in an organization. Reading from the results of the study on table 4.18, it can be implied that management in SMMEs is neutral as concerns levels of management as the structure is neither flat nor is it high. The majority however indicated lower levels than five and above. Management in SMMEs in Kenya should therefore strive for clear flatter structures that promote intrapreneurship.

**Table 4.18: Levels of Management.** 

<b>Management Levels</b>	Frequency	Percent (%)	
3	3	2.6	
4	51	44.7	
5& Above	60	52.6	
Total	114	100.0	

## **Open Communication Channels in Management**

Further the study sought to determine whether management openly communicates with the employees. Finch, Hansen and Alexander (2010) point out that when employees are consulted regularly, listened to and action taken upon their suggestions, they feel appreciated and are more effective as they perform to a higher standard. On the other hand, horizontal communication is important for firms to remain entrepreneurial as posited by Burns (2010). The study reinforces these views as table 4.19 shows that employees are often consulted by management in SMMEs in Kenya as70(61.4%) often get direct information from their employees, 37(32.5%) very often got direct information from their employees, while only 7(6.1%) indicated that they rarely got direct information from their employees.

Yan and Josef (2011) in their study in China on the role that communication plays in enhancing employees' organizational commitment, concluded that where there was abundant both upward and downward communication, employees were able to receive information and feedback from management therefore improving their performance. At the same time they were able to give feedback and suggestions to management which improved the organizational performance. Management in SMMEs in Kenya can be said to have put in place mechanisms to engage employees in direct communication which is good for intrapreneurship.

Table 4.19: How often Management gets Direct Information from Lower Levels

Of Management

Direct Information	Frequency	Percent (%)	
Rarely	7	6.1	
Often	70	61.4	
Very Often	37	32.5	
Total	114	100.0	

## Flexible Management Structure

The study sought to know how flexibility in management plays a role in intrapreneurship in SMMEs. Entrepreneurial firms put in place structures that are supportive and flexible to enable employees manage their own work and solve problems (Srivastava & Agrawal, 2010). From tables 4.20 and 4.21, it can be seen that there is no flexible management in SMMEs as employees actions are guided by the control measures put in place.

The results in table 4.20 on the expectation of employees to await managements direction before taking any action, 15(13.2%) were neutral, 72(63.2%) agreed while 27(23.7% strongly agreed. These results continue to support the views by Markovska

(2008) who found that established firms in the Macedonian Republic were not intrapreneurial partly due to management structures that were not flexible, and recommended that small firms be allowed to adopt flexible structures that were ready to change and respond to requirements from the customers. Management in SMMEs in Kenya was therefore found to be not flexible enough to handle and respond to changes promptly and should therefore adopt flexible structures.

Table 4.20.Expectation of Employees to await Management Direction Before Acting

Expectation	Frequency	Percent (%)
Neutral	15	13.2
Agree	72	63.2
Strongly Agree	27	23.7
Total	114	100.0

From table 4.21 as well, management is not flexible enough to allow employees freedom to deviate from the norm. Results show that 2(1.8%) strongly disagreed, 1(0.9%) disagreed, 7(6.1%) were neutral, 75(65.8%) agreed and 29(25.4%) strongly agreed. Those who expected employees to abide by the rules were the majority, thus still confirming that management in SMMEs did not have flexible structures for intrapreneurship.

Further prodding on the flexibility accorded to employees by management on if duties are reassigned revealed that 49.1% of the respondents rarely reassign duties to employees, while 41.4 % often reassign duties to employees and 8.6 % very rarely reassign duties to employees. Only 0.9% indicated that management very often reassigns duties to employees. This therefore continues to show that management in SMMEs in Kenya is not flexible enough to support intrapreneurship.

Table 4.21: Expectation of Employees to Always Abide by Laid Down

#### **Procedures**

Expectation	Frequency	Percent (%)
Strongly Disagree	2	1.8
Disagree	1	.9
Neutral	7	6.1
Agree	75	65.8
Strongly Agree	29	25.4
Total	114	100.0

## **Inclusive Decision Making**

Decision making process can indicate the type of management structure, whether it is rigid or not. Entrepreneurial firms are non rigid in their management structure and incorporate employees as part of decision makers. According to Irawanto (2015) in his study of Indonesian state owned enterprises found that employees who were engaged in decision making, were indirectly motivated and gave their best performance possible in their work. Another study by Ezennaya (2011) on both government and private owned firms in Nigeria found that productivity was not independent of management engaging employees in decision making. When included in decision making, their morale is raised and have a sense of belonging, are co-orperative and able to come up with innovative ideas.

From table 4.22, it can be seen that management in SMMEs often include employees in key production and marketing decisions. Those who very rarely included employees in decision making were 6(5.3%), 32(28.1%) rarely included employees in decision making, 75(65.8%) often included employees, while only 1(0.9%) very often included

employees. This is a good scenario thus SMMEs in Kenya have realized the importance of engaging employees in decision making for innovative ideas thus promoting intrapreneurship.

**Table 4.22: Inclusion of Employees to Key Production and Marketing Decisions** 

Inclusion	Frequency	Percent (%)
Very Rarely	6	5.3
Rarely	32	28.1
Often	75	65.8
Very Often	1	0.9
Total	114	100.0

## 4.5.5 Promotion of Intrapreneurship

#### **Innovativeness in SMMEs**

Innovativeness is one of the dimensions of intrapreneurship in firms. The study sought to establish if there was innovativeness in the SMMEs. Morris, Kuratko and Covin (2010) are of the view that firms should engage in sustained innovation rather than relying on a single isolated event. The sustained innovation enables them to maintain the entrepreneurial spirit to compete better in the market.

Urbancová (2013) in the study on achieving competitive advantage through innovation and knowledge found that SMEs considered innovations to be very important in sustaining their competitive advantage which led them to support innovative activities. The study recommended that innovativeness needed support by management which helped entrench an innovative culture and also ensuring continuous innovation.

Research and development is one of the ways for firms to continue to be innovative and as can be seen from, 23(20.2%) indicated that they copied what the competitor was producing, while 91(79.8%) of the firms indicated that they identified new opportunities as a result of research and development. The results therefore mean that management in SMMEs in Kenya supported innovative activities that brought about innovativeness.

**Table 4.23: What Gives Rise to New Opportunities** 

<b>Result of New Opportunities</b>	Frequency	Percent (%)
What the competitor is producing	23	20.2
Research and development	91	79.8
Total	114	100.0

The innovativeness of a firm can also be determined by the process innovation. Process innovation can be defined as implementing new or significantly improved production process, which may include changes to techniques and equipment (EC, 2006). From table 4.24, cumulatively 99.1% of the firms had upgraded the production process at least once since inception, with the majority at 52.6% having upgraded their production equipment three times, while those which had upgraded at four and above times being at 40.4%. Also, 93% of the respondents indicated that they were utilizing the most current production equipment technology in the market, as compared to 7% who did not. Botha and Nyanjom (2011) found that firms that had an established intrapreneurial orientation pursued innovation streams thereby benefitting from these innovations. The implication of this was that most SMMEs were able to pursue innovation through production equipment upgrade thereby being indicative of intrapreneurship.

Table 4.24: Number of Times the Firms Upgraded Production Equipment/Process since Inception

<b>Number of Times</b>	Frequency	Percent(%)	
0	1	0.9	
1	1	0.9	
2	6	5.3	
3	60	52.6	
4 & Above	46	40.4	
Total	114	100.0	

#### **Pro-activeness in SMMEs**

Pro activeness is another dimension of intrapreneurship and is closely related to entrepreneurs (Duarte, 2011). Williams (2009) points out firms that are entrepreneurial are able to predict future changes, needs or demands thus developing new products or services not necessarily related to the current business. They are also able to introduce the new products or services ahead of the competitor, and are also able to terminate products or services that have declined in the market and replace them with new ones (Diefenbach, 2011).

Table 4.25 indicates that most of the respondents were proactive. Majority of the firms at 95.7% cumulatively indicated that they had one or more products that they had not yet introduced into the market that they could rely on in case of failure of the products they were currently offering. It was therefore evident from the results on table 4.23 that SMMEs in Kenya are proactive which is indicative of intrapreneurship.

Table 4.25: Products not given to the Market that Firms can Rely on

<b>Number of Products</b>	Frequency	Percent (%)
None	5	4.3
1	14	12.3
2	23	20.2
3	38	33.3
4 & Above	34	29.8
Total	114	100.0

## **Competitive Aggressiveness of SMMEs**

Competitive aggressiveness as a dimension of intrapreneuship is the firm's focus and tendency towards challenging and dominating its competitors (Azami, 2013). This challenge is aimed at improving the firm's position and performance in the market place, by gaining its market share and customers (Williams, 2009; Kosta & Nicolaidis, 2011). For a firm to be said to portray intrapreneurship it should also exhibit these tendencies. From table 4.26, it can be seen that the firms have portrayed competitive aggressiveness tendencies, as only a small percentage did not post any increase in market share in the years between 2011 to 2015. The majority of the firms posted an increase of 1%-4% over the five years. The results portrayed competitive aggressiveness of the SMME firms.

**Table 4.26: Percentage Increase in Market Share.** 

Increase in	2011	2012	2013	2014	2015
Market					
Share					
No	7(6.1%)	5(4.4%)	4(3.5%)	3(2.6%)	3(2.6%)
Increase					
1-2%	52(45.6%)	47(41.2%)	47(41.2%)	46(40.4%)	43(37.7%)
3-4%	42(36.8%)	42(36.8%)	40(35.1%)	38(33.3%)	41(36.0%)
5-6%	13(11.4%)	20(17.5%)	23(20.2%)	25(21.9%)	24(21.1%)
7%	-	-	-	2(1.8%)	3(2.6%)
&above					

# **4.6 Statistical Modelling**

Statistical modelling was conducted on the variables to determine their relationship. Statistical modelling is a method that formulates mathematical models explaining the relationship amongst variables to purposely predict the values of dependent variable as arising from the given values of the independent variable. Both simple linear and multiple regression analysis performed under this section. In simple linear regression analysis, there are only two variables namely, the independent variable which causes the behaviour of the other variable known as the dependent variable. Multiple regression is undertaken when there are two or more independent variables (Kothari, 2004).

## **4.6.1 Linear Regression**

A linear regression analysis is an approach or a statistical technique that models the relationship between two or more variables using a straight line (Abrams, 2007). Through generation of an equation, regression analysis describes statistically the relationship between one or several predictor variables and the response variable (Frost, 2013). If the independent variables values are given, regression analysis equation can be

used in prediction of the values of a dependent variable (Saunders, Lewis & Thornhill, 2007). According to Pidwirny (2006), regression analysis is a type of inferential statistics. Inferential statistics are used to make inferences about data on instances whereby it is not possible to access the entire population. Results of the data collected on the sample, is used to make inferences to the whole population. Because generalizations are made on the population from which the sample was drawn, it is important to ensure that the sample has an accurate representation of the population. This is unlike descriptive statistics which simply describes what is going on in the data (Trochim, 2006).

Inference from the data is made possible by analyzing the relationship between two variables or a group of variables, analyzing the differences among variables and also by analyzing how a number of independent variables explain the variance in the dependent variable (Sekaran, 2009). Inferential statistics include the t-test, Pearson's correlation, the F-test, the analysis of variance (ANOVA), regression analysis among others (Trochim, 2006).

## **Regression Analysis on Commitment of resources**

Regression analysis was conducted on the independent variable commitment of resources to determine its relationship with the dependent variable. Assumptions of regression analysis conducted on this variable included the normality test which showed that the data was normally distributed. Another assumption on linear relationship was conducted using a scatter plot.

#### **Normality Test on Commitment of resources**

One of the assumptions of regression analysis is that the data to be used should be normally distributed (McDonald, 2014). Other assumptions as pointed out by Jason and Waters (2002), are that the relationship between the dependent and the independent variables should be linear which was tested using the scatter plots. Another of the

assumption of multiple regression is that the data should not be multicollinear, and this was established using multicollinearity test. In testing normality of the data, a histogram was fitted which indicated that the data was normally distributed and therefore suitable for regression analysis. For data to be said to be normally distributed, the histogram shape should be an approximate bell curve or a symmetrical curve. The histogram on commitment of resources in figure 4.6 fits the symmetrical curve.

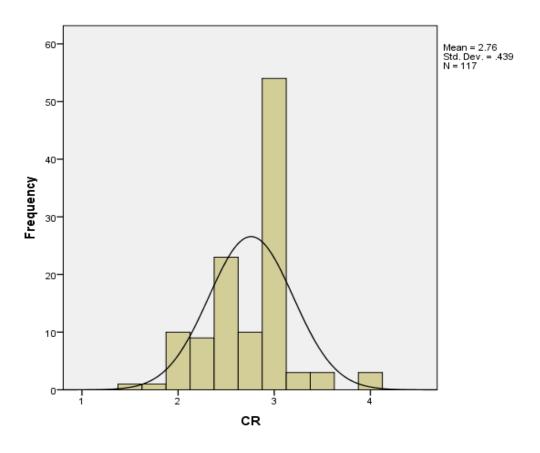


Figure 4.6: histogram on normality test on Commitment of resources

#### **Scatter Plot on Commitment of resources**

A scatter plot was further fitted to describe the associations of the independent variable commitment of resources with intrapreneurship. The results of the scatter plot in the figure 4.7 indicate that there is a positive linear relationship between the independent variable and the dependent variable, which implies that commitment of resources positively contributes to intrapreneurship in SMMEs. This led to the conclusion that commitment of resources influences intrapreneurship in SMMEs.

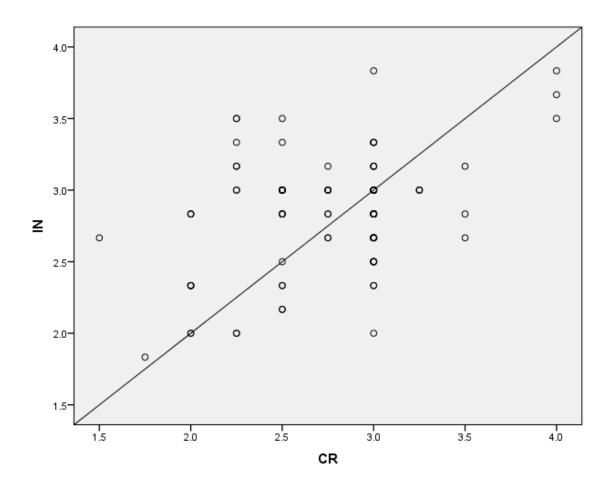


Figure 4.7: Scatter Plot on Effect of Commitment of resources on Promotion of Intrapreneurship.

# **Results of Regression Analysis on Commitment of resources**

The model on regression analysis in table 4.27 shows a positive linear relationship between commitment of resources and intrapreneurship at R=0.37, thus their association was very significant. Also with  $R^2=0.137$ , the statistical explanation implies that 13.7% of change in intrapreneurship in SMMEs can be explained by a unit change in commitment of resources. However the model did not explain 82.3% of variation in intrapreneurship, meaning that there are other factors associated with intrapreneurship which were not fitted in the model.

From ANOVA, the results of the F test (F (1,113) =17.74, p =0.000<0.05) were also significant with a p value =0.000 which is less than the standard p value of 0.05 thus reinforcing the significance of the model. These results led to the comfortable conclusion that the contribution of commitment of resources to promotion of intrapreneurship in SMMEs in Kenya is significant. It was therefore concluded that management in SMMEs need to allocate resources to areas that enhance intrapreneurship.

Further tests on the beta coefficients revealed that the coefficient for commitment of resources ( $\beta$ ) was equally significant with ( $\beta$  = 0.313, t=4.212, p=0.000< 0.05) indicating that commitment of resources significantly has a positive increase in intrapreneurship. Under objective one and hypothesis one, the study sought to establish the magnitude and the direction of the effect of commitment of resources on promotion of intrapreneurship by fitting a model Y= $\beta_0$  +  $\beta_1$ X1+ $\epsilon$ 

**Objective 1:** To determine if commitment of resources has a role on promotion of intrapreneurship in SMMEs in Kenya.

**H**<sub>1</sub>: Commitment of resources has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya

This hypothesis was tested at 5% significance level. A t-test was used to test the relationship between commitment of resources and promotion of intrapreneurship in SMMEs in Kenya. A beta coefficient in the process was computed which was found to be statistically significant. The results as indicated on table 4.27 show that the beta coefficient at  $\beta = 0.313$  is significantly different from zero, and a t-value of 4.212 which is also significantly different from zero. The P-value at 0.000 is less than the p-value of 0.05.

These results led to the acceptance of the alternative hypothesis and conclusion made that there is a statistically significant relationship between commitment of resources and promotion of intrapreneurship in SMMEs in Kenya. The null hypothesis that commitment of resources does not have significant role on promotion of intrapreneurship in SMMEs in Kenya was rejected. The model was therefore determined to be statistically fit, thus  $Y=1.986+0.313*X_1$ 

The results conform to the study by Zhao (2013) which concluded that resources both financial and no-financial resources should be allocated for intrapreneurship to thrive in an organization. The commitment of the financial resources should be to both the intrapreneur and to the areas of the entrepreneurial focus, which should be allocated enough resources for success to be attained. Apart from financial resources, another resource that the researcher identified to be of importance to intrapreneurship is time resource which managers should allow employees to dedicate and commit to the new innovations for the period necessary to have the innovations succeed.

This study however differs with the study undertaken by Nafiel, Nimran, Musadieqand Suyadi (2014) who used the corporate entrepreneurship assessment instrument and concluded that availing resources does not have a positive significant effect on intrapreneurship. The results of the study, and in comparison with the results of the other studies referred to led the researcher to suggest that management within SMMEs should commit resources to areas that out rightly promote intrapreneurship. Committing

resources to the areas studied that is research and development, upgrading or acquiring new production equipment, training of staff to upgrade their skills and marketing activities would promote intrapreneurship training in SMMEs.

Table 4.27: Linear Regression analysis model results for commitment of Resources on promotion of intrapreneurship

# **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.370	.137	.1299	.349

# **ANOVA**

M	lodel	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	2.157	1	2.157	17.740	.000
1	Residual	13.619	112	.122		
	Total	15.776	113			

# Coefficients

Model	Unstand	ardized	Standardized	T	Sig.
	Coefficients		Coefficients		
	В	Std. Error	Beta		
(Constant)	1.986	.208		9.565	.000
1 Commitment	.313	.074	.370	4.212	.000
of resources					

a) Predictors(c) Commitment of resources

# b) Dependent variable – Promotion of Intrapreneurship

# Regression Analysis on Management's Need for Achievement

In determining the relationship between management's need for achievement as an independent variable and promotion of intrapreneurship as a dependent variable, a regression analysis was performed. Regression analysis assumptions subsequently conducted under this section included normality test which established data to be normal, and a scatter plot which established the relationship of the two variables.

## Normality Test on Management's Need for Achievement

In testing normality of the data on management's need for achievement, a histogram was fitted which indicated that the data was normally distributed and therefore suitable for regression analysis. The histogram portrayed a bell or a symmetrical curve which was indicative of normally distributed data as indicated by figure 4.8.

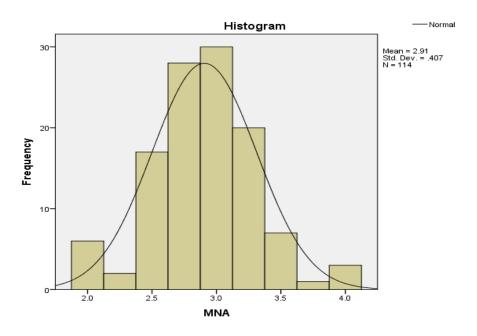


Figure 4.8: Histogram on normality test on Managements need for achievement

# Scatter Plot on Management's Need for Achievement

In testing the relationship of the independent variable management's need for achievement on the dependent variable intrapreneurship in SMMEs in Kenya a scatter plot was fitted. The results of the scatter plot in figure 4.9 indicate that there is a positive linear relationship between the independent variable and the dependent variable, thus meaning that management's need for achievement positively and significantly contributes to intrapreneurship in SMMEs.

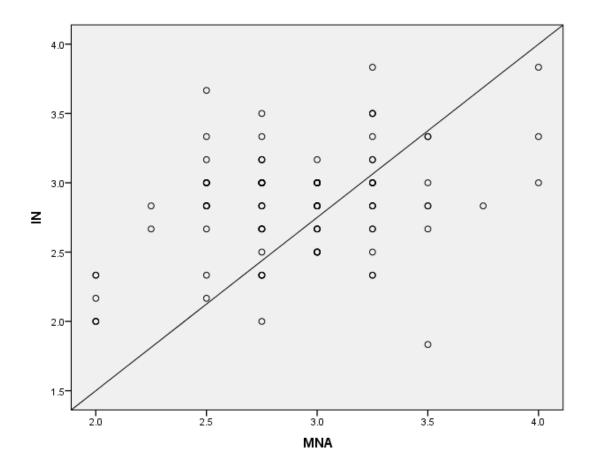


Figure 4.9: Scatter Plot on Management's Need for Achievement on Promotion of Intrapreneurship

## Results of Regression Analysis on Management's Need for Achievement

The results of the regression analysis model in table 4.28 further show that there is positive linear relationship between management's need for achievement and intrapreneurship at R=37.2, implying a significant association. With R<sup>2</sup>=0.138, statistically the implication is that 13.8% variation in intrapreneurship in SMMEs is brought about by a unit change in management's need for achievement. Further implication is that 86.2% change in intrapreneurship in SMMEs is brought about by other factors.

The F test (F (1,113)=17.96, p=0.000<0.05) as shown in the ANOVA was significant with a p value =0.000 which is less than the standard p value of 0.05 and this meant that the model was significant. These results led to the conclusion that the contribution of management's need for achievement to promotion of intrapreneurship in SMMEs in Kenya is significant, therefore for SMMEs to be entrepreneurial, management in these firms need to portray management's need for achievement tendencies.

Tests on the beta coefficient for managements need for achievement ( $\beta$ ) was equally significant with ( $\beta$  = 0.342, t=4.238, p =0.000<0.05) indicating that an increase in management's need for achievement significantly increases intrapreneurship. The study sought to establish the magnitude and direction of the effect of management need for achievement on intrapreneurship in SMMEs in Kenya under objective two and hypothesis two, by fitting the model Y=  $\beta_0$  +  $\beta_2$ X<sub>2</sub>+ $\epsilon$ .

**Objective 2:** To determine if management's need for achievement has a role on promotion of intrapreneurship in SMMEs.

**H**<sub>2</sub>: Management's need for achievement has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.

In testing this hypothesis, a t-test at 5% significance level was used to test the relationship between management's need for achievement and promotion of intrapreneurship in SMMEs in Kenya. The computation of the beta coefficient was found to be statistically significant as given by the results in table 4.28. The beta coefficient at  $\beta=0.342$  is significantly different from zero, with a t-value of 4.212 which also significantly different from zero. Also, the P value at 0.000 is less than the p-value of 0.05.

This outcome led to the acceptance of the alternative hypothesis and conclusion made that there is a statistically significant relationship between management's need for achievement and promotion of intrapreneurship in SMMEs in Kenya. The null hypothesis that management's need for achievement does not have significant role on promotion of intrapreneurship in SMMEs in Kenya was rejected. The fitted model was found to be statistically fit thus,  $Y=1.856+0.342*~X_2$ . The findings imply that the more managers/entrepreneur owners portray a high need for achievement, the more intrapreneurship will be entrenched in these firms.

These findings further support those of the study by Okhomina (2010) on owners of used car dealer firms in Germany, by establishing that they exhibited a high need for achievement thus making the firms to have a higher entrepreneurial orientation. The study compared high need for achievement with other psychological traits and found that high need for achievement had the highest mean score in determining the entrepreneurial orientation of the entrepreneurs.

These results are also in support of a study by Rishipal and Jain (2012) which pointed that entrepreneurs' need for achievement influenced their degree of risk adaptiveness. Even though their study established that entrepreneurs in SMMEs tended to portray a low need for achievement as compared to those in large enterprises, never the less high need for achievement is crucial in firms of all sizes for there to be risk adaptiveness which is a portrayal of intrapreneurship.

The outcome of the results and as supported by the reviewed studies mean that management within SMMEs need to portray a high need for achievement if intrapreneurship is to be promoted. It is necessary especially for this portrayal to be in the areas of setting challenging but achievable goals, seeking opportunities, seeking positive and reliable feedback for improvement, as well as not being risk averse but have a risk taking propensity that is calculated.

Table 4.28 Regression analysis model results for management's need for achievement on promotion of intrapreneurship.

Mode 1	R	$\mathbb{R}^2$	Adj. R <sup>2</sup>	Std. Err or
	.372	.138	.131	.347

Mode 1		Sum of Square s	D f	Mea n Squ are	F	Sig.
1	Regression	2.181	1	2.181	17.96	.000
	Residual	13.595	112	.121		
	Total	15.776	113			

$\sim$	000			
Co	effi	CI	en	ts

Mo				Unstand		Stand.	t	S
del				•				i
						Coefficie		$\mathbf{g}$
				Coefficie		nts		•
				nts				
				В	Std.	Beta		
					Erro			
					r			
1	(Constant)			1.856	.237		7.849	.000
	Management's	Need	for	.342	.081	.372	4.238	.000
	Achievement							

a) Predictors(c) Management's Need for Achievement.

# b) Dependent variable – Promotion of Intrapreneurship

## **Results of Regression Analysis on Reward System**

Under reward system as an independent variable, regression analysis was done to establish the relationship reward system and the dependent variable promotion of intrapreneurship. Tests on the assumptions of regression analysis were undertaken which included normality test which was established through a histogram, and linear relationship established through fitting a scatter plot.

## **Normality Test on Reward System**

In order to determine whether data on reward system was normally distributed so as to fit on of the conditions of regression analysis, a histogram was fitted. The histogram turned a bell shaped or a symmetrical curve which showed that data was normally distributed as shown by figure 4.10.

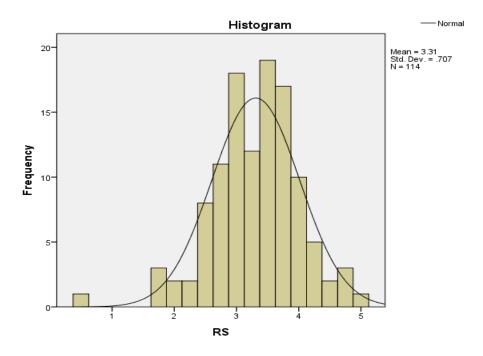


Figure 4.10: Histogram on normality test on Reward System

# **Scatter Plot on Reward System**

A scatter plot was fitted to test relationship of the independent variable reward system on the dependent variable intrapreneurship. The results of the scatter plot in figure 4.11 indicates that there is a positive linear relationship between the independent variable and the dependent variable. This implies that reward system contributes a significant variation in intrapreneurship in SMMEs, thus reinforcing its importance to SMMEs in Kenya.

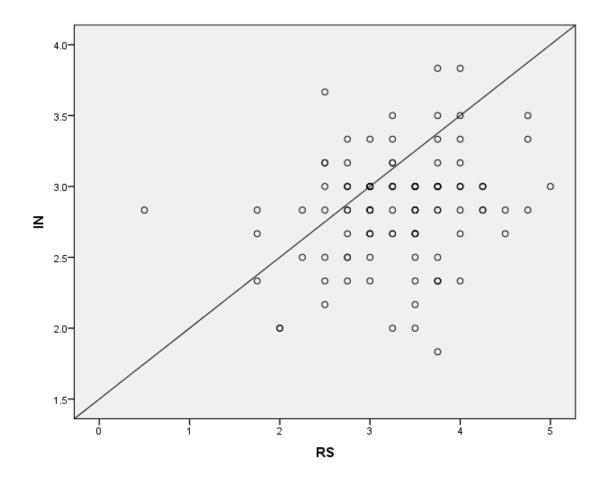


Figure 4.11: Scatter plot of Reward System on Promotion of intrapreneurship

## Results of Regression Analysis on Reward System

The results on regression analysis model on table 4.29 show a positive linear relationship between reward system and intrapreneurship at R=0.232, bringing out forth an association that is significant. Further, statistically with  $R^2=0.054$ , the model implies that 5.4% variation in intrapreneurship is brought about by a unit change in reward system. This implication leaves 94.6% of variation in intrapreneurship to be explained by other factors other than reward system.

The ANOVA results show a significant F test (F (1,113)=6.4, p=0.013<0.05), since the p value= 0.013 is less that the p value of 0.05. Since the model was found to be significant, the study concluded that the contribution of reward system to intrapreneurship in SMMEs in Kenya is significant. The implication is that, management in SMMEs in Kenya need to extend appropriate rewards to employees for promotion of intrapreneurship.

Tests on the beta coefficient for reward system ( $\beta$ ) was also significant ( $\beta$  = 0.123, t = 2.53, p = 0.013<0.05) indicating that an increase in reward system has a significant positive increase in intrapreneurship. Further, in seeking to establish the direction and magnitude of the effect of reward system on intrapreneurship in SMMEs in Kenya, objective three and hypothesis three were used by fitting the model Y=  $\beta_0$  +  $\beta_3$ X<sub>3</sub>+  $\epsilon$ .

**Objective 3:** To assess the role of reward system on promotion of intrapreneurship in SMMEs in Kenya.

**H<sub>3</sub>:** Reward system has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.

At 5% significance level, a t-test was used to test the relationship between reward system and promotion of intrapreneurship in SMMEs in Kenya. A beta coefficient was computed which was found to be statistically significant. The results on table 4.29 show

that  $\beta = 0.123$  which is statistically significant from zero, and t-value of 2.53 which is also statistically significant from zero. Further, the results of the p value at 0.013 is less than p-value of 0.05 thus returning a significant relationship.

The results led to the acceptance of the alternative hypothesis and conclusion made that there is a statistically significant positive relationship between reward system and promotion of intrapreneurship in SMMEs in Kenya. The null hypothesis that reward system does not have a role on promotion of intrapreneurship in SMMEs in Kenya was subsequently rejected. The model as fitted therefore holds, thus Y=2.443+0.123\*X<sub>3</sub>. The findings therefore imply that the more employees are rewarded for new ideas, the more intrapreneurship will be entrenched in these firms.

The results conform to the findings of Bau and Bowling (2007) in a study contacted on firms in Germany that were not above seven years old. Their conclusion was that rewards especially social incentives motivated employees to higher levels of achievement. The type of the reward system was found to match the skills of the employees to get the employees committed to the advantage of the firm.

Another study by Scheepers (2011) also established that firms should come up with a reward system that is valued by intrapreneurs if they are to be motivated to be entrepreneurial, and recommended more social incentives as opposed to financial incentives. Further, a study by (Zabouj & Antoniades, 2011) concluded that financial reward system motivates employees more but recommended that a firm should incorporate a reward system whether financial or non financial.

The results and the view by other studies reviewed bring out the fact that for SMMEs to attain higher levels of intrapreneurship, appropriate rewards that are valued by employees should be incorporated by management to motivate employees to be more entrepreneurial. The reward system should match the skills of employees, and both the

expectations of management and the intrapreneurs. This scenario would promote intrapreneurship which would give the SMMEs a competitive advantage in the market.

Table 4.29: Regression model results for reward system on promotion of intrapreneurship

	Mod	lel Summaı	<b>:y</b>		
Model	R	$\mathbb{R}^2$	Adj.R <sup>2</sup>	Std. Error	
1	.232	.054	.046	.365	

#### **ANOVA**

Model		Sum of Squares	f Df	Mean Square	F	Sig.
1	Regression	.852	1	.852	6.40	.013
	Residual	14.924	112	.133		
	Total	15.776	113			

$\sim$	000			
Co	effi	CI	en	ts

Model		Unstand.	Std. Err	Stand.	t	Si	
		Coefficients B	or	Coefficients Beta		g	
1	(Constant)	2.443	.164		14.86	.000	
	Reward	.123	.049	.232	2.53	.013	
	System						

a) Predictors(c) Reward system

# **Regression Analysis Results for Entrepreneurial Management Structure**

Regression analysis was also conducted on entrepreneurial management structure as an independent variable to establish its relationship with the dependent variable promotion of entrepreneurship. The assumptions of regression analysis performed under this

b) Dependent variable – Promotion of Intrapreneurship

section included establishing whether the data was normally distributed, and whether there was a linear relationship through fitting a scatter plot.

# Normality Test on Entrepreneurial management structure

Before the regression analysis was performed on entrepreneurial management structure, a normality test to establish the suitability of the analysis was undertaken. This as depicted by the histogram on figure 4.12 established that the data was normally distributed, as the histogram was symmetrical or bell shaped.

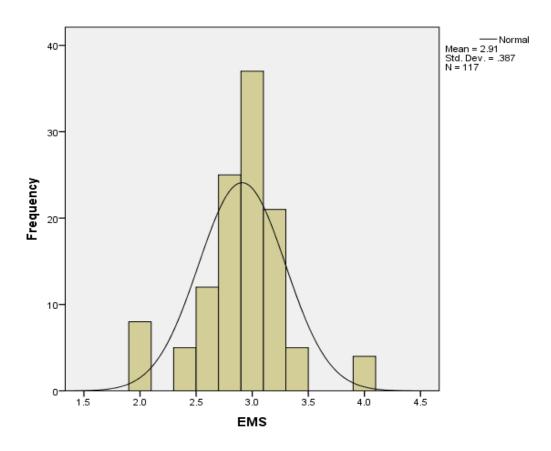


Figure 4.12: Histogram on Normality Test on Entrepreneurial management structure

# Scatter Plot on Entrepreneurial management structure

In testing the relationship between the independent variable entrepreneurial management structure on the dependent variable promotion of intrapreneurship, a scatter plot was fitted whose results as depicted in figure 4.13indicate that there is a positive linear relationship between the independent variable and the dependent variable. It was concluded that entrepreneurial management structure has a significant contribution to intrapreneurship in SMMEs in Kenya. Given the highly significant contribution to intrapreneurship, SMMEs in Kenya need supportive entrepreneurial management structures.

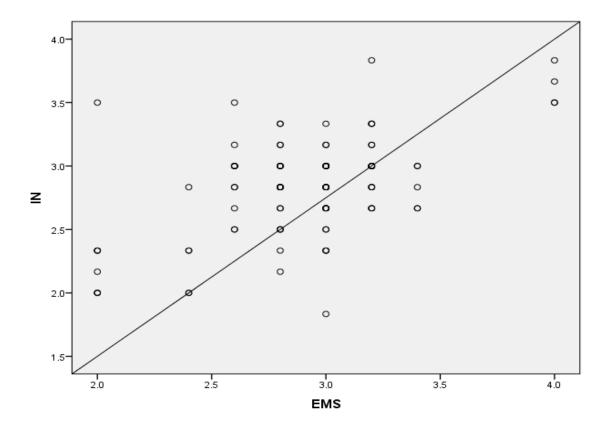


Figure 4.13: Scatter plot on entrepreneurial management structure and intrapreneurship

## Results of Regression Analysis on Entrepreneurial management structure

The results of the regression model on table 4.30 show a positive linear relationship between entrepreneurial management structure and intrapreneurship at R=0.543, making their association to be significant. With R<sup>2</sup>=0.295, statistically the implication is that an addition of an extra unit of entrepreneurial management structure would cause a variation of about 29.5% in intrapreneurship. This means that 70.5% variation in promotion of intrapreneurship is caused by other factors apart from entrepreneurial management structure.

The results of the F test (F (1,113) = 45.9, p = 0.000<0.05) from the ANOVA were significant with a p value =0.000 which is less than the standard p value of 0.05 further reinforcing the significance of the model. The study concluded that the contribution of entrepreneurial management structure to intrapreneurship in SMMEs in Kenya is significant, therefore SMMEs need to adopt proper entrepreneurial management structures for intrapreneurship to thrive.

The coefficient of entrepreneurial management structure was also significant ( $\beta$  = 0.524, t = 6.849, p < 0.000) indicating that an increase in entrepreneurial management structure has a significant positive increase in intrapreneurship in SMMEs. The magnitude and direction of the effect of entrepreneurial management structure on intrapreneurship in SMMEs in Kenya was tested under objective four and hypothesis four by fitting the model Y=  $\beta_0$  +  $\beta_4$ X<sub>4</sub>+ $\epsilon$ .

**Objective 4:** To establish if entrepreneurial management structure has a role on promotion of intrapreneurship in SMMEs in Kenya

**H**<sub>4</sub>: Entrepreneurial management structure has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.

This hypothesis was also tested at 5% significance level and a t-test done to determine the relationship between entrepreneurial management structure and promotion of intrapreneurship in SMMEs in Kenya. As shown by table 4.30 a beta coefficient was computed which returned a statistically significant result. At  $\beta = 0.524$ , and t-value= 6.849, which are both significantly different from zero, and a p-value of 0.000 which is less than the p-value of 0.05, the relationship was found to be significant.

The results therefore led to the acceptance of the alternative hypothesis with a conclusion that there is a statistically significant positive relationship between entrepreneurial management structure and promotion of intrapreneurship in SMMEs in Kenya. This scenario meant that the null hypothesis that reward system does not have a role on promotion of intrapreneurship in SMMEs in Kenya was rejected. The model as fitted holds, thus  $Y=1.319+0.524*~X_4$ . Management within SMMEs should therefore strive to put in place entrepreneurial management structures that support entrepreneurial tendencies.

The study supports the view of Burns (2011) that entrepreneurial organizations put in place flatter structures that promote horizontal communication as well as reducing tight management controls. Still, Urban (2010) stresses that an entrepreneurial firm's structure should be flexible enough so as to accommodate an environment that is continuously changing. This entrepreneurial management structure should be network-oriented, lean and non hierarchical.

The study further supports that by Shoghi and Safiepoor (2013) in their study on Iranian industrial firms, which concluded that entrepreneurial management structures were an important ingredient to a firm's entrepreneurial orientation. The study found that those firms that had strict and rigorous rules portrayed a decreased entrepreneurial orientation thus calling for firms to implement a flexible structure that promoted entrepreneurship. From the results of the current study and as stressed and supported by other reviewed scholars, it is imperative that SMMEs should put in place the entrepreneurial

management structures for promotion of intrapreneurship. These structures are accommodative of employees' entrepreneurial ideas and as well include employees to crucial decision making, which helps nurture their innovative ideas.

Table 4.30: Regression analysis model results for entrepreneurial management Structure on promotion of intrapreneurship

	Model	Summary			
Mod	R	$\mathbb{R}^2$	Adj.R <sup>2</sup>	Std.	_
el				Err	
				or	
1	.543	.295	.289	.315	

Mod		Su	Df	Mea	$\mathbf{F}$	Sig.
el		m of Sq uar		n Squ are		
		es				
1	Regression	4.657	1	4.657	45. 9	.000
	Residual	11.119	112	.099		
	Total	15.776	113			

Coeff	ïcients					
M		Unstan		Stand.	t	S
od		d.				g
el				Coeffi		•
		Coeffici	Std.	cients		
		ents	Error			
	(Constant)	1.319	.225		5.8	.00
1	(Constant)				49	0
	Entrepreneurial	.524	.077	.543	6.8	.00
	management structure				49	0

a) Predictors(c) Entrepreneurial management structure

b) Dependent variable – Promotion of Intrapreneurship

# 4.6.3 Multiple Regression Analysis

A multiple regression analysis was undertaken to determine the combined effect of the independent variables on the dependent variable. The model as shown by table4.31 shows that the relationship between entrepreneurial management (commitment of resources, managements need for achievement, reward system and entrepreneurial management structure) and promotion of intrapreneurship in SMMEs in Kenya was significant, with R=0.644 meaning a positive linear relationship.

With a R<sup>2</sup>=0.414, statistically the implication is that the predictor variables of entrepreneurial management (commitment of resources, managements need for achievement, reward system and entrepreneurial management structure) explained 41.4% variation in intrapreneurship in SMMEs in Kenya, meaning that other factors are responsible for the rest of the variation of 58.6%.

From the ANOVA, the results of the F test (F (4,109) =19.26, p=0.000 < 0.05) were significant, since p value=000 is less than p value=0.05. This meant that the model is significant. The implication is that entrepreneurial management positively contributes to intrapreneurship in SMMEs in Kenya, thus concluding that SMMEs need to entrench entrepreneurial management in their operations for intrapreneurship to be promoted.

Beta coefficients for commitment of resources (t=3.813, p=0.000< 0.05), managements need for achievement (t=2.047, p =0.043< 0.05), and entrepreneurial management structure(t=5.163, p=0.000<0.05) were significant. Reward system (t=1.237, p=0.219>0.05) was not very significant in explaining intrapreneurship activities in SMMEs. This meant that when we consider all the independent variables combined, commitment of resources, management need for achievement and entrepreneurial management structure were highly significant. Reward system on the other hand was not very significant when all the independent variables were put together. However reward system was significant when solely predicted on intrapreneurship because it

individually caused a variation of 5.4% though a weak contribution as compared to the other independent variables. As Sekaran (2009) points out, since also all the independent variables contribute to overall effect on the dependent variable, they should be retained on the model. Based on this argument, reward system was retained.

Given that intrapreneurship promotes a firm's performance (Mokaya,2013), the results of the study differ with those of the study undertaken byKuhn, Sassmannshausen, and Zollin (2010) which established that entrepreneurial management does not influence firm performance but recommended that since the sample used for the study was small, further research should be undertaken using a lager sample. However the study corresponds to that of Sijde, Veenker and During (2013) which was conducted on Dutch firms of different sizes which concluded that the view and the behaviour of management is important for championing intrapreneurship so that it can thrive in firms.

This type of managerial behaviour is especially needed for intrapreneurship propagation as well as helping remove obstacles that hinder entrepreneurial behaviour in the firm. A further research by Nafie, Nimran, Musadieq & Suyadi (2014) also confirms the results of this study that entrepreneurial management is important for intrapreneurship. Their study established that management that is supportive through for example provision of resources increases the implementation of intrapreneurship in firms.

From the results of the study, and as supported by other scholars, management within SMMEs would be advised to entrench and practice entrepreneurial management especially in the areas of entrepreneurial management structure, cultivate a high need for achievement and commit resources to the areas that promote intrapreneurship. Further advice to the management would be to come up with a reward system that is accepted and appreciated by employees so that they are encouraged to come up with innovative and entrepreneurial ideas for promotion of intrapreneurship.

Table 4.31: Multiple regression model results for entrepreneurial management on promotion of intrapreneurship

	Model	Summary				
Mode	R I	$\mathbb{R}^2$	Adj.R <sup>2</sup>	Std.		
l				Error		
	.644	.414	.393	.291		
ANOVA						
Model		Sum	Df	Mean	F	Sig.
		of		Square		
		Squar				
		es				
	Regressio	6.534	4	1.633	19.2	.000
	n				6	
	Residual	9.243	109	.085		
	Total	15.776	113			

		Coef	fficients			
Model		Unstand.		Stand.	t	Sig
		Coefficients		Coefficient s		•
		В	Std. Erro	Beta		
			r			
	(Consta nt)	.409	.287		1.42 7	.156
	MNA	.151	.074	.164	2.04 7	.043
	CA	.241	.063	.285	3.81	.000
	RS	.050	.041	.095	1.23 7	.219
	AMS	.401	.078	.416	5.16 3	.000

a) Predictors: Management's Need for Achievement, Commitment of resources,

Reward System, Entrepreneurial management structure.

b) Dependent variable – Promotion of intrapreneurship.

# **4.7 Optimal Model**

The research findings gave rise to the following optimal model.

 $Y = 0.409 + 0.401X_1 + 0.241X_2 + 0.151X_3 + 0.050X_4 + e$ 

Where,

Y= Intrapreneurship

X<sub>1</sub>= Entrepreneurial Management Structure

X<sub>2</sub>= Commitment of Resources

X<sub>3</sub>= Management's Need for Achievement

X<sub>4</sub>= Reward System

e= Error Term

## **CHAPTER FIVE**

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter gives a summary of the study findings as per the study objectives, hypotheses tested and the conceptual framework. The analysis, discussion of the results based on the analysis were done and this chapter summarizes all these. Further, the chapter makes conclusions based on the results of the analysis. Recommendations based on the study on the role of entrepreneurial management on promotion of intrapreneurship in SMMEs are made in the chapter. Areas for further study to guide subsequent research are also made.

# **5.2 Summary of Study Findings**

The study sought to find out the role of entrepreneurial management on promotion of intrapreneurship in SMMEs in Kenya. The independent variables of the study were commitment of resources, management's need for achievement, reward system and entrepreneurial management structure while the independent variable was promotion of intrapreneurship. Review of the literature showed that SMMEs belong to the SME sector which contributes immensely to the economic growth of a country and especially the developing countries like Kenya. But in spite of their importance to the economy, they are faced with a number of challenges which could partly be addressed by intrapreneurship.

# **5.2.1** Commitment of Resources to Promotion of Intrapreneurship in SMMEs

Descriptive data analysis was undertaken on each construct under commitment of resources before further types of analysis were undertaken. The study established that SMMEs committed resources to undertaking research and development, upgrading production equipment, training employees and engaging in marketing activities which promoted intrapreneurship in SMMEs in Kenya. Further tests were done using linear regression analysis on the relationship between commitment of and promotion of intrapreneurship in SMMEs in Kenya, which showed that there was a strong association.

A scatter plot diagram was fitted to further determine the relationship between commitment of resources and promotion of intrapreneurship in SMMEs. The results showed a linear positive relationship between commitment of resources and promotion of SMMEs in Kenya. Thus the implication is that commitment of resources positively influences intrapreneurship in SMMEs. Based on the statistical results, the researcher concluded that if SMMEs commit resources to areas such as undertaking research and development, upgrading production equipment, training employees and engaging in marketing activities, intrapreneurship will be promoted thus making them entrepreneurial.

Regression analysis was also done to test the alternative hypothesis that there is a significant relationship between commitment of resources and promotion of intrapreneurship in SMMEs in Kenya. The results showed that commitment of resources highly contributed to intrapreneurship in SMMEs in Kenya. The outcome led to the acceptance of the alternative hypothesis and to the rejection of the null hypothesis that commitment of resources does not have significant role on promotion of intrapreneurship in SMMEs in Kenya.

# 5.2.2 Management's Need for Achievement on Promotion of Intrapreneurship In SMMEs

All the constructs under management's need for achievement were subjected to descriptive data analysis. It was found that managers or owner managers within SMMEs had a high need for achievement as they set achievable goals, they were opportunity

seekers, they sought feedback for improvement and portrayed a risk-taking responsibility, which are some of the characteristics portrayed by individuals who have a high need for achievement.

The results of the descriptive analysis brought out management's need for achievement as having a strong positive role on promotion of intrapreneurship in SMMEs in Kenya. Further tests using regression analysis were undertaken which returned a strong positive relationship between management's need for achievement and intrapreneurship in SMMEs thus the results were found to be statistically highly significant. Fitting a scatter plot was used to further explain the relationship between management's need for achievement and intrapreneurship in SMMEs.

The results showed a strong linear relationship between management' need for achievement and intrapreneurship. The implication therefore is that managements need for achievement positively influences intrapreneurship in SMMEs in Kenya. The statistical results led the researcher to conclude that if management in SMMEs portrayed the management's need for achievement characteristics such as setting goals, being opportunity seekers, seeking feedback for improvement and portraying a risk taking responsibility, intrapreneurship would be promoted in SMMEs in Kenya.

Regression analysis was further used to test the alternative hypothesis that management's need for achievement has a significant role on promotion of intrapreneurship in SMMEs in Kenya. The result was that management' need for achievement highly contributed to intrapreneurship which led to the acceptance of the alternative hypothesis and to the rejection of the null hypothesis that management's need for achievement does not have a significant role on promotion of intrapreneurship in SMMEs in Kenya.

# 5.2.3 Reward System on Promotion of Intrapreneurship in SMMEs

Further the study had sought to establish the role of reward system on promotion of intrapreneurship in SMMEs under four constructs which were as well subjected to descriptive data analysis. It was found that the managers or owner managers valued promotion, monetary reward, shareholding and grants for employee's individual projects within the firms, as some of the rewards offered to the employees. The scenario promoted intrapreneurship in SMMEs.

The independent variable reward system on promotion of intrapreneurship was subjected regression analysis to establish the magnitude and the direction of the relationship. The relationship was found to be a weak but statistically positive relationship. When a scatter plot was used to further establish the relationship between reward system and promotion of intrapreneurship in SMMEs, the result was that there was a positive linear relationship.

This implies that reward system plays a positive role on promotion of intrapreneurship in SMMEs in Kenya. Based on the statistical results, the study concluded that if management in SMMEs rewarded employees for their performance and idea contribution, then intrapreneurship would be promoted in the firms. Management in SMMEs should therefore strive to entrench a form of reward system in their firms.

Still regression analysis was used to test the alternative hypothesis that reward system has a significant role on promotion of intrapreneurship in SMMEs in Kenya. The results returned a positive significant contribution of reward system to promotion of intrapreneurship. The statistical results led to the acceptance of the alternative hypothesis and to the rejection of the null hypothesis that reward system does not have a significant role on promotion of intrapreneurship in SMMEs in Kenya.

# **5.2.4** Entrepreneurial management structure on Promotion of Intrapreneurship in SMMEs

Entrepreneurial management structure was the fourth independent variable that was as well considered under the four constructs for promotion of intrapreneurship in SMMEs. After subjecting each of the constructs to descriptive data analysis, flexible entrepreneurial management structure was found to be weak in the SMMES. Flat levels of management, open communication channels and inclusive decision making were found to be embedded in the SMMEs, thus being promoters of intrapreneurship in the firms.

Entrepreneurial management structure and its role on promotion of intrapreneurship in SMMEs in Kenya, was subjected to further tests using regression analysis to bring out the relationship between the two variables. The regression analysis established the magnitude and the direction of the effect of entrepreneurial management structure on promotion of intrapreneurship in SMMEs in Kenya. The results returned a statistically high significant positive relationship between entrepreneurial management structure and promotion of intrapreneurship.

In addition, a scatter plot was fitted to still further determine the relationship between entrepreneurial management structure and promotion of intrapreneurship. The results showed a strong linear relationship thus implying that putting in place entrepreneurial management structure positively influences promotion of intrapreneurship in SMMEs in Kenya. The statistical results led the researcher to conclude that if management in SMMEs put in place entrepreneurial management structures, intrapreneurship in SMMEs would be enhanced.

The alternative hypothesis that entrepreneurial management structure has a positive significant role on promotion of intrapreneurship in SMMEs in Kenya was tested using regression analysis. The results showed that entrepreneurial management structure had a

high contribution to SMMEs which led to the acceptance of the alternative hypothesis and to the rejection of the null hypothesis that entrepreneurial management structure does not have a positive significant role on promotion of intrapreneurship in SMMEs in Kenya.

# 5.2.5 Promotion of Intrapreneurship in SMMEs in Kenya

Descriptive analysis revealed that there was promotion of intrapreneurship in SMMEs in Kenya as a result of the four combined independent variables under entrepreneurial management. The firms portrayed innovativeness, pro-activeness and competitive aggressiveness thus implying presence of intrapreneurship. A multiple regression analysis was undertaken to test the magnitude and the direction of effect of entrepreneurial management on promotion of intrapreneurship in SMMEs in Kenya. This turned a positive linear relationship.

The regression analysis on the overall model indicated that the relationship between entrepreneurial management under commitment of resources, management's need for achievement, reward system and entrepreneurial management structure in intrapreneurship in SMMEs in Kenya had a high significant contribution. The independent variables were therefore found to contribute and explain a significant variation in promotion of intrapreneurship in the SMMEs in Kenya. However, reward system when combined with the other three independent variables under entrepreneurial management was found to be insignificant. Reward system was however retained in the revised model since it was part of the overall entrepreneurial management's contribution to promotion of intrapreneurship in SMMEs. These results led to the conclusion that entrepreneurial management was important for SMMEs to maintain the entrepreneurial spirit.

Management within SMMEs in Kenya would portray entrepreneurial management for promotion of intrapreneurship by committing resources to areas crucial to promoting intrapreneurship, cultivating a high need for achievement, and putting in place entrepreneurial management structures appropriate for intrapreneurship. A Reward system that is accepted by employees should also be entrenched in the SMMEs given its importance as supported by past studies. The implication is that SMMEs seeking to be entrepreneurial would benefit immensely from engaging these variables in their journey to promoting intrapreneurship.

## 5.2.6 Contribution of the Study to Theory

The resource based theory stresses the importance of resources to organizations. It is not only the availability of these resources but also the utilization of these resources that is of benefit to firms. The study brought out the need for management to commit resources to areas that enhance performance in pursuit of attaining the organizational goals.

The McClelland's high need for achievement theory was used in this study to anchor management's high need for achievement in pursuit of promotion of intrapreneurship. The result was that managers need especially to set goals, seek new opportunities, seek feedback so that they can improve their operations, as well as being risk takers. The risk should be moderate to provide enough challenge and not too high for it to be discouraging. This scenario validates the need for achievement theory.

Herzberg's motivation theory was used in this study to explain rewards extended to the employees for intrapreneurship to thrive. The study established that management in SMMEs value rewards, therefore for firms to promote intrapreneurship rewards should be programmed for motivation. The study therefore supports the theory. This theory goes hand in hand in with the expectancy theory of motivation, which in a nutshell states that employees expect compensation for hard work, and that the compensation

should match the performance. The study brought out the importance of rewarding employees for ideas concerning intrapreneurship.

Structural contingency theory was used to support and explain entrepreneurial management structure. The theory explained that entrepreneurial management structure should be adaptive to the environment in which the organization is operating under. The study clearly brought out this scenario and recommended that entrepreneurial management structure should be contingent on the situation which the firm is in. Of particular, for intrapreneurship to thrive, management should employ flatter structures which enhance employees' participation.

# 5.2.7 Contribution of the Study to Methodology

The study used both simple and multiple linear regression model which showed a linear relationship between the dependent and the independent variables. Some assumptions of linear regression are that the data under observation portrays normality distribution, is not multicollinear and that the dependent and the independent variables have a linear relationship. The study established these therefore contributing to entrenchment of the methodology.

## **5.2.8** Contribution of the Study to the Existing Knowledge

The study focussed on the role of entrepreneurial management on promotion of intrapreneurship in SMMEs in Kenya. The outcome was that entrepreneurial management has a significant influence on promotion of intrapreneurship in the SMMEs. Entrepreneur owners or managers in these firms should therefore practise entrepreneurial management for entrepreneurial enhancement. Further studies can also be undertaken linking entrepreneurial management to other sectors.

#### **5.3 Conclusion**

The study made several conclusions based on the research findings. Data analysis was organized as per the research objectives and hypotheses which were statistically tested. Under the research objectives, the role of entrepreneurial management on promotion of intrapreneurship in SMMEs in Kenya was established, under the independent variables commitment of resources, management's need for achievement, reward system and entrepreneurial management structure.

The first objective was to determine the role of commitment of resources on promotion of intrapreneurship in SMMEs in Kenya. The study concluded that commitment of resources was statistically significant to the promotion of intrapreneurship in SMMEs in Kenya. This commitment was in the areas of undertaking research and development, upgrading production equipment, training employees and engaging in marketing activities. It was therefore concluded that management in SMMEs should commit resources to these areas to promote intrapreneurship.

The second objective was to examine the role of management's need for achievement on promotion of intrapreneurship in SMMEs in Kenya. The results of the study statistically concluded that management's need for achievement positively influenced intrapreneurship in SMMEs. Management's need for achievement in areas of setting goals, opportunity seeking, seeking feedback for improvement and having a risk taking propensity promotes intrapreneurship in SMMEs. It was therefore concluded that for management in SMMEs in Kenya to should portray need for achievement to so as to enhance intrapreneurship.

The third objective was to assess the role of reward system on promotion of intrapreneurship in SMMEs in Kenya. The influence of reward system on intrapreneurship in SMMEs in Kenya was statistically concluded to be significantly positive. This was in areas of promotion, monetary reward, shareholding and grants for

employees' individual projects within the firm. It was therefore concluded that for SMMEs to be entrepreneurial and promote intrapreneurship, management should reward employees for improved performance and contribution of new ideas.

The fourth objective was to establish the role of entrepreneurial management structure on promotion of intrapreneurship in SMMEs in Kenya. Statistically, the study concluded that entrepreneurial management structure significantly influenced promotion of intrapreneurship in SMMEs in Kenya. The areas looked at are flat levels of management, open communication channels, flexible management structure and inclusive decision making.

Descriptive statistics however showed that SMMEs did not fully entrench flat levels of management but were neutral. Flexible management structure was also not strongly entrenched as a promoter of intrapreneurship in SMMEs in Kenya. Open communication channels and inclusive decision making on the other hand were found to be strong promoters of intrapreneurship in SMMEs in Kenya. The conclusion was that SMMEs in Kenya should put in place favourable entrepreneurial management structures especially in the areas of management levels to make them flat, open communication channels and include employees in decision making so that intrapreneurship can be promoted, and at the same time strive to be flexible enough to allow employees' initiatives, which support intrapreneurship.

It was therefore concluded that entrepreneurial management under the independent variables namely commitment of resources, management's need for achievement and entrepreneurial management structure significantly promoted intrapreneurship in SMMEs in Kenya. The fourth independent variable, reward system should be strengthened by providing the appropriate rewards acceptable to the employees. Management in the SMMEs should therefore practice entrepreneurial management as opposed to administrative management, for promotion of intrapreneurship.

## **5.4 Recommendation**

Based on the results of the study as per the objectives and hypotheses, recommendations are made to the managers/owner managers of the SMMEs that they should practice more of entrepreneurial management to enhance intrapreneurship in the SMMEs. They should commit resources to the areas of undertaking research and development, upgrading production equipment, training of employees and engaging in marketing activities for promotion of intrapreneurship. New production equipment is essential in enhancing innovativeness of the firms especially in production of new and improved products that are competitive in the global market.

Managers and owner managers of SMMEs should also portray a high need for achievement which is a motivator for high performance. This is through setting achievable goals that are not discouraging. The high need for achievement also ensures that managers/owner managers seek new opportunities, seek feedback for improvement and have a propensity for risk taking which are all essential for promotion of intrapreneurship.

It is also important that managers/owner managers in SMMEs employ reward systems which motivate employees to perform better and be entrepreneurial within the firm. Apart from financial rewards, other rewards which employees value should be incorporated for example promotion and shareholding. Motivated employees come up with new ideas which promote intrapreneurship in the SMMEs.

The way management constitutes its structure is crucial in encouraging intrapreneurship in SMMEs. An entrepreneurial management structure that is flat, organic, not complex and controls that are not too tight is a good promoter of intrapreneurship as it gives employees inclusion in decision making and flexibility to explore new ideas. Managers or entrepreneur manager owners should therefore engage this type of entrepreneurial management structure so as to experience intrapreneurship in their firms.

SMMEs are important to the economy of Kenya as they affect the economic growth through the gross domestic product. Their value addition is a crucial factor in marketing of their products both locally and internationally, which helps in maximization of their earnings. They are also part of the larger SME sector which is deemed to be the engine of economic growth especially in developing countries, and for provision of employment. Intrapreneurship which can be promoted by entrepreneurial management can enhance the SMMEs performance, out of this realization, as a policy the Government of Kenya should include entrepreneurial management as part of the training that is offered to entrepreneur owners in this sector, as well as the nascent entrepreneurs who aspire to be future entrepreneurs. This can be achieved through inculcation of entrepreneurial management into the entrepreneurship education offered in colleges and universities.

#### **5.5** Areas for Further Research

The study looked at the role of entrepreneurial management in promotion of intrapreneurship in SMMEs in Kenya, under independent variables commitment of resources, management's need for achievement, reward system and entrepreneurial management structure. Given the crucial importance of the SMMEs to the growth of the economy of Kenya, more areas are open for further research which will lead to the strengthening of the sector.

The SME sector in general is faced with a very high mortality rate which diminishes the productivity and the attractiveness of the sector. Further research can therefore be on how entrepreneurial management can lead to sustainability of SMMEs to maturity and beyond. The research did not use a moderator variable and further research can be undertaken on including a moderating variable to the role of entrepreneurial management on promotion of intrapreneurship. The role of entrepreneurial management on promotion of intrapreneurship can be studied on other SME sectors as well. Other constructs under entrepreneurial management can be studied as well.

The study directly linked entrepreneurial management to intrapreneurship. Further study can be undertaken introducing a moderating variable so as to check the strength of the relationship between the independent and the dependent variable. The research findings showed that entrepreneurial management accounted for only 41.4% of promotion of intrapreneurship in SMMEs in Kenya. Studies on other variables that promote intrapreneurship in SMMEs in Kenya can therefore be taken.

## **REFERENCES**

- Abrams, D. R. (2007). *Introduction to Regression*. Princeton university Library,

  Data and Statistical Services. Retrieved from http://www.data@princeton.edu.
- Achakul, C. & Yolles, M. (2013).Intrinsic and Extrinsic Motivation in Personality:

  Assessing Knowledge Profiling and the Work Preference Inventory in a

  Thai Population. *Journal of organizational transformation & social*change, 10(3), 196–217
- Aktan, B. & Bulut, C. (2008). Financial Performance Impacts of Corporate Entrepreneurship In Emerging Markets: A case of Turkey. *European Journal of Economics, Finance and Administrative Studies*. 12 (2008)
- Aguinis, H. & Kraiger, K. (2009). Benefits of Training and Development for Individuals and Teams, Organizations, and Society. The *Annual Review of Psychology*, 60, 451–74
- Amar, A. D. (2004) "Motivating knowledge workers to innovate: a model integrating motivation dynamics and antecedents". *European Journal of Innovation Management*, 7 (2), 89 100.
- Antoncic, J. A. & Antoncic, B. (2011). Employee Satisfaction, Intrapreneurship and Firm Growth: A Model. *Industrial Management and Data Systems*, *3*(4), 589 607
- Argawal, R. & Helfat, C. E. (2009).Strategic Renewal of Organizations.

  Organization Science, 20 (2), 281–293
- Armstrong, M. (2007). *Employee Reward Management and Practice*, (2<sup>nd</sup> Ed). London and Philadelphia: Kogan Page Limited

- Azami, S. (2013). Intrapreneurship-"An Exigent Employment" *International Journal of Scientific & Technology Research*, 2(4), 194-198.
- Banerjee, A. & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal*, 19(1), 60–65.
- Bau, F. & Dowling, M. (2007). Incentive Systems: An Empirical Study of Reward and Incentive systems in German entrepreneurial firms. SBR, 59, 160-175.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Beck, T., Demirguc-Kunt, A. & Levine, R. (2005). *SMEs, Growth, and Poverty:*Cross-Country Evidence. Geneva: World bank
- Berisha, G. & Pula, J. S. (2015). Defining Small and Medium Enterprises: a critical review. *Academic Journal of Business, Administration, Law and Social Sciences*, 1(1), 17-28.
- Beyene, A. (2002). Enhancing the Competitiveness and Productivity of Small and Medium Scale Enterprises (SMEs) in Africa: An Analysis of Differential Roles of National Governments Through Improved Support Services. *Africa Development*, 27(3), 130–156.
- Boone, L. E. & Kurtz, D. L. (2015). *Contemporary Business*, (16<sup>th</sup>Ed). John Wiley & Sons, Inc. New York.
- Botha, M. & Nyanjom, M. D. O. (2011). Corporate entrepreneurship Orientation and the Pursuit of Innovating Opportunities in Botswana. *Acta Commercii* 2011, PP 30-44.

- Bowen, R. M (2012). Research and Development, Innovation and the Science and Engineering Workforce. USA: The National Science Board.
- Bridoux, F (n.d). A resource-based approach to performance and competition: An Overview of the Connections between Resources and Competition.

  Retrieved fromhttps://www.uclouvain.be/cps/ucl/doc/iag
- Bwisa, (2010). Towards the Improvement of Entrepreneurship Education in Africa.

  Conference Proceedings of the JKUAT Scientific, Technological and Innovation Nairobi, Kenya.
- Burns, P. (2011). *Entrepreneurship and Small Business: Start-Up, Growth and Maturity*, 3<sup>rd</sup> Ed., New York, USA: Paulgrave Macmillan.
- Casson, M., Yeung, B., Basu, A. & Wadeson, N. (2006). The Oxford Handbook of Entrepreneurship. Oxford University Press, Inc. New York, United States.
- Cargan, L. (2007). *Doing Social Research*. Rowman & Littlefield Publishers Inc. Maryland, USA.
- Chang, S. J., Witteloostuijn, A. &Eden, L. (2010). Common Method Variance in International Business Research. *Journal of International Business Studies*, 41, 178–184
- Chapman, A. (2009). *David C MCclelland's Motivational Needs Theory*. Retried from http://www.businessballs.com > leadership/management.
- Chell, E. & Ozkan, M. K. (2014). *Handbook of Research on Small Business and Entrepreneurship*. Cheltenham, UK: Edward Elgar Publishing Ltd.

- Cherry, K. (2015). *Introduction to Research Methods. Theory and Hypothesis*. Retrieved from http://www.psychology.about.com.
- Cieslinska, K. (2007). *The Basic Roles of Manager in Business Organization*. Retrieved from http://www.jard.edu.pl.
- CIMA, (2010). *The Global Manufacturing Sector: Current Issues*. Retrieved from http://www.cimaglobal.com/Documents
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research Methods in Education*, (6<sup>th</sup> Ed). Routledge Taylor & Francis Group, London and New York.
- Collins, C. J., Hanges, P. J. & Locke, E. A. (2004). The Relationship of Achievement Motivation to Entrepreneurial Behavior: A Meta-Analysis. *Human Performance*, 17: (1), 95-117,
- Cook, R., Campbell, D. & Kelly, C. (2012). Survival Rates of New Firms: An Exploratory Study. *Small Business Institute Journal* 8(2), 35-42
- Covin, J. G. & Miles, M.P. (1999). Corporate Entrepreneurship and the Pursuit of Competitive Advantage. *Entrepreneurship: Theory and Practice*, 23(4), 47-63.
- Covin, J. G. & Slevin, D.P. (1991). A Conceptual Model of Entrepreneurship as Firm Behavior. *Entrepreneurship: Theory and Practice*, 16 (1), 7-25.
- Dess, G. D., Lumpkin, G.T. & McGee, J.E. (1999). Linking corporate entrepreneurship to strategy, structure and process: suggested research directions. *Entrepreneurship: Theory and Practice*, 23(3), 85-102.
- Dermer, J. (2001). The Interrelationship of Intrinsic and Extrinsic Motivation.

  Academy of Management Journal.

- Diefenbach, F. B. (2011). Entrepreneurship in the Public Sector: When Middle Managers Create Public Value, 1<sup>st</sup> Edition. Gabler Verlag, Germany.
- Dizgah, M. R., Gilaninia, S., Alipour, H. R. & Asgari, A. (2011). High Performance Human Resource and Corporate Entrepreneurship: the Mediating Role of Organizations Citizenship Behavior and Procedure Justice. *Australian Journal of Basic and Applied Sciences*, *5*(3), 492-499.
- Donaldison, L. (2013). *Structural Contingency Theory/Information Processing Theory*. Retrieved from http://www.oxfordbibliographies.com/view.
- Donaldson, L. (2005). Studying Organization: Theory and Method. "The Normal Science of Structural Contingency Theory". Sage Publications Ltd, London
- Drew, W. & Rosenthal, R. (2003). Quantifying construct validity: Two simple measures. *Journal of Personality and Social Psychology* 84(3), 608-618.
- Drost, E. (2011). Validity and Reliability in Social Science Research. Education Research and Perspectives, Vol.38, No.
- Duarte, N. (2011). Innovation, Risk and Proactivity: Are Firms Following These Strategies? WSEAS Transactions on Business and Economics, 8(3),110-1200.
- Edinburg Group, (2014). *Growing Global Economy Through SMEs*. Retrieved from http://www.edinburgh-group.org .
- Elango, B. (2003) Does Excess Resources Influence Entry Mode Decisions of Firms: A Resource Imbalance Perspective. *Journal of Transnational Management Development*, 8(3), 47-69.

- Elasrag, H. (2013). The Role of Small and Medium-Sized Enterprises in the Industrial Development of Egypt. Ministry of Industry & Foreign Trade, Arab Republic of Egypt.
- Elahi, M & Dehdashti, M. (2011). Classification of Researches and Evolving a Consolidating Typology of Management Studies. Annual Conference on Innovations in Business & Management London, UK, 2011
- European Commission, (2006). Community Framework for State Aid for Research and Development and Innovation. *Official Journal of the European Union*, (2006/C 323/01).
- Ezennaya, N. P. (2011). Employee Participation in Decision Making and its Impact on Productivity: An Appraisal of Government Printing Press and Two Other Private Publishing Firms in Enugu. Retrieved from http://www.unn.edu.ng/publications/file.
- Fayolle, A. (2007). Contextual Perspectives. Handbook of Research in Entrepreneurship Education, Volume 2., Inc. Northampton, Massachusetts, USA: Edward Elgar Publishing.
- Finch, K. Hansen, C. & Alexander, K. (2010). *Internal communication is no Rocket Science: A Manager's Guide to Communicating with Employees*. Crown, Nova Scotia. Retrieved from http://www.novascotia.ca/cns/pubs/ItsNotRocketScience
- Fini, R., Ginmaldi, R., Marzochi, G. L., & Sobrero, M. (2012). The determinants of corporate entrepreneurship intention within small and newly established firms. Baylor University.

- Fjose, S., Grünfeld, L. A. & Green, C. (2010). SMEs and growth in Sub-Saharan Africa: Identifying SME roles and obstacles to SME growth. *MENON Business Economics, MENON-publication no. 14*
- Fogleman, S. L. & McCorkle, D. (2009). *Human Resource Management: Employee Compensation Guide*. Agrilife Extension, Texas A&M System.
- Frost, J. (2016). *Understanding t-Tests: t-values and t-distributions*. Retrieved from http://blog.minitab.com/blog/adventures-in-statistics/understanding-t-tests-t-values
- Frost, J. (2013). *How to Interpret Regression Analysis Results: P-values and Coefficients*. Retrieved from http://www.blog.minitab.com/.../how-to-interpret-regression-analysis-results-p-value.
- Gathogo, G. M. (2013). An analysis of factors affecting the performance of small and medium enterprises in the manufacturing sector in Kenya (Case of selected firms in Thika Municipality). Kenyatta University Repository
- Gautam, V. & Verma, V. (1997). Corporate Entrepreneurship: Changing Perspectives. *Journal of Entrepreneurship*, 6, 233
- Gibson, R. (2013). *Strategic Renewal in the Business Model*. Retrieved from http://www.innovationexcellence.com
- Gottschalg, O. & Zollo, M. (2007). Interest Alignment and Competitive Advantage.

  \*Academy of Management Review 32(2), 418–431
- Guitard, P. H. (2007). *SME Trade Finance- Review of Facilities Available in Kenya*. Financial Sector Deepening (FSD) Kenya.

- Gumbo, M. T. (2014). An Action Research Pilot Study on the Integration of Indigenous Technology in Technology Education. *Mediterranean Journal of Social Sciences*, 5 (10). MCSER Publishing, Rome-Italy
- Gupta, S. K. (2012). The relevance of confidence interval and *P*-value in inferential statistics. *Indian Journal of Pharmacology*. *44*(1), 143–144
- Gürbüz, G. & Aykol, S. (2009).Entrepreneurial Management, Entrepreneurial Orientation And Turkish Small Firm Growth. *Management Research News*, 32(4), 321 336
- Hayton, J. C. & Kelley, D. J. (2006). A Competency-Based Framework for Promoting Corporate Entrepreneurship. *Human Resource Management Fall*, 45(3), 407–427. Wiley Periodicals, Inc.
- Hawkins, R. & Davis, C.H. (2012). Innovation and Experience Goods: A Critical Appraisal of a Missing Dimension in Innovation Theory. *Prometheus: Critical Studies in Innovation*. *30*(3), 2012.
- Hersey, F. F., Blanchard, V. & Yetton, (2014). *The Influence of Constraints on Organizations*. Value based management.net.
- Hisrich, R. D., Peters, M. P. & Shepherd, D. A. (2010). *Entrepreneurship*(8<sup>th</sup> Ed). McGraw-Hill/Irwin, London, United Kingdom.
- Hong, T. T. & Waheed, A. (2011). Herzberg's Motivation-Hygiene Theory and Job Satisfaction in the Malaysian Retail sector: The Mediating Effect of Love of Money. *Asian Academy of Management Journal*, 16(1), 73–94.
- Holmes, N. Carvalho, G. & Powers, M. (2010). Reward Systems & Incentives.

  Human Resources & Labor Management August 2<sup>nd</sup>, 2010

- Hornsby, J.S., Kuratko, D.F. & Montagno, R.V. (1999). Perception of Internal Factors for Corporate Entrepreneurship: A Comparison of Canadian and US managers. *Entrepreneurship: Theory & Practice*, 24(2), 9-24.
- Hortoványi, L. (2012). *Entrepreneurial Management*. AULA KiadóKft, Corvinus University of Budapest, Hungary.
- Howard, L. W. & Dougherty, T. W. (2004). Compensation & Benefits Review:

  \*Alternative Reward Strategies and Employee Reactions.\* Sage

  \*Publications. Retrieved from http://cbr.sagepub.com/content/36/1/41
- IFAC, (2010). The Role of Small and Medium Practices in Providing Business Support to Small-and Medium-Sized Enterprises. Information Paper April 2010, New York, USA.
- ILO, (2007). Assessing the Enabling Environment for Women in Growth Enterprises.

  An AfDB/ILO Integrated Framework Assessment Guide. ILO Geneva.
- Irawanto, D. W. (2015). Employee Participation in Decision-Making: Evidence From a State Owned Enterprise in Indonesia. *Management*, 20(1), 159-172
- Islam, J & Hu, H. (2012). A Review of Literature on Contingency Theory in Managerial Accounting. *African Journal of Business Management*.6(15), 5159-5164.
- Jackal, M. L. (2010). *Corporate Entrepreneurship*.Institut Pro Technologicks, Prague. Retrieved from Kpsr.rse.cz
- Jakobsen, T. G. (2013). *Theory of Science- What is Positivism? Popular Social Science: Bridging the Gap.* Retrieved fromhttp://www.popularsocialscience.com.

- Jong, J.P.J., Parker. S. K., Wennekers, S. &Wu. C. (2011). Corporate

  Entrepreneurship at the Individual Level: Measurement and

  Determinants. Scientific Analysis of Entrepreneurship and SMEs. EIM

  Research Reports, Netherlands. Retrieved from http://www.entrepreneurship-sme.eu.
- Joshi, H. (2012). Multicollinearity Diagnostics in Statistical Modeling and Remedies to Deal With it Using SAS. Retrieved from http://www.cytel.com.
- Joy, C. (2014). *Descriptive Method*. Retrieved from https://prezi.com/3rdptjum29u9/descriptive-method.
- Kahkha, A.O., Kahrazeh, A., Armesh, H. (2014). Corporate Entrepreneurship and Firm Performance: Important Role of Small and Medium Enterprise.

  International Journal of Academic Research in Business and Social Sciences, 4(6), 8-25.
- KAM, (2015). Kenya Association of Manufacturers and Exporters Directory. Nairobi: KAM.
- KAM, (2012). *The KAM Industrial Business Agenda*: Proposals for the Incoming Government. Retrieved from http://www.kam.co.ke
- Karacaoglu, K., Bayrakdarog, A. & San, F. B. (2013). The Impact of Corporate Entrepreneurship on Firms' Financial Performance: Evidence from Istanbul Stock Exchange Firms. *International Business Research*, 6(1), 2013.
- Kasiulevičius, V., Šapoka, V. & Filipavičiūtė, R. (2006). Sample Size Calculation in Epidemiological Studies. *Gerontologija*.7(4), 225–231

- Katua, N. T. (2014). The Role of SMEs in Employment Creation and Economic Growth in Selected Countries. *International Journal of Education and Research* 2(12)
- Kauffman, E. M. (2006). *Compensation and Rewards*. Retrieved from www.entrepreneurship.org/resourcecenter.
- Kennedy, L. J. (2013). *Manufacturing Future Economic Growth and Job Creation*., USA: World Economic Forum
- Kifle, Y. (2016). Small and Medium-Size Companies Key to American

  Manufacturing Sector's Success. Retrieved fromhttps://www.allbusiness.com/small-and-medium-size-companies.
- Kimberlin, C. L. & Winterstein, A. G. (2008). Validity and Reliability of Measurement Instruments Used in Research. *American Journal of Health-System Pharmacists*, 65, 2008
- Kinkel, S., Lay, G., & Wengel, J. (2005). Innovation: More than Research and Development. Bulletins of the Manufacturing Performance Survey, No. 33. Retrieved fromhttp/:www.isi.fraunhofer.de/isi-wAssets/docs/i/en/pi-mitteilungen.../pi33e.pdf
- KIPPRA, (2014). Kenya Economic Report 2014: Navigating Global Challenges
  While Exploiting Opportunities for Sustainable Growth. Nairobi:
  KIPPRA.
- KIPPRA, (2013). Kenya Economic Report 2013: Creating an Enabling Environment for Stimulating Investment for Competitive and Sustainable Counties.

  Nairobi: KIPPRA.

- KPMG International, (2015). China Outlook 2015. Retrieved fromhttp://www.kpmg.com
- Knupfer, N. N. & McLellan, H. (2001). Descriptive Research Methodologies. The Handbook of Research for Educational Communications and Technology, AECT, Bloomington, UK.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. (2<sup>nd</sup> revised Ed). New Delhi, India: New Age International (P) Ltd.
- Korb, K. A. (2012). Conducting Educational Research. Reliability of Instruments.

  Retrieved from http://www.korbedpsych.com
- Kuhn, B, Sassmannshausen, S. P. & Zollin, R. (2010). "Entrepreneurial Management" As a Strategic Choice in Firm Behavior: Linking It with Performance. Conference Proceedings of the HTSF in Twente, The Netherlands: HTSF.
- Kuratko, D. F., Ireland, R. D., Covin, J. G. & Hornsby, J. S. (2005). A Model of Middle-Level Managers' Entrepreneurial Behavior. Entrepreneurship: Theory &Practice, Baylor: Baylor University.
- Kuratko, D. (2014). *Entrepreneurship: Theory, Process, and Practice*, (9<sup>th</sup> Ed). South-Western, USA:. Cengage Learning.
- Kuratko, D.F. (2003). Entrepreneurship Education: Emerging Trends and Challenges for The21st Century. 2003 Coleman Foundation White Paper Series for the U.S. Association of Small Business and Entrepreneurship
- Kolokavic, M., Sisek, B., & Milovanovic, B. M. (n.d). *Influence of Corporate Entrepreneurship on the Performance of Croatian Large Companies*. Retrieved from. https://bib.irb.hr.

- Kraus, S., Harms, R., & Fink, M. (2009). Entrepreneurial marketing: moving beyond marketing in new ventures. *International Journal of Entrepreneurship and Innovation Management*, 11(1), 19–34.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement1970, 30*, 607-610.
- Kriticos, A., Fossen, F. & Calliendo, M., (2008). *The Impact of Risk Attitudes on Entrepreneurial Survival*. IZA Discussion Paper No. 3525. Retrieved from http://www.ftp.iza.org/dp3525.pdf
- Labaree, R. (2013). Organizing Your Social Sciences Research Paper: Theoretical Framework. Research Guides, University of South Carolina Libraries. Retrieved fromhttp://libguides.usc.edu/writingguide.
- Laosirihongthong T., Prajogo, D. I & Adebanjo, D. (2014). The Relationships Between Firm's Strategy, Resources and Innovation Performance: Resources-Based View Perspective. *Planning & Control: The Management of Operations*, (25)15, 1231-1246.
- Latham, B. (2007). Sampling: What is it? Quantitative Research Methods. *ENGL* 5377, *Spring* 2007.Retrieved fromwebpages.acs.ttu.edu/rlatham.
- Lawson, M. (2014). The Impact of Risk Propensity on Corporate Entrepreneurhip.

  Unpublished Research Project, Gordon Institute of Business Science,
  University of Pretoria, South Africa.
- Leon, A. C., Davis, L. L, & Kraemer, H. C. (2011). *Journal of Psychiatric Research*. 45(5), 626-629.

- León, I. M. M. & García, J. A. M. (2011) "The Influence of Organizational Structure on Organizational Learning" *International Journal of Manpower*, 32(5/6), 537 567
- Levinson, M. (2015).U.S. *Manufacturing in International Perspective*.

  Congregational Research Service: Informing the Legislative Debate
  Since 1914. Retrieved from https://fas.org/sgp/crs/misc/R42135.pdf
- Leweling, T. A. (2007). Extending Organizational Contingency Theory to Team

  Performance An Information Processing and Knowledge Flows

  Perspective. Dissertation , Naval Postgraduate School Monterey,

  California
- Lichtenstein, J. (2014). Demographic Characteristics of Business Owners.

  Advocacy: The Voice of Small Business in Government. Issue Brief

  Number 2. Retrieved from http://www.sba.gov/advocacy.
- Liu, C. & Wang, H. (2012). The Mediating Role of Entrepreneurial Efficiency on the Relationship between Human Resource Management and Corporate Entrepreneurship. Advances in Computer Science and Education, 140, 359-364.
- Long, N. (2016). *Definition of Structural Contingency Theory*. Retrieved from http://www.oxfordindex.oup.com/view.
- Loy, A. Follet, L. & Hofmann, H. (2014). *Variations of Q-Q Plots {The Power of our Eyes! Retrieved from* https://arxiv.org/pdf/1503.02098.

- Lotz, H, M. & Merwe, S. P. (2013). An assessment of selected organisational-based factors on the perceived success of agribusinesses: a corporate entrepreneurship perspective. *Southern African Business Review 17*(3), 187-217
- Lunenburg, F. C. (2011). Expectancy Theory of Motivation: Motivating by Altering Expectations: *International Journal of Management, Business, and Administration*, 15(1), 1-6.
- Maes. J.(2003). The Search for Corporate Entrepreneurship: A Clarification of the Concept and its Measures. Katholieke Universiteit, Naamsestraat, 69
- Marcati, A., Guido, G. & Peluso, A. M. (2008). The Role of SME Entrepreneurs'Innovativeness and Personality in the Adoption of Innovations. *Research Policy*, 37(9), 1579–1590.
- Markovska, M. (2008). Intrapreneurship Way of Work in Organizations for Improvement of Working Quality. 5<sup>th</sup> International Scientific Conference, Business and Management, 16-17 May 2008, Vilnius, Lithuania.
- Marvel, M. R., Griffin, A., Hebda, J., & Vojak, B. (2007). Examining the Technical Corporate Entrepreneurs' Motivation: Voices from the Field. *Entrepreneurship: Theory &Practice 31* (5), 753-768. Baylor University
- Medium Enterprises: Global Perspectives. Busisness Science Reference,

  USA.International Finance Corporation (IFC), (2014). SMEs and

  Women-owned SMEs in Mongolia: Market Research Study. Retrieved

  from http://www.ifc.org/wps/wcm/connect.

- Mensah, A. A. (Strategic Resources and Performance of Rural SMEs). *International Journal of Business and Social Research (IJBSR)*, 3(4), 106
- Okhomina, D. (2010). Entrepreneurial Orientation and Psychological Traits: The Moderating Influence of Supportive Environment. *Journal of Behavioral Studies in Business*; 3, 1-6.
- McDonald, J.H. (2014. *Handbook of Biological Statistics* (3<sup>rd</sup> ed.). Baltimore: Sparky House Publishing,
- McGlone, C. (2014). Corporate Entrepreneurship: An Investigation into Factors which Contribute to Entrepreneurial Activities within the Financial Services Industry. Dissertation Submitted to the National College of Ireland. Retrieved from http://www.trap.ncirl.ie/1751/1/catherinemcglone.pdf
- Mitchel, L. (2011). Overcoming the Gender Gap: Women Entrepreneurs as Economic Drivers. Ewing Marion Kauffman Foundation
- Mugenda, A. (2008). *Social Sciences Research: Theory and Principles*. Applied Research and Training Services, Nairobi: Acts Press.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research Methods. Quantitative and Qualitative Approaches., Nairobi, Kenya: Acts Press.
- Mohsen, T. & Dennick, R. (2011). Making sense of Cronbach's Alpha International *Journal of Medical Education*. 2, 53-55
- Mokaya, S. O. (2012). Corporate Entrepreneurship and Organizational Performance: Theoretical Perspectives, Approaches and Outcomes. *International Journal of Commerce and Art, 1*(4).

- Mokua, L. O. & Ngugi, P. K. (2013). Determinants of Effective Corporate

  Entrepreneurship in The Banking Industry in Kenya: A case of Equity

  Bank Limited. *International Journal of Social Sciences and Entrepreneurship*, 1(5), 936-952
- Morley, M. & Cardona, P. (2013). *Manager-subordinate Trust: A Global Perspective*. New York, USA: Routledge,
- Morris, M.H., Kuratko, D. F. & Covin, J. G. (2010). *Corporate entrepreneurship and innovation.*, USA: South-Western Cengage Learning.
- Nafukho, F. M. Machuma, A. & Muyia, H. (2010) "Entrepreneurship and Socioeconomic Development in Africa: A Reality or Myth?", *Journal of European Industrial Training*, 34(2),96 109
- NAM, (2015). Facts About Manufacturing. Retrieved from http://www.nam.org/Newsroom/Facts-About-Manufacturing.
- Nath, L. (2005). Corporate Entrepreneurship: A Strategic and Structural Perspective. Lakshmi NathPG, Department of Business Administration ANR College Gudivada Andhra.
- Ngugi, P.K. (2012). Challenges Hindering Sustainability of Small and Medium Family Enterprise After the Exit of the Founders in Kenya, Unpublished PhD Thesis, juja: .Jomo Kenyatta University of Agriculture and Technology.
- Ni, J. (2015). *China's Manufacturing Successes and Pitfalls*. Retrieved from http://www3.weforum.org/docs/Manufacturing.

- Nicolaidis, C. S. & Kosta, G. C. (2011). Intrapreneurship as a Unique Competitive Advantage. World Academy of Science, Engineering and Technology International *Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 5(11), 1468-1472.
- Nafiel, N. A., Nimran, U., Musadieq, M. & Suyadi, I. (2014). Organizational Internal Factors, Corporate Entrepreneurship, and Organizational Performance. *European Journal of Business and Management*, 6(36).
- Nieuwenhuizen, C. (2008). *Basics of Entrepreneurship*. South Africa: Juta & Co. Ltd.
- Nkosi, T. (2011). Corporate Entrepreneurship and Organisational Performance in the Information and Communications Technology Industry, unpublished Masters Thesis, South Africa: University of the Witwatersrand.
- Noer, B. A., Idrus, M. S., Hadiwijoyo, D. & Wirjodirdjo, B. (2011). Entrepreneur as a Career Choice: Interrelationship between Risk Taking, Competitive Aggressiveness, Proactiveness, Innovativeness, and Autonomy. *IOSR Journal of Business and Management, Volume 11*(5), 21-28
- Organization for Economic Co-operation and Development, (2004). Promoting SMEs for Development: The Enabling Environment and Trade and Investment Capacity Building. Proceedings of Conference in Istanbul, Turkey.
- Okhomina, D. (2010). Entrepreneurial Orientation and Psychological Traits: The Moderating Influence of Supportive Environment. *Journal of Behavioral Studies in Business*; 3, 1-6.

- Omukoro, J. O. (2009). *Problem-Solving in Management: Peculiarities of the Arts*. Retrieved from http://www.ajol.info/index.php/cajtms/article.
- Osborne, Jason & Elaine Waters, (2002). Four Assumptions of Multiple Regression that Researchers Should Always Test. *Practical Assessment, Research & Evaluation*, 8(2). Retrieved from http://PAREonline.net/getvn.asp?v=8&n=2.
- Ozutku, H. (2012). The Influence of Intrinsic and Extrinsic Rewards on Employee Results: An Empirical Analysis in Turkish Manufacturing Industry. Business and Economics Research Journal, 3(3), 29-48.
- Parijat, P. & Bagga, S. (2014). Victor Vroom's Expectancy Theory of Motivation An Evaluation. *International Research Journal of Business and Management*, 7(9), 1-8.
- Pidwirny, M. (2006). "Inferential Statistics: Regression and Correlation". Fundamentalsof Physical Geography, 2nd Edition. Retrieved from http://www.physicalgeography.net/fundamentals/3h.html.
- Perrigot, R. & Pénard, T. (2013).Determinants of E-Commerce Strategy in Franchising: A Resource-Based View. *International Journal of Electronic Commerce Spring 2013, 17* (3), 109-130.
- Porter, M. E. (1985). Competitive Advantage: Creating and Sustaining Superior Performance. New York, USA: Free Press.
- Porter, M. (1990). The Competitive Advantage of Nations., New York, USA: Free Press.

- Pradesh. Naldi, L., Achtenhagen, L. & Davidsson, P. (2015). International CorporateEntrepreneurship among SMEs: A Test of Stevenson's Notion of Entrepreneurial Management. *Journal of Small Business Management Special Issue: Entrepreneurial Leadership and Gender*, 53(3), 780–800.
- Ragui M, Wainaina A (2013). Corporate Entrepreneurship: The Way Forward for SMEs Growth. *Prime Journal of Social Science* 2(7): 369-37
- Rahim, M. A. &Daud, N. (2012). A Proposed Conceptual Framework for Rewards and Motivation among Administrators of Higher Educational Provider in Malaysia.
- Ramachandran, K., Devarajan, T. P., Ray, S. (n.d.). *Corporate Entrepreneurship:*How?.Working Paper Series, Indian School of Business. Retrieved from http://www.isb.edu
- Ratzburg, W. H. (n.d). *McClelland's Achievement Motivation Theory*. Retrieved from http://www.jam3c.tripod.com
- Reddy, M. R. S. & Rao, V. G. (2014.Application of the Resource-Based View: A Case of an Indian Pharma Multinational.*IUP Journal of Business Strategy*, 11(1), 54-67.
- Republic of Kenya, (2015). *Economic Survey 2015*. Nairobi, Kenya: Kenya National Bureau of Statistics,.
- Republic of Kenya, (2012). *Micro and Small Enterprises Act No. 55 of 2012*. The National Council for Law Reporting, Nairobi, Kenya
- Republic of Kenya, (2007). Kenya Vision 2030. A Globally Competitive and Prosperous Kenya. Nairobi, Kenya.

- Research Advisors (2006). *Sample Size Table*. Retrieved from http://www.research-advisors.com/tools/SampleSize.htm
- Rebublic of Kenya, (2005). Sessional Paper No.2 of 2005 on Development of Micro and Small Enterprises for Wealth and Employment Creation for Poverty Reduction. Department Micro and Small Enterprises Development, Nairobi, Kenya.
- Republic of South Africa, (2015). *Economic Growth. Statistics South Africa*.

  Retrieved from http://www.statssa.gov.za/?page\_id=735&id=1
- Republic of Uganda, (2010). *National Industrial Sector Strategic Plan 2010/11-2014/15*. Ministry of Tourism, Trade and Industry, Kampala, Uganda.
- Rishipal& Jain, N. (2012). Need for Achievement an Antecedent for Risk Adaptiveness Among Entrepreneurs. *Global Journal of Management and Business Research*, 12(22),1-7.
- Rix, J. & Flint, A. (2013). Offering Employees a Stake in the Business is a Very Effective Way of Rewarding Key Individuals. Retrieved from http://www.grantthornton.co.uk.
- Runkel, P. (2016). What Are T Values and P Values in Statistics?. Retrieved from http://blog.minitab.com/blog/statistics-and-quality-data-analysis/what-are-t-values-and-p-values-in-statistics
- Sakhdari, K., Burgers, H & Davidsson, P. (2014). The Moderating Role of

  Entrepreneurial Management in the Relationship between Absorptive

  Capacity and Corporate Entrepreneurship: An Attention-Based View.

  Retrieved from https://eprints.qut.edu.au/71124/1/Sakhdari\_
  \_The\_moderating\_role\_-\_ACERE.pdf

- Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students*, 4<sup>th</sup> Ed. Tottenham, UK: Pearson Education Ltd.
- Sarwar, S. & Abugre, J. (2013). The Influence of Rewards and Job Satisfaction on Employees in the Service Industry. *The Business & Management Review*, 3(2), 22-32
- Scheepers, M. J. V. (2011). Motivating Intrapreneurs: The Relevance of Rewards. Industry & Higher Education 25(4), 249–263.
- Scheepers, M. J., Hough, J. & Bloom, J.Z. (2008). Nurturing the Corporate Entrepreneurship Capability. *Southern African Business Review*, 12 (3).
- Schmelter, R., Mauer, R., Börsch C., &Brettel M. (2010).Boosting Corporate Entrepreneurship Through HRM Practices: Evidence from German SMEs. *Human Resource Management Special Issue: Special Section:*Entrepreneurship—Part 2, 49(4), 715–741.
- Sehgal, V. (2008). Supply Chain Mussings: Connecting Supply Chain to your Business Strategy. Retrieved http://fromwww.supplychainmusings.com.
- Sekaran, U. (2009). Research Methods for Business. A Skill-Building Approach, 5<sup>th</sup>Edition., New Delhi, India: John Wiley & Sons Inc.
- Senaji, T. A. & Kamau, J. N. (2013). Entrepreneurial Intensity and Performance
  Outcomes Among Kenyan Firms. *Kabarak Journal of Research and Innovation*, 2012-09, pp 10-31
- Shaheen, A. Naqvi, S. M. H. & Khan, M. A. (2013). Employees Training and Organizational Performance. *Interdisciplinary Journal of Contemporary Research in Business*, 5(4), 490-503.

- Shane, S. A. (2003). A General Theory of Entrepreneurship: The Individual-Opportunity Nexus. Edward Elgar Publishing Ltd, Cheltenham, United Kingdom
- Shariatmadari, M., Hajimohammadian, M., Mahdi, S. & Jarad, R. (2012). *Barriers to Corporate Entrepreneurship in Small and Medium Size Enterprises*.

  Chronicle of The Neville Wadia Institute Of Management Studies And Research. Retrieved fromwww.nevillewadia.com/images/Cronicle2012/Dr.-Mehdi-Shariatmadari12.pd
- Schindehutte, M. & Kuratko, D. F. (2014). The Role of Marketing in Initiating Entrepreneurial Activity in Established Firms. *Developments in Marketing Science: Proceedings of the Academy of Marketing Science*, pp 291-295
- Shoghi, B. & Safieepoor, A. (2013). *International Journal of Academic Research in Business and Social Sciences*, 3(11)
- Sibin Wu, Matthews, Linda, Grace K. Dagher, (2007) "Need for Achievement, Business Goals, and Entrepreneurial Persistence". *Management Research News*, 30(12), 928 941
- Sijde, P., Veenker, S. & During, W. (2013). Intrapreneurship in SMEs: About the Role of Management and R&D. *European Journal of Business and Social Sciences*, 1(11), 24-30.
- Singh, K. (2011). Study of Achievement Motivation in Relation to Academic Achievement of Students. *International Journal of Educational Planning & Administration*. 1(2), 161-171

- Singh, H. & Mahmood, R. (2014). Manufacturing Strategy and Export Performance of Small and Medium Enterprises in Malaysia: Moderating Role of External Environment. *International Journal of Business and Commerce*, 3(5), 37-52.
- Sirmon, D.G., Hitt, M.A., Ireland, R.D., & Gilbert, B.A. (2011). Resource Ochestration To Create Competitive Advantage: Breadth, depth and life cycle effects. *Journal Of Management*, *37*, 1390-1412.
- Sledzik, K. (2013). Schumpeter's View on Innovation and Entrepreneurship.

  Management Trends.
- Smith, U. S., Hampson, Y., Chaston, I. & Badger, B. (2003). Managerial Behavior, Entrepreneurial Style, and Small Firm Performance. *Journal of Small Business Management*, 41(1), 47–67.
- Soylu, A. (2008). Structural Contingency Theory In Population-ecology Theory Out.

  The Journal of Human Resource and Adult Learning.4 (1).
- Spector, B. (2007). *Implementing Organizational Change: Theory and Practice*. New Delhi: Prentice Hall.
- Srivastava, N. & Agrawal, A. (2010). Factors Supporting Corporate Entrepreneurship: An Exploratory Study. *Vision: The Journal of Business Perspective 14*, 163.
- Statistics Canada.(2011). Survey on Financing and Growth of Small and Medium Enterprises. Survey on Financing of Small and Medium Enterprises, 2004 and 2007; and calculations by Industry, Canada.

- Stewart, W. H. & Roth, P. L. (2007). A Meta-Analysis of Achievement Motivation Differences between Entrepreneurs and Managers. *Journal of Small Business Management*, 45(4), 401–421
- Stewart, W.H. Carland, J.C., Carland, J.W., Watson, W.E. & Sweo, R. (2003). "Entrepreneurial dispositions and Goal Orientations: A Comparative Exploration of United States and Russian Entrepreneurs" in, Shawn M. Carraher, Jason K. Buchanan, George Puia, (2010) "Entrepreneurial Need for Achievement in China, Latvia, and the USA", Baltic Journal of Management, 5(3), 378 396.
- Stokes, D., Wilson, N. & Mador, M. (2010). *Entrepreneurship*: Cengage Learning EMEA, Hampshire, UK.
- Stone & Associates, (2013). On the Threshold: Refocusing U.S. Export Assistance Strategy for Manufacturers. Retrieved from http/:www.stone-assoc.com
- Sunday, K. G. & Somoye, R. O. C. (2011). Organization Performance. The Roles and Duties of Managers. *Journal of African Macroeconomic Review*, *1*(1).
- Sullivan, J. (2011). *Increasing Employee Productivity: The Strategic Role That HREssentially Ignores*. Retrieved from http://www.eremedia.com
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics. 5th ed.*Boston: Allyn & Bacon/Pearson.
- Taiwo A. M, Ayodeji M. A & Yusuf A. B (2012). Impact of Small and Medium Enterprises on Economic Growth and Development. *American Journal of Business and Management*, *1*(1), 18–22.

- Tarboda, J. (2015). *South Africa GDP Annual Growth Rate*. Retrieved from http://www.tradingeconomics.com/south-africa/gdp-growth-annual
- Tarus, D. K. & Nganga, S. I. (2013). Small and Medium Size Manufacturing Enterprises Growth and Work Ethics in Kenya. School of Business and Economics, Moi University, Kenya
- Teece, D. J. (2012). Dynamic Capabilities: Routines versus Entrepreneurial Action. *Journal of Management Studies*. 49(8), 1395–1401.
- Teixeira, R., Koufteros, X. A., Peng, X. D (2012). Organizational Structure, Integration, and Manufacturing Performance: A Conceptual Model and Propositions. *Journal of Operations and Supply Chain Management*, 5 (1), 69 81.
- Thanasegaran, G. (2009). Reliability and Validity Issues in Research. *Integration and Dissemination*, 4, 35-40.
- The U.S. Bureau of Labor Statistics (2014). About the manufacturing sector. Retrieved from http://www.bls.gov.
- The Organisation for Economic Co-operation and Development (OECD). (2005).

  The Measurement of Scientific and Technological Activities, Proposed

  Guidelines for
- Collecting and Interpreting Technological Innovation Data. Oslo Manual Tirreni, R. G. (2005). Allocation of Marketing Resources to Optimize Customer Equity. Dissertation No. 3038 of the University of Allen. Retrieved from http://www1.unisg.ch/www/edis.nsf

- Trestl, M. (2014). Driving Innovation and Business Performance through Corporate Entrepreneurship: Innovativeness, Proactiveness, Risk-taking and People. *Proc. of the Second Intl. Conf. on Advances In Social Science, Management and Human Behaviour –SMHB 2014*. Institute of Research Engineers and Doctors, USA.
- Trochim, W. M. K., (2006). *Sampling. Research Methods Knowledge Base*. Retrieved From http://www.socialresearchmethods.net/kb/sampling.php.
- Trochim, W. M. K. (2006). *Positivism & Post-Positivism*. Research Methods Knowledge Base. Retrieved from www.socialresearchmethods.net/kb/positvsm.php
- Turner, A.G. (2003). Sampling Strategies. United Nations Secretariat, Statistics Division. Retrieved from http://www.unstats.un.org.
- Underdahl, S. C. P., Walker, L. S. & Woehr, D. J. (2014). Gender and Perceptions of Leadership Effectiveness: A Meta-Analysis of Contextual Moderators. *Journal of Applied Psychology* 99(6), 1129–1145
- UNIDO, (2015). World Manufacturing Production. Statistics for Quarter II, 2015.

  Retrieved from http://www.unido.org/statistics
- UNIDO, (2012). *Tanzania Industrial Competitiveness Report 2012*. Retrieved from https://www.unido.org
- United Nations, (2009). Supporting Performance Management in the Organization.

  A guide for Staff and Managers. Leadership, Management and Organization Development, United Nations.
- Urban, B. (2010). Frontiers in Entrepreneurship. Johannesburg, South Africa: Heinemann Publishers (Pty) Ltd,

- Urbancová, H. (2013). Competitive Advantage Achievement Through Innovation and Knowledge. *Journal of Competitiveness*, 5(1), 82-96.
- Vaughan, R. (2008). *Conceptual Framework*. Bournemouth University. Retrievedfrom http://www.bournemouth.ac.uk
- Vasiliauskiene, L., Stanikuniene, B. & Lipinskiene, D. (2005). The Employees' Competence Development inside Organization: Managerial Solutions. *Engineering Economics*, 5 (45)
- Wanjau, k. L., Gakure, R.W. & Kahiri. (2012). The Role of Quality in Growth of Small and Medium Enterprises and Economic Development in Kenya. Retrieved from http://www.elearning.jkuat.ac.ke/journals.
- Williams, C. (2009). *Management*. South-Western Cengage Learning, CanadaWeihrich, H. & Koontz, H. (2004). *Management: A Global Perspective*, 11th Edition (Paperback). New York: McGraw Hill.
- Westfall, L. (2008). Sampling Methods: Excerpt from The Certified Software

  Quality Engineer Handbook by Linda Westfall. The Westfall Team.

  Retrieved from http://www.westfallteam.com/Papers/Sampling
  %20Methods.pdf.
- Wu, S. Matthews Dagher, G. K. (2007) "Need for Achievement, Business Goals, and Entrepreneurial Persistence". *Management Research News*, 30(12), 928 941.
- Wüstenhagen, R. (2008). Sustainable Innovation and Entrepreneurship.

  Northampton, USA: Edward Elgar.

- Yan, W. & Josef, P. (2011). The Role of Communication in Enhancing Employees'

  Organizational Commitment: Exploring the Relationship Between

  Social-Emotional-Oriented Communication, Work Oriented

  Communication and Organizational Commitment in China. Retrieved from https://www.diva-portal.org/.
- Yang, Q. (2014). Remanufacturing Versus New Acquisition of Production Equipment: Definitions and Decision-making Checklist. Malardalen University, Sweden.
- Zabouj, N. & Antoniades, N. (2015). A study about the use of reward systems and employee motivation in a call centre. Retrieved from https://gupea.ub.gu.se/bitstream.
- Zenger, J. & Folkman, J. (2015). What Younger Managers Should Know About HowThey're Perceived. Harvard Business Review. Retrieved from https://hbr.org.
- Zhao, F. (2006). Entrepreneurship and Innovations in E-Business: An Integrative Perspective., London, UK: Idea. Group Publishing.
- Zhao, L. L. (2013). Corporate Intrapreneurship: Steps to Building a Sustainable Startup Mentality Within an Established Organization. Retrieved from http://lucyzhao.com/wp-content.

### **APPENDICES**

### Appendix 1: Questionnaire/Interview Guide

Please fill in as honestly as possible. All information will be treated with utmost confidentiality. There is no right or wrong answer that the researcher is looking for.

### **Part A: Participant Information**

1. Gender	Male	[ ] Fema	le [ ]
2. Age 30 years and below 51-60 [ ] 61 &		[ ]	41-50 [ ]
3. Number of years worked i			
	_	1_5	[ ] 6-10 [ ]
11- 15			
4. Number of years the enter			L J
4. Ivalliber of years the enter	prise has been h	i carstellee	
10 and below	[ ]	11-20	[ ] 21-30 [ ]
31-40 [ ]	Abov	e 40 [ ]	
5. Relationship with enterpri	se		
Owner Manager	[ ] Employ	yee Manager	[ ]
6. Type of manufacturing bu	siness		
7. Number of employees			
10-100	[ ]	101- 200	[ ] 201-300[ ]
301-400	[ ]	Above 400	[]
8. Turnover in Kenya Shillin	gs		
	_		

# Section B: Study Questions 9. Commitment of Resources

	m· 1	. 4	•	
ล)	Tick	the	appropriate	answer

Statement	1	2	3	4	5
What percentage of profits is set aside for development of		01-03%	04- 06%	07-09%	Above 10%
new products each year? (Research & Development					

b) Each year the enterprise has a i) Always [ ] ii) Not aliii) (Specify)	ways [	]			Others
c) How old is the current product 5 years and below [ ] 16-20 years [ ] Abod) The current equipment/s are serves [ ] No [ ] e) If No to (d) above please standard transfer of the current equipment of the current equipment of the current equipment of the current equipment of the current product of t	6- 10 ove 20 ye sufficient ate reaso	years [ ] ars [ ] t for the production	duction presented to either	cocess acquire n	nore or up-grade
Statement	1	2	3	4	5
i) Indicate the percentage at which the market demands	1-	26-50%	51- 75%	76- 100%	Others(specify)
more than you produce ii) Employees are taken for training	Never	Very rarely	Rarely	Often	Very often
10. Management's Need for A a) Customers concerns are prom Strongly agree [ ] Agree Disagree [ ] Strongly b) New opportunities are as a re	nptly add y Disagn	ressed [ ]	Neutral	[ ]	
i) Producing what the competito					

c). Specify the targets t	hat were pu	t in place	for each	year within	the last	five yea	rs for
the following							

### a) Increase in Profits

<i>u,</i> 11101000	111 1 1 0 1 1 0 0				
Year	None	1%-25%	26%-50%	51%-75%	71%-100%
2011					
2012					
2013					
2014					
2015					

### b) Market Share

Year	None	1%-5%	6%-10%	11%-15%	Over 15%
2011					
2012					
2013					
2014					
2015					

a)How many new	None	1	2	3	4 & above
opportunities has					
management exploited					
yearly within the last					
five years?					
b)Describe the presence	None	Spontaneous	Only	Part of	Initiative by
of feedback			when	the	either
mechanisms that have			required	system	employees or
been put in place from					customers
(i) Customers					
(ii) Employees					

d) As a manager, please	e ind	icate	e the level of you	r risk t	aking		
i) Calculated risk taker			•		] Moderate risk taker	[	-
iv) High risk taker	[	]	Risk averse	[	]		

11. Reward System
Statement

Statement					
i) How many promotions	None	1-5	6-10	11-15	Above 15
within the last five years has the firm effected as a result					
of new idea contribution?					
ii) How often does the firm give monetary reward for new production ideas	None	Hardly	Often	Very often	Considered as part of employees work
iii) How many employees has the firm offered shareholding as recognition	None	1	2	3	Above 3
for new ideas					
iv) How many times within the last five years have the	None	1	2	3	Above 3
employees been given grants for their individual projects within the firm					

Statement						
i) Please specify the levels of management that the firm has	1	2	3	4	5 above	&
ii) How often does management get direct information from lower levels of employees?	Not at all	Very Rarel y	Rarel y	Ofte n	Very often	
iii) Please state the most common form of communication with/or between management and staff	Verbal	Mem o	Email	letter s		
iv) How often does management reassign duties to employees	Not at all	Very Rarel	Rarel y	Ofte n	Very often	
		У				
How often are employees included in key production and marketing decisions?	Not at all	Very Rarel y	Rarel y	Ofte n	Very often	

## 13. Promotion of Intrapreneurship

a) Please indicate the number of different types of product lines that the enterprise
produces
b) Please state the product that gives the enterprise its highest profit share
c) Is this the product in (a) above the one that the enterprise was formed to produce?

Yes			Ι	No					
d)	If	no	to	(c)	above,	please	state	the	reasons
ŕ				•	ction equip	ment/proces	ss is of the	e latest to	echnology
Yes		iy the	compar	ту орста	No [	]			

Statement					
i) How many new product lines has the firm introduced since inception	None	1	2	3	4 and above
ii) How many times has the firm upgraded its production equipment/process since	0	1	2	3	4 and above
inception					
iii) How many products not already given to the market can the firm rely on in case	None	1	2	3	4 & above
the current product/s fail					
iv) How many products does the firm produce that are	0	1	2	3	4 and above
a) not produced by other firms					
b) closely related to those of other firms					

~		•		1 . 1		. 1	1	
1	) State the n	ercentage increas	e 1n	market share	w/ifhin	the	last five y	vears
1	, Diate the p	Ciccinage incicas	· 111	market smare	** 1 (111111	uic	iast ii v	y Cars

Year	No	1-2%	3-4%	5-6%	7% &
	increase				above
2011					
2012					
2013					
2014					
2015					

Signature	Date
Stamp	

Thank you very much for your honest response and participation

Appendix II: Sample Size Calculation Table

Required Sample Size at 5% Confidence Level

N-n	N-n	N-n	N-n	N-n
10-10	100-80	280-162	800-260	2800-338
15-14	110-86	290-165	850-265	3000-341
20-19	120-92	300-169	900-269	3500-346
25-24	130-97	320-175	950-274	4000-351
30-28	140-103	340-181	1000-278	4500-354
35-32	150-108	360-186	1100-285	5000-357
40-36	160-113	380-191	1200-291	6000-361
45-40	170-118	400-196	1300-297	7000-364
50-44	180-123	420-201	1400-302	8000-367
55-48	190-127	440-205	1500-306	9000-368
60-52	200-132	460-210	1600-310	10000-370
65-56	210-136	480-241	1700-313	15000-375
70-59	220-140	500-217	1800-317	20000-377
75-63	230-144	550-226	1900-320	30000-379
80-66	240-148	600-234	2000-322	40000-380
85-70	250-152	650-242	2200-327	50000-381
90-73	260-155	700-248	2400-331	75000-382
95-76	270-159	750-254	2600-335	100000-384

Source: Krejcie and Morgan (1970)

**N= Population Size** 

n= Sample Size

**Appendix III: Results of Factor Analysis** 

COMPONENT	LOADING
Research and development.	.732
Production equipment	.720
Training.	.627
Marketing.	.697
Opportunity seeking.	.724
Feedback for improvement.	.881
Setting goals.	.912
Risk taking propensity.	.515
Promotion.	.681
Monetary reward.	.704
Shareholding.	.700
Grants for individuals.	.787
Levels of management.	.641
Flexibility.	.590
Communication channels.	.655
Decision making.	.764
Pro-activeness.	.760
Competitive aggressiveness.	.552

**Extraction Method: Principal Component Analysis**