

**INTRAPRENEURIAL PREREQUISITES AS DETERMINANTS OF  
ORGANISATIONAL OUTCOMES AMONG KENYAN STATE CORPORATIONS**

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SEPTEMBER 2013

**DECLARATION**

This thesis is my original work and has not been presented for a degree in any other  
University or any other award

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**DEDICATION**

To my late parents, Mr. and Mrs. Eustace Njiru, who taught me the virtue of pressing on,  
and to my family for their support and encouragement.

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## OPERATIONAL DEFINITION OF TERMS

This study adopted the following definitions of key terms:

### **(a) Entrepreneurship**

Entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resultant rewards of monetary and personal satisfaction and independence (Hisrich & Peters, 2002).

### **(b) Intrapreneurship**

Intrapreneurship is entrepreneurship within an existing organisation. It involves the pursuit of creative or new solutions to challenges confronting the organisation, including the development or enhancement of old and new products and services, markets, and administrative techniques and technologies for performing organisational functions (Hisrich & Peters, 2002). **Intrapreneurial** behaviour is opportunistic, value-driven, risk accepting, creative activity where ideas take the form of organisational growth or transformation (Bird, 1989).

### **(c) Intrapreneurial Prerequisites**

These were defined in this study as those conditions or factors that, if present, may result in intrapreneurial ventures being undertaken by members of staff. The prerequisites included managerial behaviours and organisational cultural aspects such as management support for intrapreneurship, rewards and reinforcement, personnel development, individual

intrapreneurial orientation and organisational intrapreneurial orientation (Heinonen & Korvela, 2003; Kuratko & Morris, 2002).

**(d) Intrapreneurial Outcomes**

These were defined in this study as the results of intrapreneurial behaviour. These included employee job satisfaction, customer satisfaction and financial performance (Heinonen & Korvela, 2003).

**(e) State Corporations**

This study adopted the definition of state corporations as derived from the State Corporation Act Chapter 446 of the Laws of Kenya that a state corporation is a body corporate established under an Act of Parliament (National Council for Law Reporting [NCLR], 2009). Bos (1986) further describes public corporations as institutions of public law with a separate legal personality, usually created by a specific law or decree that defines the corporation's powers and duties. Their characteristic mode of financing is by loans or allotments of capital and not by the issue of shares or stock.

**(f) Determinants**

A determinant is an influencing element or factor (The American Heritage Dictionary, 2011). Thus in this study, the prerequisites of intrapreneurship were regarded as the factors that influenced the intrapreneurial outcomes.

**ABBREVIATIONS AND ACRONYMS**

AAPAM	African Association for Public Administration and Management
ANOVA	Analysis of Variance
CE	Corporate Entrepreneurship
CEO	Chief Executive Officer
GOK	Government of Kenya
IT	Information Technology
LCL	Lower control Limit
LDCs	Less Developed Countries
n.d.	No Date
O&M	Operations and Maintenance
PCS	Performance Contracts Secretariat
PSCGT	Private Sector Corporate Governance Trust
ROK	Republic of Kenya
RRI	Rapid Result Initiative
SAGA	Semi-Autonomous Government Agencies
SAPs	Structural Adjustment Programmes
SPSS	Statistical Package for Social Sciences
UCL	Upper Control Limit
TMT	Top Management Team
VIF	Variance Inflation Factor

### **ABSTRACT**

The performance of state corporations in Kenya has not been as expected, as demonstrated by reports of unrelenting financial and managerial woes. In an attempt to reign on the poor performance, the government has developed policies on how to manage the state corporations, with emphasis on self-sustainability. The requirement to be self-sustaining demands that state corporations continuously innovate, improve themselves and competitively market their products and services, which in essence is intrapreneurship. This study analysed the prerequisites and outcomes of intrapreneurship in state corporations in Kenya. Using the theory of intrapreneurship, the study conceptualised the constructs of the prerequisites as encouragement by the management; rewards and communality; training and development; enabling work environment; organisational intrapreneurial orientation; individual motivation; individual competence; and individual intrapreneurial orientation. The outcomes of intrapreneurship that were studied were employee perceptions of job satisfaction, customer satisfaction and financial performance. To accomplish this, the study adopted an explanatory survey design and selected a disproportionate stratified sample from the population of state corporations in Kenya. The respondents were 182 employees in the state corporations. Data were collected using questionnaires and interviews and were analysed using descriptive statistics, correlations, analysis of variance and stepwise multiple regression. The information is presented in charts, tables and narratives. This study found that though the prerequisites of intrapreneurship were evident to varying degrees in all state corporations, the scores differed significantly among the organisations. Further, there was a significant relation between the prerequisites and the outcomes of intrapreneurship. The results of this research indicated that the key prerequisites of intrapreneurship, which have significant deterministic influence over the outcomes, were individual motivation; enabling work environment; organisational intrapreneurial orientation; rewards and communality; and individual intrapreneurial orientation. The study concluded that some prerequisites had an antecedent effect on other prerequisites. Thus, for intrapreneurship to take place and the outcomes envisaged to be accomplished, the staff should be motivated to act intrapreneurially, and there should be an enabling work environment in the organisation. The variability in the outcomes that was accounted for by the prerequisites suggested that there are other factors, beyond the scope of this study that have an effect on the outcomes. These findings contribute to intrapreneurial theory by showing that various prerequisites of intrapreneurship do not have a direct impact on the outcomes but rather have an antecedent effect on the prerequisites. The study recommends that there is need to establish reward systems for innovative undertakings. Training programs to build and strengthen intrapreneurship should be implemented in state corporations since they will contribute towards an enabling work environment for intrapreneurship. The study also provides guidance to managers interested in motivating their employees to undertake intrapreneurial activities. The results also give direction to employees by offering them different scenarios that lead to job satisfaction, customer satisfaction and financial performance. For future research, it was recommended that objective measures on financial performance be utilized in similar studies. An assessment of the efficacy of intrapreneurial programs in state corporations could also be investigated in order to give clear links to improved performance.

## CHAPTER ONE : INTRODUCTION

This chapter presents the concept of intrapreneurship and background information about state corporations in Kenya. The chapter further discusses the research problem, objectives of the study, its justification and definition of the key terms used in the research.

### 1.1 Background of the Study

The importance and potential of intrapreneurship for the development of innovation is widely recognized. This is because intrapreneurship is key towards innovation in established organisations and innovation has become a major driving force for business growth and success. (Covin & Miles, 1999; Jong, Parker, Wennekers & Wu, 2011; McMurray, & Chapman, 2009; Tao, Probert, & Phaal, 2010). Its application in organisations has a lot of potential for organisational development that would lead to greater returns.

Intrapreneurship is the practice of entrepreneurship within the context of an established organisation. It has been exalted as a necessity for society as a whole, as well as for specific organisations and industries, especially at a time when unemployment rates are high, when market globalization is increasing and when environmental changes are escalating, (Cornwall & Perlman, 1990; Kamffer, 2004; Republic of Kenya [ROK], 2003, 1994, 1992, 1986). Further, established businesses, when confronted with fierce global competition, tend to regard intrapreneurship as a way of staying competitive. This has led to an emerged and sustained interest in studying intrapreneurship within existing organisations. The term “intrapreneurship” was coined, to describe entrepreneurship within an organisation (Jong, et al., 2011; Pinchot, 1985; Saetre, 2001). The term emphasizes the collective and corporative aspects of entrepreneurship. It reflects on the efforts made by an organisation to improve

internal work/business processes and operations (Lutfihak, Cagri, Gurhan, Gunduz & Kemal, 2010).

Intrapreneurial practices as well as intrapreneurial managers are required for organisations to compete successfully in the new competitive environment and to exploit opportunities key to sustainable economic development (Kamffer, 2004). The increasingly competitive markets and the emphasis on decreasing costs while increasing revenue should be two key drivers for firms to increase their intrapreneurial activities (Sembhi, 2002). Intrapreneurial activity also plays an important part in radical innovation discovery and wealth creation.

Prerequisites of intrapreneurship are vast. As mentioned e.g. by Antoncic and Antoncic (2011) and Menzel (2008), intrapreneurship occurs on two levels: the level of the organisation and on the level of the individual. Support by the management is generally thought of as beneficial for intrapreneurship and change in the organisation (Vandermerwe & Birley, 2000). Importance of management involvement, as well as management encouragement, and rewards in terms of training and trusting individuals within the firm to detect opportunities have been proposed to positively influence an organisation's intrapreneurial behaviour (Monsen, Saxton & Patzelt, 2007; Sijde, Veenker & During, 2013).

Intrapreneurship is initiated in established organisations for purposes of profitability, strategic renewal, fostering innovations, gaining knowledge of future revenue streams and international success (Hornsby, Kuratko & Zahra, 2002; Kroeger, 2007; Riot, 2010; ). Indeed as Antoncic and Antoncic (2011) and Heskett and Sasser (2010) stress, organisational performance, growth and development, employee satisfaction and customer satisfaction may depend considerably on intrapreneurship and employee-related prerequisites.

Notwithstanding the growing interest in intrapreneurship, limited empirical research has been carried out on the prerequisites and outcomes of intrapreneurship in different kinds of organisations and contexts in Kenya. This study attempted to bridge this gap by establishing the prerequisites that foster intrapreneurship in state corporations in Kenya and some associated outcomes.

Bos (1986) describes public or state corporations as institutions of public law with a separate legal personality, usually created by a specific law or decree that defines the corporation's powers and duties. Their characteristic mode of financing is by loans or allotments of capital and not by the issue of shares or stock. On the other hand, state companies are private law institutions, established under the ordinary company law, which are controlled by that government by virtue of its ownership of shares, whether wholly or in part. In contrast, departmental agencies do not have a separate legal personality. Substantial portions of their total staff are civil servants and their revenue account is incorporated in the government budget.

The history of state owned corporations in Kenya can be traced back to the early days of colonial rule when they were established in areas of transport, communication and agriculture to enable exploitation of the colonial territory. After independence, the new government set out strategies for development and established more state corporations in other sectors such as commerce, industry, tourism, construction insurance and banking. The number of state corporations rose to 240 by the mid-1980s (Public Sector Corporate Governance Trust [PSCGT], 2002). This number had however been reduced by over 50% to 121 state corporations by 2004 (ROK, 2004). This was because of liquidation or privatisation.

Common examples of privatisation are the Kenya Airways and the Kenya Commercial Bank. Common examples of liquidation are African Finance Corporation, and Kenya Grain Growers Cooperative Union.

Although discussed in a number of different settings, there are contexts in which the issue of intrapreneurship has not been addressed exhaustively. One of these contexts is in the state corporations in Kenya. State Corporations in Kenya have been experiencing a myriad of problems, including corruption, nepotism, and mismanagement (Njiru, 2008; Petiffor, 2001). In fact, from the Public Investment Committee reports, out of 130 reports examined by the Auditor General – Corporations, only 23 managed a clean bill of health (Republic of Kenya, 2007). The general story is one of loss, fraud, theft and gross mismanagement. For example, a World Bank (2004) article stated that a key area for corruption-busting reform is the parastatal sector. When compared to similar economies, Kenya has had an over-abundance of state corporations many of which are a drain on public resources; more to the point, they have been the locus of corruption that thrives in public monopolies, especially when coupled with lax oversight, management and fiduciary control procedures.

An area of parastatal dominance that cries out for reform is the financial sector. For years, the financial sector was the vehicle for illegal and corrupt transactions, not to mention mismanagement. The result is that the public sector banks are left holding loans, up to 30 percent of which are non-performing, with the result being restricted credit availability to honest individuals (World Bank, 2004).

To stress on this state of affairs further, PSCGT (2002) outlined some of the reasons for failure in state corporations. These included increase of the corporations without proper

planning due to political and social pressures. This was done without due regard for their sustainability. In addition, there had been the infiltration of politicians seeking to obtain among other things, unsecured loans, irregular tenders and employment for friends and relatives. There is also lack of or failure to hold on to appropriate guidelines and policies on financial control, cost recovery or commercial probity. Further, there was heavy political control; inefficient corporate management brought about by lack of skilled work force and poor procurement practices, leading to a lack of a well defined authority-to-operate. In addition, inefficient planning, research and development units as well as lack of resources to invest in modern technology, compounded their inefficiencies and made products uncompetitive. Finally, there were no clear corporate objectives and strategies. This state of affairs reflected the unrelenting need for reforming the state corporations.

The poor performance of public enterprises is one of the reasons that many less developed countries (LDCs) have failed to develop more rapidly (Trivedi, 1992). Therefore, improving the performance in state owned corporations and enterprises has been an area of interest world over and especially in LDCs. For example, France, South Korea, Venezuela, India and Senegal have implemented policies of performance contracting in their effort to improve the performance of their state enterprises (Trivedi, 1990). In contrast, Tanzania has put emphasis on improving the efficiency of its state corporations by divesting or liquidating the non-strategic ones and restructuring and commercializing the strategic ones (PSCGT, 2002).

Since 1980, Kenya has made efforts to implement in phases changes necessary to adjust the economy to the new realities of the liberalised free enterprise market economy. For example, in the late 1970s and early 1980s, the country put in place fundamental structural adjustments programmes (SAPs) to its economy. The concept of structural adjustment pertains in general

to steps taken to bring domestic economic institutions and policies more into line with world prices, trade patterns and investment opportunities in both the public and private sectors (Hecox, 1992). The key prang of the SAPs was cost cutting which introduced cost sharing in public service delivery. This meant that public institutions would no longer receive unlimited financial support from the government and had to look for other means of raising revenue by either cutting costs or finding alternative revenue sources. The Sessional paper No. 1 of 1986 (ROK, 1986, pg. 29) strongly put the case for structural adjustment programmes, stating; “Government’s resources are limited. The only way out of this dilemma is to involve those who participate in government services increasingly in financing the recurrent costs of these services”.

Since then, the Government has maintained a strong commitment to restructure and revamp its state corporations. In July 1994, the government published a paper that defined policies, principles and guidelines for privatisation and parastatal reform. The paper identified non-strategic public enterprises for privatisation or liquidation. The remaining strategic public enterprises were to be retained under government ownership but restructured to enhance efficiency through private sector participation and performance linked contracts. The government policy on the parastatals was that the government would, inter alia: appoint the boards of public enterprises from among those who are adequately qualified and meet specific criteria; negotiate performance criteria with boards to define objectives and operational performance criteria; and provide enhanced incentives for improved performance (ROK, 1994). These new proposals on the management of state corporations meant that these organisations would require adopting private sector business practises.

In June 2003, the government unveiled its economic recovery strategy for wealth and employment creation. The new strategy was founded on the principles of the sessional paper of 1994 and required changes in public sector management. Thus, Since June 2005, state corporations have been signing performance contracts with the government in a bid to enhance and sustain their performance; other reform initiatives in the public sector since 2003 in order to improve service delivery in the public service include the development of strategic plans and customer service delivery charters. In order to jump start performance improvement, there has also been the introduction of rapid result initiatives (RRI). Evidently, majority of the state corporations have registered relatively good performance as shown in the 2006/2007-performance evaluation (Performance Contracts Secretariat [PCS], 2006). However, a reasonable number have registered poor performance, and those that show good performance are not able to sustain it over a long period (Trivedi, 2008). There is now need to study state corporation further to establish how to instil good corporate practice, such as that of intrapreneurship.

## **1.2 Statement of the Problem**

Despite the reforms and initiatives to reinvent the state corporations in Kenya, many of them still perform poorly (Mwaura, 2007; ROK, 2007a). Though there is confidence in many quarters that state corporations can be agents for national development and many efforts are directed at revamping them, they are still underperforming, thereby becoming a burden to the government treasury (PSCGT, 2002; Trivedi, 1992). Different reports have indicated that state corporations in Kenya suffer from unrelenting financial woes, wastefulness, retrenchment, insolvency and inefficiency (Irungu, 2005; Petiffor, 2001; PSCGT, 2002; ROK, 1986, 1994, 1996, 2001, 2003, 2004, 2007; Transparency International, 2003; World Bank, 2004). Indeed, State corporations are currently facing serious challenges, which include

achieving, and sustaining financial self-sufficiency, and competing in a liberalised market environment.

In June 2005 the finance Minister declared that state corporations would henceforth not rely on the government treasury for financial bailouts; non performing corporations would be privatised or liquidated; and non-performing chief executives would be laid off, and where financial misappropriation was proven, those responsible would be prosecuted (ROK, 2005). In demonstrating her resolve to have state corporations work towards financial self-sufficiency, the Kenya government progressively cut down its financial allocations to state corporations since the 2006/2007 fiscal year with a vision of the firms becoming fully financially self-sustaining (ROK, 2006).

Research has found that intrapreneurship could help parastatals to remain viable public investments (Kroeger, 2007; Kuratko, Ireland, and Hornsby, 2001; Stewart, 2009). Studies carried out in developed countries have identified the benefits of intrapreneurship both in large and small firms, some of which include improved financial performance, customer satisfaction and employee satisfaction (Antoncic & Antoncic, 2011; Hisrich & Michael, 2002). In Kenya, a few studies on intrapreneurship have been carried out; a study by Mucee (2002), which focused on corporate venturing practices in listed companies, found that overall, the supportive intrapreneurial culture, climate and support are lacking in many private firms in Kenya. In addition, Karimi (2005) studied negative and positive correlates of intrapreneurship in a case study of one public university and found that training and encouragement of the staff fostered intrapreneurship while lack of free flow of information discourages intrapreneurship. Ayiro (2005) modelled intrapreneurship in one semi-

autonomous government agency and found that there is need to give staff independence to innovate and embrace new approaches to generate competitive products and services.

From the foregoing, it can be said that limited research has been undertaken focusing on intrapreneurship in state corporations in Kenya. It is therefore not possible to state conclusively the status of intrapreneurship in state corporations. This study hoped to increase the body of knowledge on intrapreneurship by studying intrapreneurial prerequisites and outcomes in state corporations.

### **1.3 Purpose of the Study**

The purpose of this study was to determine the intrapreneurial prerequisites that influence organisational outcomes in state corporations in Kenya.

### **1.4 Objectives of the Study**

The specific objectives of this study were:

1. To establish cross-sectoral differences in the prerequisites of intrapreneurship evident in state corporations of Kenya
2. To determine cross-sectoral differences in the perceptions of the outcomes of intrapreneurship among staff in state corporations of Kenya
3. To investigate the relationship between the prerequisites of intrapreneurship and job satisfaction in Kenyan state corporations
4. To determine the relationship between the prerequisites of intrapreneurship and the perceptions of customer satisfaction in state corporations of Kenya
5. To assess the relationship between the prerequisites of intrapreneurship and the staff perceptions of financial performance in state corporations of Kenya

## **1.5 Research Hypotheses**

The hypotheses tested in this study were:

- H1: There is a significant difference in intrapreneurial prerequisites between state corporations in Kenya
- H2: There is a significant difference between Kenyan state corporations' with respect to the employees' perceptions of the outcomes of intrapreneurship
- H3: There is a significant relationship between intrapreneurial prerequisites and employees' job satisfaction in state corporations of Kenya
- H4: There is a significant relationship between intrapreneurial prerequisites and employees' perceptions of customer satisfaction in state corporations of Kenya
- H5: There is a significant relationship between intrapreneurial prerequisites and employees' perceptions of financial performance in state corporations of Kenya

## **1.6 Justification and Significance of the Study**

The study serves to advance research and knowledge in the area of intrapreneurship. The findings will be of value to the government and other policy makers, in providing empirical evidence so that they may formulate policy on how to develop an intrapreneurial culture that state corporations can adopt so as to survive and grow. There is also an urgent need for policies on recruitment of management staff and conduct of business in state corporations. This research will therefore inform policy formulation on the management of state corporations.

Staff in state corporations may use the results to revamp their organisations through inculcating the lessons outlined herein. State corporations play a significant role in the

country's economic development. They account for a sizeable number in the country's employment opportunities in addition to contributing to a share in the Gross Domestic Product (PSCGT, 2002). Therefore, any managerial inefficiency in a state corporation could lead to spill over inefficiency in other areas of the economy. This study may have contributed to increasing knowledge in these organisations based on the analysis of intrapreneurship and recommendations herein on appropriate measures to improve performance.

The Government of Kenya's immediate concern is rapid economic development as clearly stated in the Economic Recovery Strategy for Employment and Wealth Creation Paper (ROK, 2003) and The Vision 2030 (ROK, 2007b). One way to achieve this is the revamping of state corporations to make them more effective, efficient, self-sustaining and productive in their operations. In recognising this, the government has initiated a number of reforms in the recent past including the introduction of the practice of performance contracting in state corporations and other government institutions, improving monitoring and evaluation systems as well as record keeping systems. In demonstrating her resolve to have state corporations work towards financial self-sufficiency, the Kenya government has progressively cut down its financial allocations to state corporations since the 2006/2007 fiscal year with a vision of the firms becoming fully financially self-sustaining (ROK, 2006). This calls for the need to develop organisational and managerial intrapreneurial competencies. Therefore, an understanding of the current situation will guide policy makers in future planning of the state corporations with regard to intrapreneurship.

Intrapreneurs are both born and made (Bird, 1989). Therefore, it was important to establish the capacity gaps in all categories of staff, which would facilitate the design of appropriate development interventions. Further, it is in the best interest of the corporations to become

intrapreneurial in order to avoid becoming obsolete or losing their best people to entrepreneurial flight. This study will enlighten managers in state corporations on the importance of intrapreneurship for sustained growth.

This study extends the body of literature in the area of intrapreneurship. Specifically, this study increased the sample size of public sector organisations studied, and the number of variables tested so as to make comparisons between the sectors represented. This study has thus extended knowledge in the area of intrapreneurship by studying the prerequisites of intrapreneurship in state corporations as determinants of perceived organisational outcomes.

## **1.7 The Scope and Limitations of the Study**

### **1.7.1 The Scope**

This study investigated intrapreneurial prerequisites and outcomes in Kenya's state corporations. The study's scope was eight state corporations. The sample represented all the eight categories of state corporations, namely: financial; commercial/manufacturing; regulatory; public universities; training and research; service; regional development authorities and tertiary/training state corporations.

The research analysed intrapreneurial prerequisites and outcomes in state corporations. This notwithstanding, the research recognises that organisational and managerial success can be influenced by other factors including personal, internal and external issues, which were not covered in this study.

The study included variables for example financial performance that referred to data dating five years at the time of data collection, which was to coincide with the five year operating plans in state corporations.

### **1.7.2 The limitations**

This study used respondent perceptions to measure all the variables in the study. Perceptual measures used in the instruments probably introduced bias because employee perceptions may not be an accurate indicator of all intrapreneurial outcomes, especially financial performance. However, perceptual measures have been used widely in previous research and found useful in providing greater understanding of causal relationships in intrapreneurship. They have also been found to be highly explicit and to provide accurate assessments of conditions within an organisation. Further, they are practical in their administration and facilitate standardised interpretation (Antoncic & Hisrich, 2001; Lyon, Lumpkin & Des, 1999).

The study used research instruments that contained performance-rating scales. However, performance-rating scales are limiting because of the “halo effect”, which is the tendency to make ratings on specific abilities based on an overall impression (Sommer & Sommer, 1991). The researcher attempted to limit the halo effect by giving appropriate instructions to respondents. Performance rating scales are also limited because of “loafing”, which is the tendency to score all items similarly and positively or negatively. Questions posed in the negative manner in the scale were aimed at minimising loafing.

## **1.8 Organisation of the Thesis**

Chapter one provides the research background, research objectives, significance of the study, scope, and the limitations encountered in the course of the study. The subsequent parts of this thesis are organised around four other chapters. Chapter two presents the literature review. Here, the definition of intrapreneurship is discussed. Related literature on the key variables of the study namely, the prerequisites of intrapreneurship and the outcomes of intrapreneurship

is also discussed. State corporations, being the unit of analysis in this study are also discussed, with emphasis on reforms that have been taking place in the recent past. The chapter also contains the theoretical and conceptual frameworks of this study.

Chapter three discusses the methodology employed in this research. It outlines the research design, population and sampling design, the testing of reliability and validity of the instruments and the data collection and analysis procedures that were used. Chapter four presents the findings of the study, organised around the hypotheses. The chapter then discusses the findings, contrasting them with other's findings in literature.

The final chapter (chapter five) summarises the entire study, and makes conclusions from the findings. Recommendations for policy, practice and further study are given. The references made in this study are presented after chapter 5.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The purpose of this study was to analyse intrapreneurial prerequisites and outcomes in the context of state corporations in Kenya. This chapter discusses literature related to the study. The chapter presents a definition of entrepreneurship, and then describes the concept of intrapreneurship. In reviewing literature on state corporations in Kenya, there will be a discussion of structural adjustment programmes as well as a description of the role management and employees play in fostering intrapreneurship. The review then analyses literature on how intrapreneurship is measured before presenting the theoretical and conceptual model around which the study is organised.

### **2.2 Theoretical Review**

#### **2.2.1 Definition of Entrepreneurship**

There has been a lot of attention on the subject of entrepreneurship over the past few years, arising from the discovery by economic analysts that small firms contribute to economic growth and vitality. Furthermore, many people have chosen entrepreneurial careers because doing so may offer greater economic and psychological rewards as well as some level of independence than does the employment route. The term "entrepreneurship" comes from the French verb "entreprendre" and the German word "unternehmen," both, which mean to "undertake" (Bird, 1989). The Merriam-Webster online dictionary (2012) defines an entrepreneur as one who organizes, manages, and assumes the risks of a business or enterprise.

Substantial effort has gone into creating an understanding of the psychological and sociological wellsprings of entrepreneurship. Studies on these aspects have found some

common characteristics among entrepreneurs in aspects such as the need for achievement, perceived locus of control, orientation toward intuitive rather than sensate thinking, and risk-taking propensity. Further, many have noted the common, though not universal, aspect of childhood deprivation, membership within a minority group and economic experiences during early adolescent, as typifying the entrepreneur (Bird, 1989).

This study adopted the definition by Hisrich and Peters (2002, pg. 3), that “entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resultant rewards of monetary and personal satisfaction and independence”. Further, Bird’s (1989, pg. 5) definition of entrepreneurial behaviour provided additional explanation of the concept, thus “entrepreneurial behaviour is opportunistic, value-driven, risk accepting, creative activity where ideas take the form of organisational birth, growth or transformation”.

### **2.2.2 The Concept of Intrapreneurship**

The focus of study in the field of entrepreneurship has shifted over the years. Increasingly, there has been more focus on examining entrepreneurship from an organisational perspective. Corporate entrepreneurship, corporate venturing and intrapreneurship are all terms that are used to classify entrepreneurial activities within organisations. Viewing entrepreneurship from an organisational perspective is consistent with the views of Schumpeter (as cited in Sembhi, 2002), who argued that entrepreneurship will eventually be dominated by firms that are capable of devoting more resources to innovation. Notably, Schumpeter (1934) presented some interesting reasoning on why a firm should increase its entrepreneurial activity. He pointed out that a single entrepreneur creates new profitable avenues. As a result, he indicated that more entrepreneurs innovating are good for an economy as a whole. Applying these ideas

to the firm level, the more sources of entrepreneurial activity within the firm, the more the opportunity created for the firm. He also proposed that entrepreneurial-driven economic activity leads to higher levels of income and that this relationship does not suffer from diminishing returns.

The word 'intrapreneur' or 'intrapreneurship' has evolved over the last two decades or so into business English. It is coined from the word 'entrepreneur' and represents the practice of the intrapreneur. The American Heritage Dictionary (2011) defines the intrapreneur as a person within a large corporation who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation. Thus, the intrapreneur is the one who comes up with new ideas, who develops creative responses in the organisation, who takes full advantage of opportunities and pushes for change in the organisation. He or she should have moved from an 'administrative mode' to an 'entrepreneurial mode'.

Intrapreneurship is entrepreneurship within an existing organisation. It can be defined as a process by which individuals inside organisations pursue opportunities without regard to the resources they currently control, and as doing new things and departing from the customary to pursue opportunities (Vesper, 1990). It also involves the pursuit of creative or new solutions to challenges confronting the organisation, such as the development or enhancement of old and new products and services. Further, the pursuit of new markets, or new administrative techniques and technologies for performing organisational functions may be seen as intrapreneurship. Thus, changes in strategy, organisational structures and systems and methods of dealing with competitors may all be seen as innovations (Antoncic & Hisrich, 2001). Antoncic & Hisrich, (2001) further stressed that it is inconsistent with reengineering, downsizing, and other efficiency methodologies currently being witnessed in large firms.

Intrapreneurship has been called various terms such as intrapreneuring; corporate entrepreneurship; internal corporate entrepreneurship; corporate venturing; internal corporate entrepreneurship; strategic renewal; internal entrepreneurship and venturing (Antoncic, 2007; Sharma & Chrisman, 1999). In this study the terms intrapreneurship and corporate entrepreneurship were used interchangeably.

Today's businesses would not survive in this period of rapid change and innovation without entrepreneurial competence (Drucker, 1985). Indeed, large-size companies are now turning to intrapreneurship because they are not getting the continual innovation, development, and value creation that they previously had (Menzel, Krauss, Ulijin & Weggeman, 2006). Antoncic & Hisrich (2003, pg. 7) assert that intrapreneurship is a sub-field of entrepreneurship and that intrapreneurship's broadest definition is "entrepreneurship in an existing firm". Intrapreneurship has been defined in distinct ways; as a process; as doing new things; as spirit of entrepreneurship inside the existing firm; and as creation of new organisations by an organisation (Antoncic & Hisrich, 2003).

Gapp & Fisher (2007) affirm that intrapreneurship is the practice of composing new business products and opportunities in an organisation by proactive empowerment. Intrapreneurship is "the process of uncovering and developing an opportunity to create value through innovation and seizing that opportunity without regard to either resources or the location of the entrepreneur" (Menzel, Aaltio & Ulijn, 2007, pg. 734).

Intrapreneurship can be considered as a process. Sharma and Chrisman (1999, pg. 18) explain intrapreneurship as ". . . the process whereby an individual or a group of individuals, in

association with an existing organisation, create a new organisation, or instigate renewal or innovation within that organisation”. It has also been described as “a process by which individuals-either on their own or inside organisations-pursue opportunities without regard to the resources they currently control” (Stevenson & Jarillo, 1990, pg. 25). Further thoughts on intrapreneurship regards it as “the process of uncovering and developing an opportunity to create value through innovation and seizing that opportunity without regard to either resources or the location of the entrepreneur” (Antoncic & Hisrich, 2001, pg. 497).

Intrapreneurship process has been characterized in three distinctive modes: analytical, intuitive and political. Intrapreneurs in analytical mode focused on how to implement solutions and were regarded as having analytical thinking. In the intuitive mode, Intrapreneurs focused their energies on producing new ideas for developing inventive initiatives. In this mode, they undertake initiatives that not only added value to their organisations, but also gave distinction to them and/or their employees. In the third mode, intrapreneurs focused their efforts on the political process of haggling strategies to develop results. In this process, intrapreneurs described a complex network of links that caused them to transform their early on goals (Arslan & Ezgi, 2008). The authors asserted that in all of the three modes, three stages or phases of the process emerge. These three phases are Opportunity Discovery, Opportunity Exploitation and New Means-end Relationship. This study is hinged on both the analytical and intuitive modes since it focuses on giving recommendations on how to implement solutions. In the intuitive mode, this study hoped to produce ideas that add value to state corporations.

### **2.2.3 Intrapreneurship in Organisations**

In order to develop a more sound theoretical foundation, researchers have asked three primary questions regarding intrapreneurship: what are the drivers of intrapreneurship? What are the implications of an intrapreneurship strategy? What is the nature of intrapreneurship?

Researchers began by examining factors, which they believed had the potential to influence the extent to which an organisation is entrepreneurial. This area of research focuses on the study of three primary factors that researchers have found to contribute to an organisation's ability to behave entrepreneurially: the environment, the organisation, and the individual. On the environment, it has been described that each organisation operates within the dynamics of a particular environment that presents the organisation with both opportunities as well as challenges, and as such, this external environment exerts influence on the behaviours exhibited by the organisation, including entrepreneurial efforts. Studies on the influence of the environment on a firm's degree of intrapreneurship has shown that environments characterized by heterogeneity, dynamism, and hostility are associated with higher levels of intrapreneurial behaviours. As environments exhibit greater heterogeneity in the sense that there are a greater number of market segments with differing customer needs and profiles, firms tend to be more entrepreneurial (Zahra, 1991). This same finding holds true when the environment tends to have a high level of hostility (Covin & Slevin, 1989; Zahra, 1993), and when the environment is dynamic as characterized by constantly changing conditions in which new sources of sustainable competitive advantage become necessary (Miller & Friesen, 1984).

In addition to the environment, characteristics of the organisation itself influence the degree of participation in Intrapreneurship. For instance, there is a greater level of entrepreneurship

within organisations that exhibit an organic rather than a mechanistic structure (Covin & Slevin, 1988; Tornatzky, Eveland, Boylan, Hetzner, Johnson, Roitman & Schneider, 1983). Tornatzky et. al., 1983 established that formalized, centralized structures were negatively associated with entrepreneurial behaviours. Decentralization was found to positively add to successful entrepreneurship within the firm (Russell & Russell, 1992). Furthermore, organisational values such as the acceptance and encouragement of innovative behaviours have been found to promote entrepreneurship within the organisation (Russell & Russell, 1992).

The third factor that influences an organisation's ability to behave entrepreneurially is the individual. Literature has examined the influence of the strategic direction set by top management within the organisation. The top management team are responsible for setting the overall strategy of the corporation. The inclination of the top managers toward risky, innovative, and proactive behaviours sets the tone throughout the organisation on whether these behaviours are tolerated or encouraged (Covin & Slevin, 1991). The degree to which researchers believe that top management's and the organisation's inclinations toward entrepreneurship are aligned is made clear by the fact that an organisation's level of intrapreneurship is often operationalised by measuring top management's propensity toward entrepreneurial behaviours (Covin & Slevin, 1991).

#### **2.2.4 Implications of Intrapreneurship**

Researchers have explored the link between intrapreneurship and firm performance. This stream of research has demonstrated that there is, in fact, a positive link between intrapreneurship and firm performance (Miller & Friesen, 1978; Zahra, 1996; Zahra & Covin, 1995). Thus, intrapreneurship has been recognised as a form of sustainable competitive

advantage because entrepreneurial behaviours may result in a variety of wealth-creating actions, such as expense reduction, the development of innovations, and increased efficiency efforts (Dess, Lumpkin & McGee, 1999).

Ireland, Kuratko and Covin (2003, pg. 1) go so far as to describe the intrapreneurship strategy as “a set of commitments and actions framed around entrepreneurial behaviour and processes that the firm designs and uses to develop current and future competitive advantages”. Narasimhan and Flamholtz (2007) give some reasons for encouraging corporate entrepreneurship in organisations as: to develop cost effective solution[s] to meet the challenges of global competition; to take advantage of the in-house genius; to innovate, to improve flexibility, competitiveness, and reactivity; to avoid losing business to start-ups in economies and to exploit new market opportunities.

The other question that academics have been answering is “What makes a company entrepreneurial?” In order to successfully pursue an intrapreneurship strategy as a sustainable competitive advantage, the firm must first have an orientation toward entrepreneurship. This inclination is known in literature as an intrapreneurial orientation (Dess & Lumpkin, 2005). Dess and Lumpkin (2005) posit that an intrapreneurial orientation is conceptualised as a mindset towards entrepreneurship that is revealed in the processes, practices and culture of the organisation. It is the predecessor of participation in entrepreneurship, and while entrepreneurship is considered to be the “what” behind an intrapreneurship strategy, an intrapreneurial orientation is considered to be the “how” (Lumpkin & Dess, 1996). Much of the literature on intrapreneurship in the 1990’s and 2000’s has focused on intrapreneurial orientation and its implications for the firm.

Intrapreneurship is partially responsible for successful management of service organisations. Nevertheless, public service organisations need to be well understood by intrapreneurs; they have many interested parties, long-standing organisational structures, employees with lifetime employment, and uniquely defined decisions making processes. For successful inculcation of intrapreneurship, Stull (2005) suggests the following aspects were crucial: Firstly, the leadership had to be formally in place, since any organisational entrepreneurship team must have leadership. Other factors according to Stull (2005) are people and their empowerment; learning is also critical because entrepreneurship, empowerment, and successful innovation involve learning. Further, the organisational culture is crucial; culture affects our perceptions, desires, goals, actions and feelings; doing entrepreneurship in organisations means developing a high awareness for the various cultures one encounters.

Stull (2005) also stressed on the need for rewards. The three most powerful rewards observed in academic circles are (a) money, (b) time (c) an intrinsic feeling of a job well done. Other aspects are adequate technology with less bureaucracy, commitment and community in intrapreneurial ventures, efficiency and effectiveness and relentless dedication.

### **2.2.5 Barriers to intrapreneurship in organisations**

Various studies have identified several barriers to intrapreneurship. In a competitive business environment, organisations need to search for new business ideas and opportunities, and then make the crucial arrangements to bring them to lucrative results in their organisations. However, many organisations face some difficulties in doing this. Some operational difficulties to intrapreneurship that have been noted include inadequate planning, improbable corporate expectations, insufficient corporate support, and misreading the market (Kuratko et al., 1990).

Hill (2003) stressed that intrapreneurship barriers could be categorized into four main titles: Firstly, resistance to Change; where individuals frequently resist change for the reason that they have already invested a great contract of time and force in mastering certain jobs, and fear that their asset will be wasted. Change is resisted because the future is unknown and caving in could potentially cause threat to personal status and respect. It means that innovation could strain existing power structures and relations. Secondly, the nature of large organisations; in large organisations, managers structure work in order to be able to control it. The organisation's management is forced to establish quantifiable performance standards, resulting in a lot of paperwork. The traditional corporate culture has a climate and remuneration system that is mostly fixed (Hill, 2003). Intrapreneurship is thus prevented when an organisation has poor communication and structural strongholds that block the flow of useful information (Eesley & Longenecker, 2006). In this traditional corporate culture, the guiding principles are: "to follow the instructions given; do not make any mistakes; do not fail; do not take the initiative but wait for instructions; stay within your turf; and protect your backside". This restrictive environment is of course not conducive to creativity, flexibility, independence, and risk taking - the jargon of intrapreneurs (Hill, 2003, pg. 26). Organisations that are full of unhealthy political activity, infighting, and uncooperative organisational members have a very difficult time bringing out the best in people to create better business performance (Eesley & Longenecker, 2006).

Thirdly, lack of intrapreneurial ability - An intrapreneur discovers, evaluates, and exploits opportunities to create new goods and services (Hall & Sobel, 2006). Therefore, to be able to realize intrapreneurship in a company it is necessary to have intrapreneurial tendency and ability. Fourthly, unsuitable Compensation Methods - Intrapreneurs and managers are

different. Traditional methods of rewarding such as increasing remuneration and promotion, are useful for managers to support effective work but these methods rarely work for intrapreneurs, because these methods remove them from the area in which they can be innovative, and, characteristically, intrapreneurs do not make good corporate managers. The impact of intrapreneurs is felt at the corporate level or within their business unit. They should, thus, be rewarded appropriately through a performance based bonus plan i.e. tied to the bottom line and/or have positions of authority and be decision-makers (Hill, 2003).

### **2.3 The Prerequisites of Intrapreneurship**

Research on what fosters intrapreneurship in an organisation abounds. According to Balasundaram and Uddin (2009), Hornsby and Naffziger, (1992) Kuratko, et al. (1990) and Sijde, et al. (2013), intrapreneurship is fostered by management support; work discretion; rewards/reinforcements; time availability; organisational and structure boundaries; resource availability, knowledge of the market and intrapreneurial competencies of staff. Other determinants include individual motivation; transparency, openness and communality; individual competence; enabling work environment; training and development; individual intrapreneurial orientation; and, organisational intrapreneurial orientation.

Several researchers have asserted that intrapreneurial behaviour is discouraged when the management does not support the efforts of the employees and is not tolerant of their mistakes (Hisrich & Peters, 2002; Kamffer, 2004; Kolveried & Amo, 2002). To promote innovation and intrapreneurial behaviour in the organisation the top management team should be dissatisfied with the status quo; talk to employees, suppliers and customers; they should create a vision that will not only empower employees but will also guide the independent and innovative employee. Further, the management should allow employees to come up with

creative ideas to find and implement the opportunities that lie within the overall strategy and remove anything that hinders innovation in the organisation. They should also search for and reward sponsors. It is also the management's role to keep the system open to all kinds of innovations, from value improvement, process breakthroughs, line extensions, new products and services, new ways of working together, new internal services and new organisational patterns. Further, the management needs to measure innovation and the climate for innovation by measuring the progress of each division.

Additional research by Kamfer (2004, pg.13) concluded that "great leaders create conditions that bring out people's ability to produce extra ordinary results". Kolveried & Amo, (2002) asserted that people contribute to innovation when they are asked to do so in ways that encourage them to be innovative. This implies that if the top management team (TMT) are not intrapreneurial, the whole organisation will not be intrapreneurial, and vice versa.

Research on entrepreneurial motivation identifies extrinsic rewards, independence/autonomy, and intrinsic rewards as key motivational factors, which drive an individual entrepreneur's decision to venture (Kuratko, Hornsby & Naffziger, 1997). Monsen, Saxton and Patzelt (2007) outlined incentive scheme elements that make up motivation as profit sharing, participation, success probability, pay risk, effort, autonomy motivation, job risk. Further, Heinonen and Korvela (2003) stated that an individual's motivation to be intrapreneurial is displayed by the individual's confidence in their abilities, the desire to actualise themselves at the workplace, the willingness to make responsible decisions and tolerance of uncertainty.

On rewards and communitary studies have concluded that the use of appropriate rewards can also enhance employees' willingness to assume the risks associated with entrepreneurial

activity (Hornsby & Kuratko, 2003). In addition, Heinonen and Korvela (2003) described this prerequisite to include people being rewarded well and employees' productive activities being rewarded. They further referred to communality as a feeling of group solidarity; it included open discussion of difficult decisions, work being carried out in teams in the workplace; clear knowledge of what is expected of one in the workplace and the ease with which one gets help at the workplace.

One's individual competence in a certain area is a key prerequisite of intrapreneurship. Heinonen and Korvela (2003) described it to include familiarity with the vision of the workplace i.e. the direction to be pursued in the future, eagerness to present new ideas at the workplace, expertise that is varied, and active development of oneself.

Heinonen and Korvela (2003) described the enabling environment to innovate to include sufficient authority and responsibility to carry out duties well, freedom to work spontaneously, a perceived good working environment a suitable workload and open flow of knowledge.

The authors also identified training and development as necessary in sharpening one's ability to be intrapreneurial. They described it to include one's professionalism and ability to develop their work, information sharing in work teams and across departments and the managerial and organisational support for training and development (Heinonen and Korvela, 2003).

Researchers have conceptualized intrapreneurial orientation as the degree to which the top executives within the firm demonstrated a willingness to take risks, innovate, and proactively compete with other companies (Miller, 1983). In addition, Lumpkin and Dess (2005) defined an intrapreneurial orientation as a mindset that is focused toward entrepreneurship and is

manifested in the processes, practices, and culture of the organisation. The common thread that most researchers agreed on is that an intrapreneurial orientation involves an approval and encouragement of entrepreneurial behaviours. Specifically, the entrepreneurial behaviours of innovativeness, risk-taking, and proactiveness have consistently been studied as the three primary dimensions of an intrapreneurial orientation.

The major characteristics of an intrapreneur that have been listed by various authors (Antoncic & Hisrich, 2001; Kuratko, et al., 1990; Maes, 2003, Zahra, 1991; Zahra & Covin, 1995) include multi-skilling and self confidence in the face of difficulties and discouraging circumstances. It also involves innovative skills i.e. one who is able to carve out a new niche in the market place, often invisible to others. Being results-oriented - the drive to set goals and targets and get pleasure from achieving them; risk-taking - the successful intrapreneur exhibits an incremental approach to risk taking, at each stage exposing him/her to only a limited, measured amount of personal risk and moving from one stage to another as each decision is proved. Commitment, energy and single-mindedness; desire for autonomy; ability to overcome barriers; and task/goal orientation are also characteristics of intrapreneurs.

At firm level, organisational intrapreneurial orientation is a key prerequisite of intrapreneurship. Dess and Lumpkin (2005, pg.147) stated that “firms that want to engage in successful intrapreneurship need to have an intrapreneurial orientation”. In order to establish the importance of an intrapreneurial orientation, academics have studied the construct as a firm-level phenomenon and explored the possibility of an empirical link between an intrapreneurial orientation and firm performance. The overall results of these efforts have been positive (Covin & Slevin, 1988, 1989; Wiklund, 1999).

For instance, firms with a high degree of intrapreneurial orientation and an organic organisational structure outperform those firms that have a lower degree of intrapreneurial orientation and a mechanistic structure (Covin & Slevin, 1989). Covin and Slevin (1989) further found that in a hostile environment characterized by intense competition, few opportunities, and constantly changing consumer preferences, entrepreneurial firms perform better than firms that are more conservative. Moreover, Wiklund (1999) examined whether the relationship between intrapreneurial orientation and performance is sustainable over time and found that investments in an intrapreneurial orientation actually paid-off over time as the relationship between intrapreneurial orientation and financial performance increased.

Intrapreneurism in organisations has evolved to encompass a variety of concepts: identifying and fostering employees who have what are considered to be intrapreneurial traits, developing an intrapreneurial process for part or all of a business, and developing innovation through rewarding intrapreneurial behaviour. Thus, the organisation will display a high tendency to take risks; a high tendency to engage in strategic planning activities; a high ability to identify customer needs and wants; a high level of innovation; a high ability to persevere in making vision of business a reality; and a high ability to identify new opportunities (Menzel, 2008).

#### **2.4 The Outcomes of Intrapreneurship**

The relationship between intrapreneurship and firm performance has been examined extensively in literature. Researchers have studied financial and non-financial consequences of adopting intrapreneurship. Intrapreneurship has been found to enhance an organisation's knowledge of customers, competitors, suppliers and regulatory agencies. Furthermore, literature in human resources management has shown that firms with a higher degree of intrapreneurial orientation adopt human resources management practices that encourage

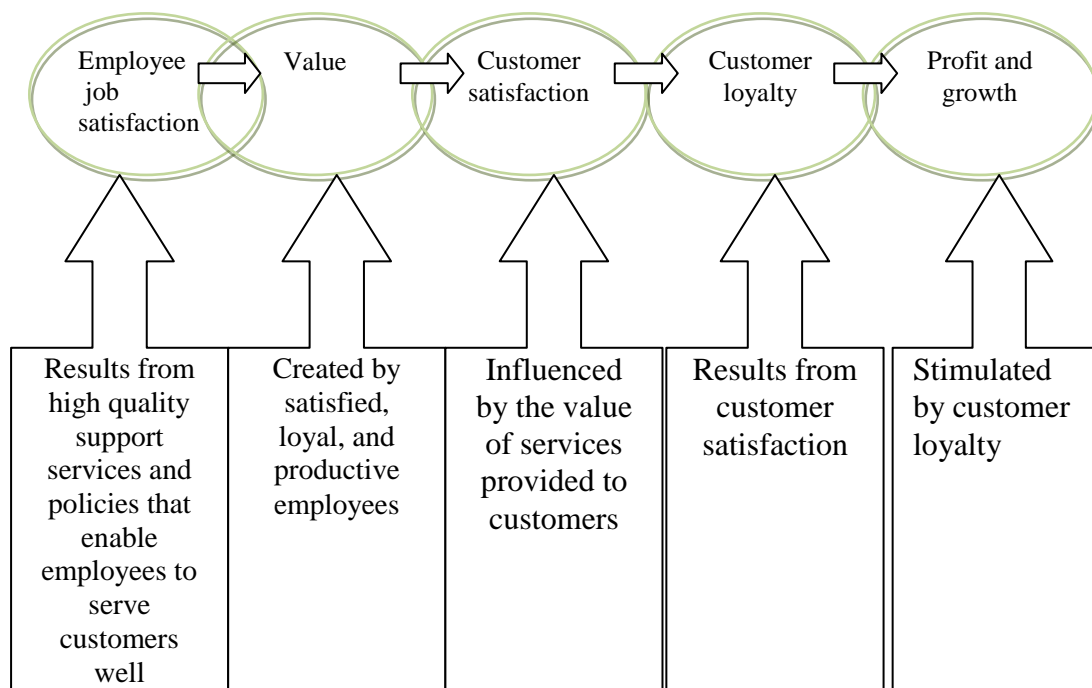
innovation and risk-taking, have a long-term rather than short-term perspective, and have a higher level of employee participation in training programs (Antoncic & Antoncic, 2011; Morris & Jones, 1993).

Several researchers have found links between performance and the presence of intrapreneurship (Antoncic & Hisrich, 2000; Bailey 1992; Kuratko & Hornsby, 1998; Marcus, Dennis & Clinton, 2000; Morris & Sexton, 1993; Stull, 2005). Morris and Sexton (1993) found higher performance in large firms with a high level of entrepreneurial intensity. Gough (1993) posited that firms with a high level of in-house innovation outperformed firms who pursued opportunities through joint ventures or acquisitions. Bailey (1992) found that efforts to encourage and develop intrapreneurship in large firms resulted in significant profits. Further, Kramer and Venkataraman (1993) showed that rapid, sustained growth is a characteristic of entrepreneurial enterprises.

In fact, identifying and fostering intrapreneurship within a large firm is justified precisely because the intrapreneurs will develop new products and ideas. These ultimately shall contribute to improved firm performance, leading further to customer satisfaction and employee job satisfaction (Adams, Wortman & Spann, 1988; Antoncic & Hisrich 2001; Cornwall & Hartman, 1988; de Chambeau & Mackenzie, 1986; Ellis & Taylor, 1988; Pinchot, 1985; Zahra 1991, 1995; Zahra, Nielsen & Bogner. 1999). The results of intrapreneurship can include wide-ranging benefits to the firm such as increased process efficiencies, increased market share, or increases to the bottom line. As innovation becomes part of the firm's values, the underlying ineffective culture undergoes an intense change; turnover of top talent decreases as employees realize the firm's commitment to their ideas and work; leadership

development is also realised through mentoring and formal leadership development programs as well as recruitment of talent.

Heskett and Sasser (2010) summarised the outcomes of intrapreneurship to include employee job satisfaction, value addition that leads to customer satisfaction and loyalty, and ultimately achieving profits and growth of the firm. Figure 2.1 demonstrates the linkages.



Adapted from Heskett and Sasser (2010)

**Figure 2.1 The Chain Linking the Outcomes of Intrapreneurship**

From Figure 2.2 it is evident that profits and growth in an organisation are a consequence of customer loyalty, which stems from a satisfied customer. Customer satisfaction on the other hand, is influenced by the value of services provided to the customer by the employees; satisfied, loyal and productive employees create this value. An employee's satisfaction results

from high quality support from the employer that is based on the services and policies that govern the work place.

Given the high level of concurrence that intrapreneurial activity should lead to higher long-term performance, the stage is set for an empirical assessment of the prerequisites and outcomes of intrapreneurship.

## **2.5 Empirical Review**

There is a powerful impulse amongst enterprise development practitioners to measure intrapreneurship in some way. According to Heinonen & Korvela (2003), intrapreneurship has been operationalised in empirical research in many diverse ways. Some of the variables used to model intrapreneurship are innovativeness/innovation; risk taking; proactiveness; competitive aggressiveness; prior venture experience; slack resources/ resource availability; autonomy; rewards and sanctions and centralisation of decision making. Others are specialisation; organisational support; time availability; organisational structure; organisational communication; environmental scanning; organisational values/culture; self-renewal; new business venturing and ownership (Antoncic & Hisrich, 2001; Kuratko, et al., 1990; Maes, 2003, Zahra 1995, 1991; Zahra & Covin, 1995). These variables refer to practices or circumstances that can, in some degree, be controlled by the organisation.

Previous studies on intrapreneurship by Stull (2005) based on non-profit organisations focused on the interaction between individuals and organisational mechanisms and found that factors such as trust, reciprocity and person organisation fit, influence the entrepreneurial orientation of employees, and this orientation often leads to entrepreneurial projects that have significant positive outcomes for an organisation. Zahra (1991) focused on the manufacturing

corporations in the USA and found that internal organisational characteristics influence intrapreneurship. The study also found that intrapreneurship improves performance. Russell and Russell (1992) confirmed this study in a study of 77 strategic business units in the USA, and Antoncic and Hisrich (1998) in a study of Slovenian firms. In addition, improved organisational results, usually in terms of growth and profitability, are thought to be a result of intrapreneurship (Antoncic & Hisrich, 1998; Zahra, 1991; Zahra & Covin, 1995). Smart and Conant (1994) captured not only the dynamic process in dimensions of innovation, risk-taking and Proactiveness but also attitude towards strategic planning processes that reflected the extent to which a firm practiced business venturing.

In Kenya, studies in intrapreneurship have focused on various sectors: Mucee (2002) focused on private organisations listed in the Nairobi stock exchange. He found that intrapreneurship culture is lacking. Karimi (2005) focused on the success factors of intrapreneurial ventures in public universities and found that the sustenance of intrapreneurial ventures required staff and management that had intrapreneurial competencies. Kitheka (2005) focusing on the civil service in Kenya, studied factors that hinder civil servants from being entrepreneurial and found that there is discouragement from the top management team to be intrapreneurial. Ayiro (2005) carried out a case study of one government department in Kenya. The researcher measured management support, organisational characteristics, rewards and resource availability and found that the organisation did not embrace methods of stimulating innovation, nor was it using the creative energy of employees by giving them resources and innovative independence. In addition, he found that the organisation did not embrace new approaches to generate competitive products or services. He thus recommended the need for extrinsic rewards commensurate with the value of the intrapreneurs' contributions in order to encourage them to initiate new projects.

These limited researches left a gap in knowledge such that it was not possible to state conclusively the status of intrapreneurship in state corporations, which this present study has bridged. Specifically, this study increased the sample size of public sector organisations studied, and the number of variables tested so as to make comparisons between the sectors represented. This study has thus extended knowledge in the area of intrapreneurship by studying the prerequisites of intrapreneurship in state corporations and how these relate with organisational outcomes.

### **2.5.1 State Corporations in Kenya**

The study of state corporations in Kenya requires a brief analysis of the structural adjustment programs (SAPs) introduced in the country in the 1970s and 1980s. The World Bank led SAPs recognized that lending in developing countries required that the recipient states had to use the borrowed capital more efficiently, increase domestic savings and production, and develop a sustainable pattern of investment. Specifically in Kenya, the conditions placed for lending included encouragement of labour-intensive investment; reform of the public sector operations to encourage divestiture and efficiency; and reassessment of price and fiscal incentives that were key to resource mobilization. These conditions were felt more in the parastatal sector because the parastatals were heavily reliant on the exchequer yet the SAPs were calling for reduced financial support to state corporations to spur improved performance (ROK, 1986).

These reforms continued but with limited impact. Consequently, in June 2003 the Government launched a new blue print referred to as the Economic Recovery Strategy for Wealth and Employment Creation (ERS). Here, it reiterated the same strategies as those

contained in SAPs. In implementing these strategies, the Government was requiring all Boards of state corporations to sign performance contracts with the government and the Chief Executive Officers to sign performance contracts with their respective Boards. This was to ensure that there was reduction or altogether elimination of reliance on exchequer funding for government agencies, which were expected to generate revenue or make profit. It would also ensure that there was an objective basis for divesting loss making government agencies; it would compel the agencies to give a return to the shareholders (mainly the government) by paying dividends or surplus. Further, the process would lead to government ministries/departments improving service delivery to the public (Kobia & Mohammed, 2006)

The signing of performance contracts in time was expected to trickle down to the lowest cadres of public servants. All this was in a bid to revamp these corporations by ensuring improved and sustained performance as well as service delivery. Hitherto, state owned enterprises had a culture that had not been intrapreneurial. Shirley and Nellis (1991, pg. 17) stated it thus: “When state corporations are required to keep prices artificially low, not only do budget deficits and debts grow and shortages worsen, but public and private investment decisions are distorted and the under-priced resources wasted. When State Corporations hire excess workers to promote employment, labour productivity falls and unskilled labourers may end up earning more than the private sector, at taxpayers’ expense. When state corporations receive subsidies for non-commercial objectives, management tends to become lax and the resulting inefficiencies create shortages and bottlenecks throughout the economy.” Thus, state corporations needed to be studied further in order to assess how productivity could be improved. This study attempted to do this by analysing the prerequisites and outcomes of intrapreneurship in state corporations.

## 2.6 Theoretical Framework

This study was based on the theory of economic development as postulated by Schumpeter (1934). He argued that the entrepreneur is the main actor in economic development due to his/her innovative activities. The Schumpeterian school of thought stated that; the entrepreneur is the founder of a new firm and an innovator who breaks up established routines and opposes the old ways of doing things; an entrepreneur is a creative non-conformist. Schumpeter's contribution was his argument that economic development is a process of Creative Destruction which occurred through innovation and that innovation is primarily the result of individuals defying a status quo and bringing something new to markets (Phillips, 2011). Entrepreneurs break prevailing moulds and create new orders. On their part Bosma, et. Al. (2010) and Parker (2011) argued that intrapreneurship was a concept closely related to entrepreneurship, emphasizing the entrepreneurial process and innovativeness. Intrapreneurship, however, takes place within the organisation (in this study in state corporations). The intrapreneur acts like an entrepreneur in that he/she realizes his/her own ideas without being the owner of the enterprise. The basis of intrapreneurship is recognizing an opportunity, exploiting it and trusting that exploiting the opportunity in a new way that deviates from previous practice will succeed and support the realization of the organisation's aims and profitability.

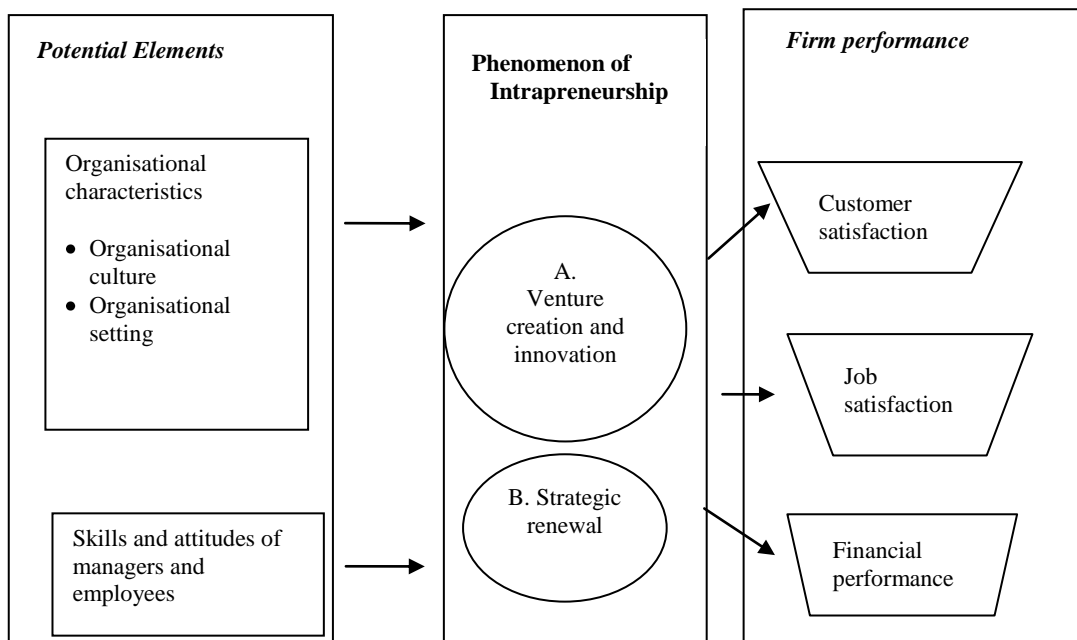
Research into the nature, prerequisites and effects of firm-level entrepreneurial activities has grown over the past 25 years. Following is a discussion of some of the models developed by various authors:

### 2.6.1 Heinonen and Korvela (2003) Model

The Heinonen and Korvela (2003) model ordered the prerequisites and outcomes of intrapreneurship, as well as the phenomenon of intrapreneurship into the following variables:

- i) The phenomenon of intrapreneurship that includes venture creation and innovation as well as strategic renewal
- ii) The prerequisites of intrapreneurship that include management activities, organisation culture, organisation setting as well as the skills and attitudes of employees
- iii) The organisational outcomes of intrapreneurship which include customer satisfaction, job satisfaction and financial performance

Figure 2.2 illustrates the interrelationships as identified by the authors.



Source: Heinonen and Korvela (2003 pg 3)

**Figure 2.2 Heinonen and Korvela (2003) Model of Intrapreneurship**

Heinonen and Korvela (2003) stressed that the phenomenon of intrapreneurship is displayed in a company's commitment to innovation, with its three components namely: product

innovation, proactiveness, and risk taking. The authors explained these three components to include, the firm's ability to create new products or modify existing products, ability to compete favourably in the market place and the ability of the firm to willingly take business risks

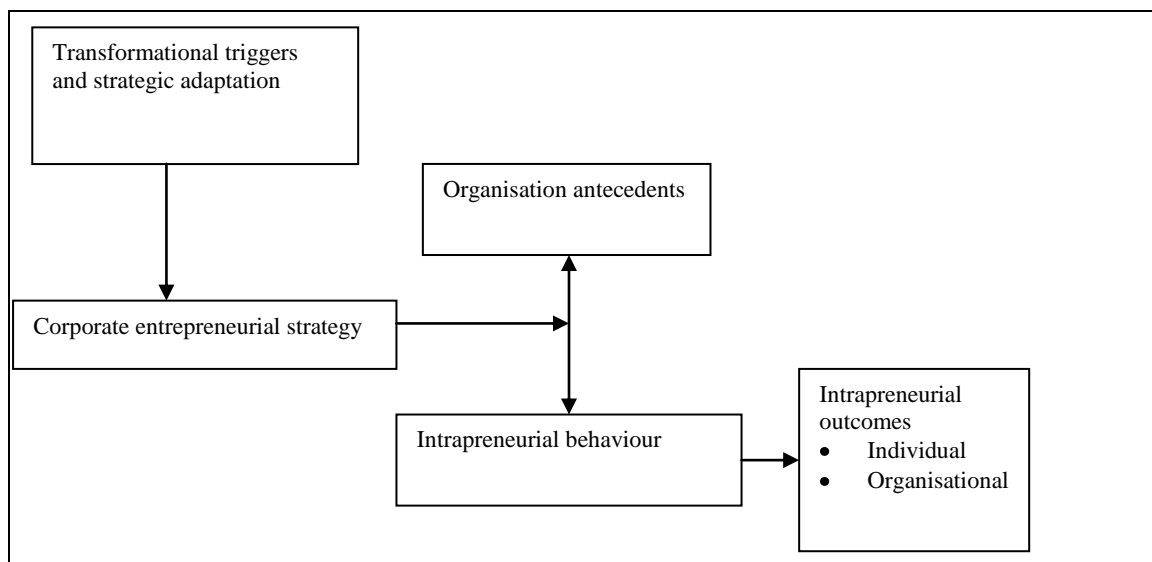
Another important point from this model is that the potential elements of intrapreneurship are both organisational and managerial. Management is expected to act as a facilitator and promoter of intrapreneurship. The authors see organisational setting as the way work is organised, power and responsibility shared in achieving organisational goals. Further, within the practice of intrapreneurship, the individual is the key actor. The individual skills and attitudes referred to in literature as the intrapreneurial orientation, are the capabilities and willingness of any potential intrapreneur to act intrapreneurially.

According to the model, the firm performance would therefore be the outcome of intrapreneurship. Intrapreneurship can give grounds for competitive advantage of an existing organisation. The manifestations of such competitive advantage may be financial performance, and non-financial manifestations, such as customer satisfaction as well as job satisfaction of the employees.

The current study relied on Heinonen and Korvela (2003) model by building on the potential elements as prerequisites and firm performance variables as the outcomes in order to investigate these within the context of state corporations in Kenya.

### 2.6.2 Kuratko and Hornsby 1998 Model

Kuratko and Hornsby (1998) stated that a transformational trigger, one that requires a major change, causes executive management to select an adaptive strategy, one of which is a corporate entrepreneurial strategy. When an organisation chooses a corporate entrepreneurial strategy, certain antecedents including management support, use of rewards, supportive structure, and resources must be present to influence managers to behave intrapreneurially. The greater the manager perceives the existence of the organisational antecedents the higher the probability of the decision to behave intrapreneurially. Intrapreneurial behaviour is believed to lead to outcomes that are perceived by both the individual and the organisation. Figure 2.3 displays the interconnection of intrapreneurial variables as illustrated by the authors.



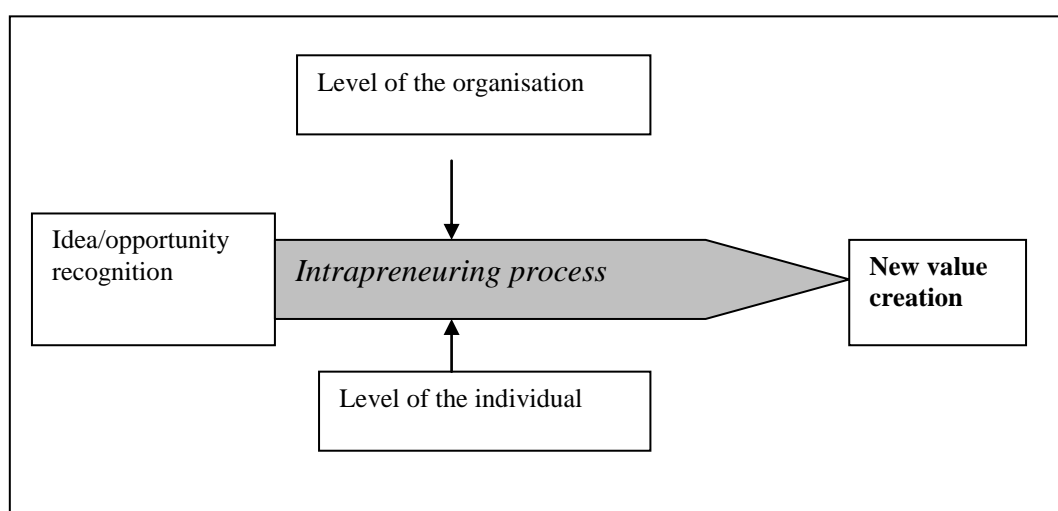
Source: Kuratko and Hornsby (1998 pg 6)

**Figure 2.3 Kuratko and Hornsby (1998) Model of Corporate Entrepreneurship**

The works of Kuratko and Hornsby (1998) are useful in this study since they stress that for intrapreneurial outcomes to exist there has to be the interplay of both organisational antecedents and individual intrapreneurial behaviour. Both issues were tested in this study.

### 2.6.3 Maes's 2003 Model

Maes (2003) aimed at clarifying the concept of intrapreneurship and its measures. He postulated that the intrapreneuring process operated at the core of the intrapreneurship construct and was executed through the ongoing interaction of two main process layers: the organisation and the individual. The process starts with opportunity recognition and ends with new value creation (Figure 2.4).



Source: Maes (2003 pg.13)

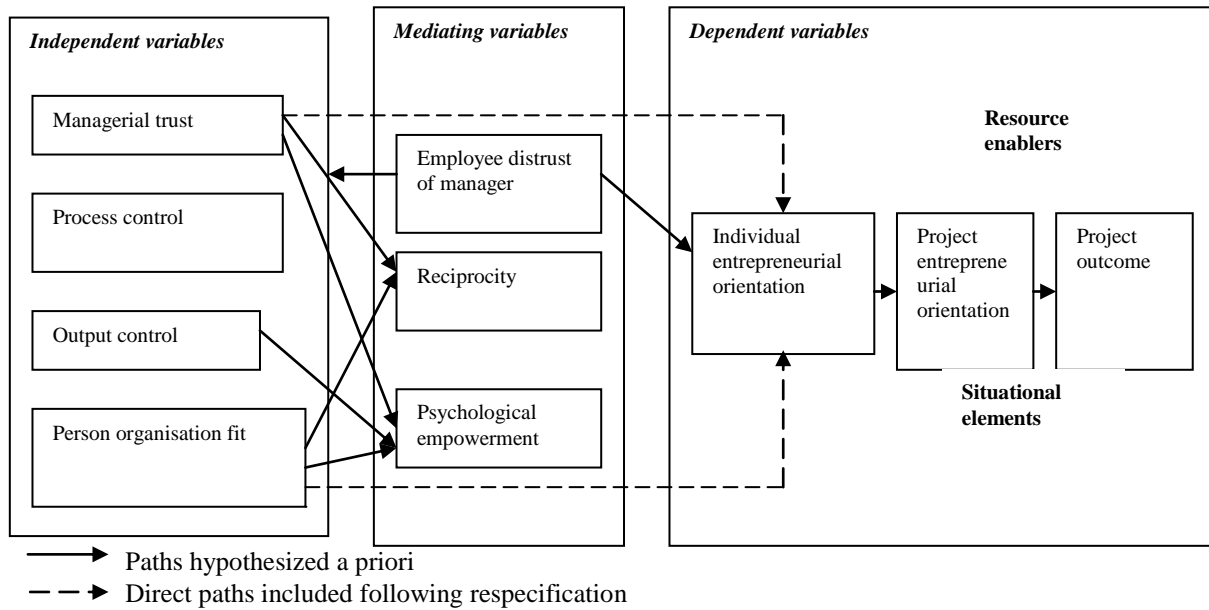
**Figure 2.4 Intrapreneurship construct based on Maes, 2003**

This model, though simplified, is vague on the new value that is created, but it contributes to this study by emphasising that intrapreneurship stems from the recognition of new ideas and opportunities. Further, the intrapreneurial process involves both individual and organisational interventions.

### 2.6.4 Stull's 2005 Model

Stull (2005) also aimed to clarify the concept of intrapreneurship and its measures. He postulated that a firm's intrapreneurial outcomes were as a result of an individual employee's

intrapreneurial orientation. However, for the individual to develop intrapreneurial orientation there was need for them to trust their managers, perceive reciprocity and fit in the organisation. Figure 2.5 illustrates this relationship further.



Source: Stull (2005 pg 46)

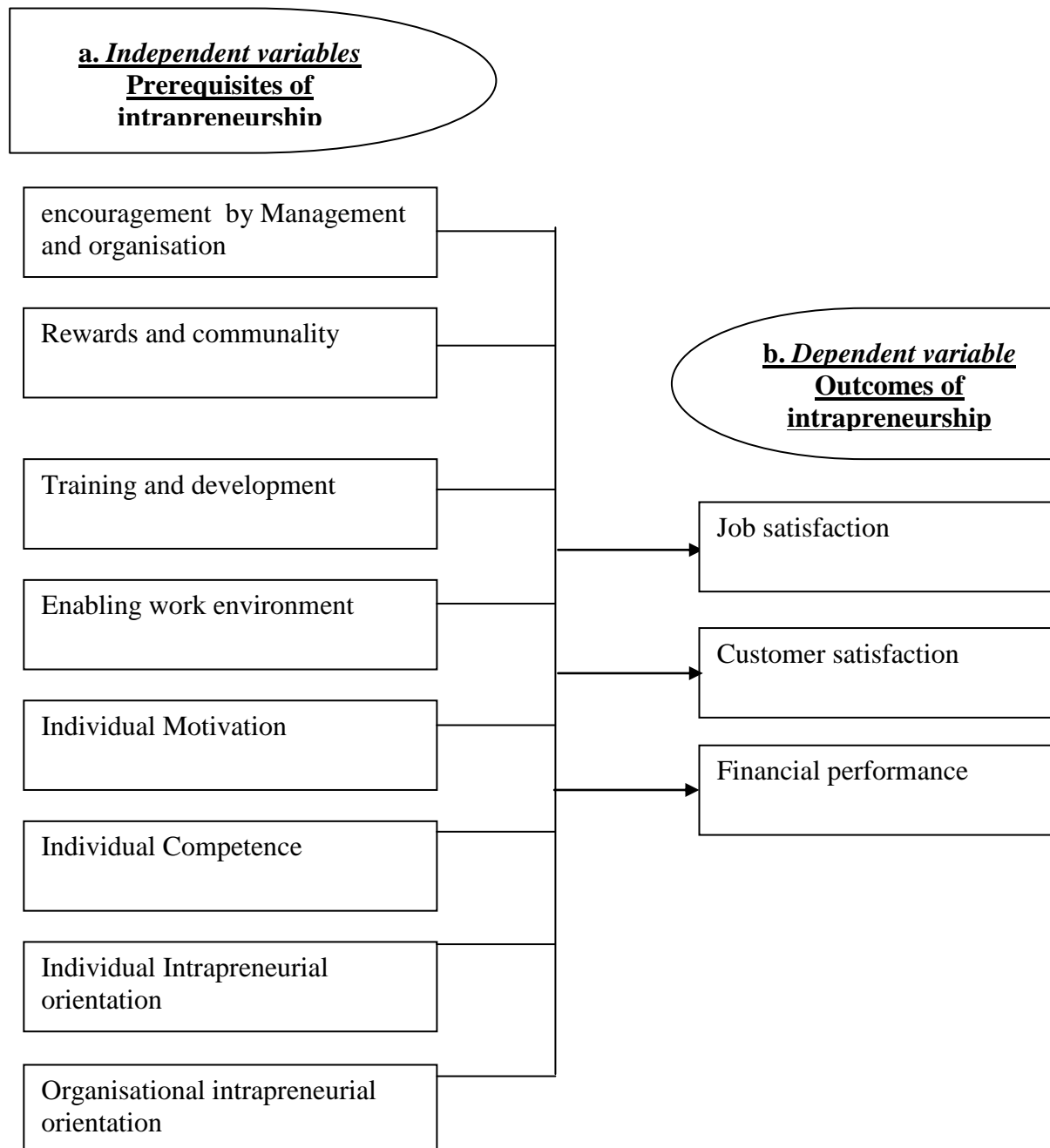
**Figure 2.5 Model for Understanding the Factors Facilitating Intrapreneurship**

Stull (2005) model built on Mae's (2003) model, emphasising that it is not just the idea recognition but also the orientation of an individual to act intrapreneurially that resulted in an intrapreneurial project. This orientation had to get support from management and the organisation itself. These are factors that were built onto the conceptual model of the current study.

## 2.7 The Conceptual Framework for this Study

Intrapreneurship requires several factors to interplay in order to be realised. An intrapreneurial organisation will reap several advantages that are a measure of its success. The following

conceptual model borrowed from the models discussed in section 2.11, especially Miller's (1983), Kuratko and Hornsby's (1998) and Stull's (2005) models.



Source: Author

**Figure 2.6 The Conceptual Framework**

This model views the prerequisites of intrapreneurship as being both organisational and individual aspects and activities that encourage and result in intrapreneurship. The organisational prerequisites include encouragement by management and organisation; rewards and communality; enabling work environment; training and development; and organisational intrapreneurial orientation. The individual prerequisites include individual motivation, individual competence, and individual intrapreneurial orientation. The model further looked into employee perceptions of the following intrapreneurial outcomes, namely job satisfaction, customer satisfaction, financial performance

There is a link between the three outcomes of intrapreneurship in this study; Profits and growth in an organisation are seen as resulting from customer loyalty, which stems from a satisfied customer. Customer satisfaction on the other hand is regarded as being influenced by the value of services provided to the customer by the employees. Such value is created by satisfied, loyal and productive employees. On the other hand, an employee satisfaction is considered to be the result of high quality support from the employer that is based on the services and policies that govern the work place.

The relationship between the prerequisites and outcomes of intrapreneurship displayed in this model formed the basis of the null hypotheses that were tested in this study:

*H<sub>01</sub>: There is no significant difference between intrapreneurial prerequisites in state corporations in Kenya*

*H<sub>02</sub>: There is no significant difference between Kenyan state corporations' with respect to the outcomes of intrapreneurship*

*H<sub>03</sub>: There is no significant relationship between intrapreneurial prerequisites and employees' job satisfaction in state corporations of Kenya*

*H<sub>04</sub>: There is no significant relationship between intrapreneurial prerequisites and employees' perception of customer satisfaction in state corporations of Kenya*

*H<sub>05</sub>: There is no significant relationship between intrapreneurial prerequisites and employees' perception of financial performance in state corporations of Kenya*

## **2.8 Summary of Literature Review and Research Gap**

The literature reviewed has highlighted theoretical dispositions of intrapreneurship. Intrapreneurship has been discussed as the process of creating something new and of value by devoting the necessary time and effort, assuming the accompanying financial, psychological and social risks and receiving the resultant rewards; intrapreneurship exists in an established organisation. The chapter has described the events that have catapulted the state corporations into performance panic. These have been due to World Bank led SAPs and the State's financial constraints demanding that state corporations work towards self-sufficiency or face privatisation.

The chapter has further discussed various researches on intrapreneurship carried out in various countries, including Kenya, which left a gap in knowledge such that it is not possible to state conclusively the status of intrapreneurship in state corporations in Kenya. Therefore, this study attempted to fill the gap by increasing the number of variables tested. This study has also extended knowledge in the area of intrapreneurship by studying the prerequisites of intrapreneurship in state corporations and how these relate with organisational outcomes.

The conceptual model around which this study is centred posits that intrapreneurial outcomes in an organisation are determined by the skills and attitudes of employees as well on certain managerial activities that influence the organisational cultures and settings.

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Introduction**

This chapter discusses the research methodology, by describing the research design, the population of study, sampling procedures, the data collection instruments and procedures and how the data were analysed.

### **3.2 Research Design**

This study was a cross sectional explanatory survey design. Saunders et al. (2009) describes an explanatory study as one that establishes causal relationships between variables. This therefore would explain the relationship between the prerequisites and outcomes of intrapreneurship. A survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to certain variables (Mugenda & Mugenda, 1999). Survey research collects data in a standardised way to a large number of respondents. This approach yielded data that was used to examine relationships and dispositions as well as describe patterns of relationships before making causal inference (Nachmias & Nachmias, 2002). Further, the cross sectional design as well as inferential statistical analysis were used to organise, describe and summarise data collected. The advantage of using the cross-sectional approach is that it allowed the researcher to carry out the study in the natural and real life setting.

### **3.3 Operationalisation and Measurement of Variables**

Table 3.1 identifies how the independent and dependent variables of the study were operationalised and measured.

**Table 3.1 Operationalisation and measurement of variables**

<b>Variables</b>	<b>Type</b>	<b>Operationalisation</b>	<b>Measurement</b>
<b>Prerequisites of intrapreneurship</b>			
1. Encouragement	Independent	5-point Likert scale	Scale of 4 – strongly agree 3 – agree 2 – disagree 1 – strongly disagree
2. Rewards and communality	Independent	5-point Likert scale	
3. Training and development	Independent	5-point Likert scale	
4. Enabling work environment	Independent	5-point Likert scale	
5. Org. intrapreneurial orientation	Independent	5-point Likert scale	
6. Motivation	Independent	5-point Likert scale	
7. Competence	Independent	5-point Likert scale	
8. Individual intrapreneurial orientation	Independent	5-point Likert scale	
<b>Outcomes of intrapreneurship</b>			
9. Job satisfaction	Dependent	5-point Likert scale	0 – cannot tell
10. Customer satisfaction	Dependent	5-point Likert scale	
11. Financial performance	Dependent	5-point Likert scale	

Table 3.1 presents the variables that were measured in this study. The independent and dependent variables were all operationalised using a five-point Likert scale with responses weighted from zero to four depending on agreement levels.

### **3.4 Population**

The population of a study is the full set of cases from which a sample is taken (Saunders et al., 2009). For this study, it was employees of eight state corporations in Kenya, which formed the unit of analysis. The eight were selected from the list of 121 state corporations in Kenya

(Republic of Kenya, 2004). State corporations in Kenya are classified into eight broad functional categories or sectors based on mandate and core functions. The sectors are financial, commercial/manufacturing, regulatory, public universities, training and research, service, regional development authorities, and tertiary/training state corporations (Republic of Kenya, 2004). Appendix 3 contains a list of the eight sectors of state corporations in Kenya. The population of staff members in the eight state corporations was 4,000 (PSC, 2006).

### **3.5 Sampling**

Probability sampling was used to select survey respondents. The eight state corporations were sampled using stratified random sampling method. Appendix 3 contains the distribution of the target population. Each category of state corporations in the sampling frame comprised a sampling stratum. One organisation was randomly selected from each stratum. This not only ensured adequate representation from each sector but also enabled cross comparison among the sectors. The selection of one organisation per strata was necessitated by financial and time constraints. However, the number of sampling units in each stratum is not the same, so the sampling was a disproportionate stratified sample (Nachmias & Nachmias, 2002).

Within the organisation, a systematic random sample of at least thirty cases of the managers and employees were selected to participate in this study. The number of 30 cases was justified by Mugenda & Mugenda, (1999) and Peterson (1982), who recommended the need to have a minimum sample size of 30 respondents because estimates stabilize with such a number of respondents. To carry out the systematic sampling, a list of staff members was obtained from the organisation. The sampling fraction was obtained by dividing the number of staff by 30 then picked every  $n^{\text{th}}$  person on the list based on the fraction.

Five respondents were selected purposively for interviews. Three were senior managers in three state corporations and two senior officers from the Inspectorate of State Corporations. Thus, the sample size comprised of 245 respondents, representing 6.125% of the population of the study.

### **3.6 Data Collection Instruments**

This study collected primary data. The main data collection instrument was a questionnaire for employees in state corporations (see appendix 2). An interview schedule was also utilised to guide discussion with the five respondents who were sampled to be interviewed (see appendix 3). The questionnaire items were divided into two sections: the first section contained general questions about the respondents' biodata as well as general questions about the organisation. The second section was the intrapreneurship assessment scale. Here, for each variable in this study, a set of questions on a five point frequency rating scale were posed for the respondent to select the option that was closest to their views. The questionnaire items picked from those previously used by other researchers (Heinonen & Korvela, 2003) to measure the intrapreneurial characteristics of the organisation and its managers, but were adapted, and modified to suit the present research context.

The survey required information about the perceived potential prerequisites and outcomes of an organisation's intrapreneurship. Perceptual measures were used in this study and are justified because they have been used widely in previous research and because they are useful in providing greater understanding of relationships in the intrapreneurship model. They are also highly detailed and provide accurate assessments of conditions within a firm. Further, they are practical in their convenient administration and facilitating uniform interpretation (Antoncic & Hisrich, 2001; Lyon, Lumpkin & Des, 1999). Dess and Robinson (1984) and

Jennings and Young (1990) found that subjective measures of certain financial measures correlated significantly with their objective counterparts; the authors suggest that such subjective measures could be used when objective indicators are unavailable. Sapienza, Smith and Gannon (1988) examined the advantages and disadvantages of objective versus subjective measures and concluded that both types of data can enrich a study. It was on this basis that this study adopted perceptual measures for all the variables in this study.

The measures contained in the scales were selected according to their congruence with the concepts and items to be studied. The items were adopted from instruments contained in Robbins and Coulter (1999), Pinchot Website (1999), Liu, Xueming and Yi-Zheng (2002), Hinonen and Korvela (2003) and the Corporate Entrepreneurship Assessment Instrument (CEAI) developed by Kuratko and Morris (2002). Heinonen and Korvela (2003) developed an instrument for measuring corporate entrepreneurship among employees while Kuratko and Morris (2002) developed the CEAI mainly for use amongst managers. Both were however very similar and useful in developing the final instrument used in this study.

### **3.7 Pretesting and Establishing the Reliability and Validity of Research Instruments**

The research questionnaire was pretested in one state corporation that was conveniently sampled. The organisation was convenient because it was geographically close to the researcher at the time. Pretesting was done to refine the questionnaire and to assess the response time, which was found to be approximately 20 minutes. Pretesting was also carried out to test the instrument for reliability using the Cronbach Alpha test of reliability. Alpha (Cronbach) is a model of internal consistency, based on the average inter-item correlation or which is usually interpreted as the mean of all possible split-half coefficients (Cortina, 1993). The face, construct and content validity of the instruments was checked as well, by noting

items in the questionnaire that the respondents found difficult. Pretesting, thus, allowed the revision of instruments based on the outcomes. The pretesting organisation was not included in the study. The results of the Cronbach Alpha measure of reliability was as follows:

**Table 3.2 Cronbach Alpha Measure of Reliability**

<b>Variable</b>	<b>Number of items</b>	<b>Cronbach Alpha</b>
All the prerequisites of intrapreneurship	70	.909
Job satisfaction	6	.805
Customer satisfaction	6	.822
Financial performance	3	.814

Source: Survey data (2010)

As noted in Table 3.2 the prerequisites of intrapreneurship scale of 70 items had a reliability score of  $\alpha = 0.909$ , which was deemed adequate because, according to Mugenda and Mugenda (1999, pg. 96), “a coefficient of 0.80 or more implies that there is a high degree of reliability of the data”. The outcomes of intrapreneurship scales also showed high levels of reliability, all greater than  $\alpha = 0.8$ .

### **3.8 Data Collection Procedures**

Authority to collect data was sought from the Ministry of Education, Science and Technology. After sampling had established the organisations to be included in the study, letters of introduction were sent in advance requesting to be allowed to collect data. Follow-up telephone calls were then made to a contact person within the organisation to inform them on the impending research and appointment dates were set. The researcher trained and prepared two research assistants to assist in data collection and wrote introduction letters for each to inform the organisational contact person that the person was representing the project. The researcher and assistants dropped questionnaires for each potential respondent and collected

the filled questionnaire as was agreed. After several follow-up visits, the researcher felt that the collected responses, 182 out of the 245 respondents targeted for questionnaires, representing 74.2% response rate, were adequate in view of limited finances and time. The researcher then carried out interviews with five key informants. Three were senior managers in three state corporations. They were interviewed to give a general picture about intrapreneurship in state corporations and to corroborate the information that was gathered from other employees using questionnaires. Two other senior officers from the Inspectorate of State Corporations were also selected for interviews. They were selected in order to address global and policy issues concerning state corporations.

### **3.9 Analysis and Interpretation of Data**

Data were cleaned, arranged, coded, and entered into the database. Data were analysed by use of descriptive and inferential statistics using the Statistical Package for Social Sciences (SPSS) version 12 and Microsoft Excel computer packages as tools for data analysis. Data collected through interviews was summarised and reported as narratives while data collected through questionnaires was analysed quantitatively in six levels as follows:

Level 1: Data on background information was summarised and presented in frequency tables. These were data on respondents' age, gender, education level, and years employed in their respective organisations.

Level 2: Data from the frequency rating scales measuring intrapreneurship were arranged, coded and organised in terms of the eight prerequisites of intrapreneurship (the independent variables ) and the three outcomes of intrapreneurship (the dependent variables). The results were presented in frequency tables.

Level 3: Each variable had been measured using five point Likert scales. The mean of the summation of the weights yielded a score for each of the eight prerequisites of intrapreneurship and three outcomes of intrapreneurship. The scores were further disaggregated by sector or category of state corporation.

Level 4: Results from level three were used to test  $H_{01}$  and  $H_{02}$  using Analysis of Variance (ANOVA) to establish cross-sectoral comparisons of the existence of the prerequisites in the eight categories of state corporations and the extent of the outcomes of intrapreneurship in these categories. The study employed the F statistic to test the hypotheses at 95 percent confidence interval.

Level 5: For objectives three, four and five, correlations of the variables were used to determine the relationship of the main variables of intrapreneurial prerequisites and outcomes. The Pearson Product Moment Correlation Coefficient (Pearson  $r$ ) was used in this study. Pearson  $r$  is a measure of the magnitude and direction of the linear relationship between two variables (Mugenda and Mugenda, 1999). The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative). The absolute value of the correlation coefficient indicated the strength, with larger absolute values indicating stronger relationships. Significance was tested at 0.05 level of significance. The significance of each correlation coefficient is also displayed in correlation tables. The significance level (or p-value) assesses the probability that the findings occurred by chance. If the significance level is very small (less than 0.05) then the correlation is significant and the two variables are linearly related. If the significance level is relatively

large, for example, 0.50 or more, then the correlation is not significant and the two variables are not linearly related.

Level 6: To establish the relationship between the independent and dependent variables, hypotheses testing and further analysis was performed using stepwise multiple regression analysis. Generally, multiple regressions are ideal for prediction and estimation (McClave et al., 2001). The Stepwise regression analysis technique is a variant of the multiple regression analysis models which is designed to select from a group of independent variables (IVs) the one variable at each stage that has the largest correlation ( $r^2$ ), and hence makes the largest contribution to the model. The program typically stops admitting IVs into the equation when no other IV makes a contribution that is statistically significant at a level specified by the researcher. Thus, the stepwise procedure enabled the establishment of the key prerequisites of intrapreneurship that have a determinant effect on the outcomes of intrapreneurship.

The following equation represents the model that explained the relationship between the prerequisites and outcomes of intrapreneurship:

$$Y_i = \beta_0 + \beta_1 (X_1)_i + \beta_2 (X_2)_i + \beta_3 (X_3)_i + \dots + \beta_8 (X_8)_i + \epsilon_i$$

Where:

$Y$  = Dependent variable (1. Job satisfaction score, 2. Customer satisfaction score or 3. Financial performance score)

$X_{1-8}$  = Independent variables (1. Management and organisational encouragement, 2. Individual motivation, 3. Rewards and communality, 4. Individual competence, 5. Enabling work environment, 6. Training and development, 7. Individual Intrapreneurial orientation or 8. Organisational Intrapreneurial orientation)

$\beta_0$  = The deterministic proportion of the model that estimates  $y$

$\beta_i$  = Determines the contribution of the independent variable  $x_i$

$\epsilon$  = Random error for the outcomes that is not explained by the independent variables.

For hypothesis testing the following model applied for the two tailed test at .05 significance level

$$H_0: \beta_I=0 \text{ or } H_a: \beta_I \neq 0$$

In this equation, the  $\beta$ s are the regression coefficients, representing the amount the dependent variable  $y$  changes when the corresponding independent changes 1 unit. The  $\beta_0$  is the constant, where the regression line intercepts the  $y$  axis, representing the amount the dependent  $y$  will be when all the independent variables are 0.

Associated with multiple regression is  $R^2$ , multiple correlation, which is the percent of variance in the dependent variable explained collectively by all of the independent variables. The values of  $R$  squared range from 0 to 1. Small values indicate that the model does not fit the data well. The sample  $R$  squared tends to optimistically estimate how well the model fits the population. Adjusted  $R$  squared attempts to correct  $R$  squared to more closely reflect the goodness of fit of the model in the population.  $R$  Squared was used to help determine which model was best. The model chosen had a high value of  $R$  squared that did not contain too many variables.

Regression tables in SPSS also include the coefficients sub-table. The unstandardised and standardised coefficients are the coefficients of the estimated regression model. The standardized version of the  $b$  coefficients are the beta weights, in units of standard deviations used when the variables are measured in different units (Gujarati, 2009). In this study, the unstandardised coefficients were used for interpretation because the data was already standardised into percentages prior to carrying out the analysis. The regression tables also present the variance inflation factor (VIF). Large VIF values ( $VIF > 2$ ) are an indicator of multicollinearity.

In interpreting the data, the statistical significance was evaluated and formed the basis of accepting or rejecting the hypotheses at the 95 percent confidence limits. Conclusions and recommendations were made based on the outcomes.

### **3.9.1 Testing the Assumptions of Multiple Regressions Analysis**

In order to carry out multiple regression analysis, it was necessary to ensure that the data was fit for it. Five assumptions were tested for the purposes of carrying out regression analysis: the assumption of normality, linearity, homoscedasticity, reliability and no multicollinearity.

Regression analysis assumes that variables are measured reliably (without error). From Table 3.2 Cronbach alpha measure of reliability indicated that the reliabilities were quite high ( $\alpha=.909$ ) and were therefore deemed adequate for multiple regression analysis. Regression analysis assumes that data on the variables have normal distributions. Kolmogorov-Smirnov tests provide inferential statistics on normality. Thus, using the Kolmogorov-Smirnov z test of normality, it was found that the variables are normally distributed and can thus be subjected to multiple regression analysis.

Multiple regressions can only accurately estimate the relationship between dependent and independent variables if the relationships are linear in nature. An examination of residual plots (plots of the Standardised residuals as a function of Standardised predicted values) as recommended by Osborne and Waters (2002) indicated that the relationships between the prerequisites of intrapreneurship and job satisfaction, customer satisfaction and financial performance respectively, were linear and therefore regression analysis could be performed.

Multiple regression assumes there is homoscedasticity between the variables. This assumption means that the variance of errors is the same across all levels of the independent variable (IV). When the variance of errors differs at different values of the IV, heteroscedasticity is indicated. The researcher therefore tested to ensure that the residuals were dispersed randomly throughout the range of the estimated dependent variable. Thus, homoscedasticity signify that there was no interaction effect between the measured independent variable and an unmeasured independent variable not in the model. Further it indicated that no independent variables are skewed (Osborne & Waters, 2002). This assumption was checked by visual examination of a plot of the Standardised residuals (the errors) by the regression Standardised predicted value. The results showed that the assumption of homoscedasticity was met by the prerequisites of intrapreneurship and the outcomes of job satisfaction, customer satisfaction and financial performance, respectively.

Assumption of no multicollinearity refers to the absence of excessive correlation among the predictor variables. Osborne & Waters (2002) noted that when correlation is excessive ( $r > .90$ ), standard errors of the b and beta coefficients become large, making it difficult or impossible to assess the relative importance of the predictor variables. Collinearity diagnostics in SPSS yielded a tolerance scores that were used to indicate the presence of multicollinearity. The higher the inter-correlation of the independents, the more the tolerance will approach zero. As a rule of thumb, a tolerance of less than .20 indicates multicollinearity (Garson, 2010). When tolerance is close to zero, there is high multicollinearity of that variable with other independents and the b and beta coefficients will be unstable. In this study, all the tolerance factors were all large, above .20 and this confirmed that there was no multicollinearity and that the data could be subjected to multiple regression analysis. The specific tolerance values are presented in Chapter 4.

### **3.10 Outputs**

The outputs from the data collection procedures and data analysis formed the empirical evidence of the prerequisites and outcomes of intrapreneurship in state corporations. These include organisational, managerial and individual characteristics and competences. The outcomes of intrapreneurship in state corporations were established in terms of perception measures of customer satisfaction, employee satisfaction and the financial performance of these organisations. The relationships between the prerequisites and outcomes of intrapreneurship that were established led to the development of a model of intrapreneurship in state corporations in Kenya.

## **CHAPTER FOUR: RESEARCH FINDINGS**

### **4.1 Introduction**

This chapter presents the findings of the data collection activity. Data were collected mainly from employees of State Corporations of Kenya. The chapter is organized around the objectives of this study. First, the report summarises the main characteristics of the sample that was selected. The next part presents the prerequisites of intrapreneurship in state corporations; then the perceptions of the staff in state corporations on the extent of outcomes of intrapreneurship. The next section presents results on the relationship between the prerequisites and outcomes of intrapreneurship. A discussion about the findings is then presented and culminates with a model based on the results.

### **4.2 Analysis of Response Rate and Descriptive Statistics**

From the targeted 245 respondents, 177 returned the fully filled questionnaires and five interviews were carried out, giving a response rate of 74.2%. This was found adequate in view of the expenses and time that further follow up would have involved. Following were the characteristics of the respondents.

#### **4.2.1 Distribution of the Respondents by Sector of the State Corporation**

Respondents were drawn from eight sectors. From each sector, one organisation was randomly sampled. Table 4.1 displays the number of respondents per sector and the corresponding percentage.

**Table 4.1 Respondents by Sector**

<b>Sector</b>	<b>n</b>	<b>Percent</b>
Tertiary Education And Training Corporations	21	11.9
Regional Development Authorities	20	11.3
Service Corporations	21	11.9
Training And Research Corporations	22	12.4
Public Universities	21	11.9
Regulatory Corporations	28	15.8
Commercial/Manufacturing	28	15.8
Financial Corporations	16	9.0
<b>Total</b>	<b>N=177</b>	<b>100.0</b>

Source: Survey Data (2010)

From Table 4.1 it can be seen that all the eight sectors were each represented by one organisation. This representation allowed for comparisons based on the sector.

#### **4.2.2 Departmental Distribution**

The respondents were drawn from various departments in their respective organisations. The distribution is shown in Table 4.2

**Table 4.2 Respondents by Departments**

<b>Department</b>	<b>n</b>	<b>Percent</b>
Research	31	17.8
Human Resources	27	15.3
Accounts/Finance/Internal Audit	23	13.0
Administration/operations	17	9.6
Business/planning/ Engineering/environment	16	9.0
Production/Manufacturing	15	8.5
Management	15	8.5
Library/Registry/IT	13	7.3
Training/academics	11	6.2
Marketing/Sales/procurement/Public Relations	8	4.6
<b>Total</b>	<b>N=177</b>	<b>100.0</b>

Source: Survey data (2010)

Noteworthy, majority of the respondents in the samples were drawn from the human resources and research departments in their organisations, which could indicate that they were the majority in the respective organisations sampled. The distribution in different departments was necessary for triangulating responses and findings. Thus, the different perspectives based on one's profession and placement in the organisation was necessary for ensuring that the results were authentic and representative.

### **4.2.3 Characteristics of respondents**

Respondents were required to state their gender, age bracket, length of service in their current organisation, and highest academic qualification. The responses are in Table 4.3.

**Table 4.3 Characteristics of Respondents**

<b>Variable</b>	<b>Profile</b>	<b>Frequency</b>	<b>Percent</b>	
<b>Gender</b>	Female	57	32.2	
	Male	120	67.8	
	<b>Total</b>	<b>177</b>	<b>100</b>	
<b>Age</b>	18-30 years	42	23.7	
	31-40 years	80	45.2	
	41-50 years	46	26.0	
	51-60 years	9	5.1	
	<b>Total</b>	<b>177</b>	<b>100</b>	
<b>Length of Service in the Organisation</b>	Less than 1 year	21	11.9	
	1-5 years	48	27.1	
	5-10 years	40	22.6	
	11-15 years	39	22.0	
	16-20 years	22	12.4	
	Over 20 years	7	4.0	
	<b>Total</b>	<b>177</b>	<b>100</b>	
<b>Highest Qualification</b>	<b>Academic</b>	PhD Degree	7	4.0
		Masters Degree	66	37.3
		Post graduate Diploma	1	0.6
		Bachelors Degree	59	33.3
		College Diploma	20	11.3
		College Certificate	11	6.2
		Secondary school	13	7.3
		<b>Total</b>	<b>177</b>	<b>100</b>

Source: Survey data (2010)

From Table 4.3, majority (over 40%) of the respondents were in the 31-40 years age bracket. Only about 25% of the respondents were below the age of thirty (30) years. This indicated that the respondents were mature enough to understand the various dimensions of intrapreneurship prerequisites and outcomes as depicted in the instruments. From Table 4.3 it is also evident that over 75% of the respondents had university degrees. Only 7.3% had not studied beyond secondary school. These results confirmed that the respondents were not only literate, but also well-educated and would therefore be in a position to understand the concepts of intrapreneurship and respond accordingly.

It is noticeable that more than 88% of the respondents had been in their organisation for more than 2 years. This duration was assumed adequate for the respondent to have been able to understand their organisation and the intrapreneurial activities that go on in these organisations. The 11.9% who had been in their organisations for less than one year were also included in the analysis because they could also give their initial impression on the factors of intrapreneurship.

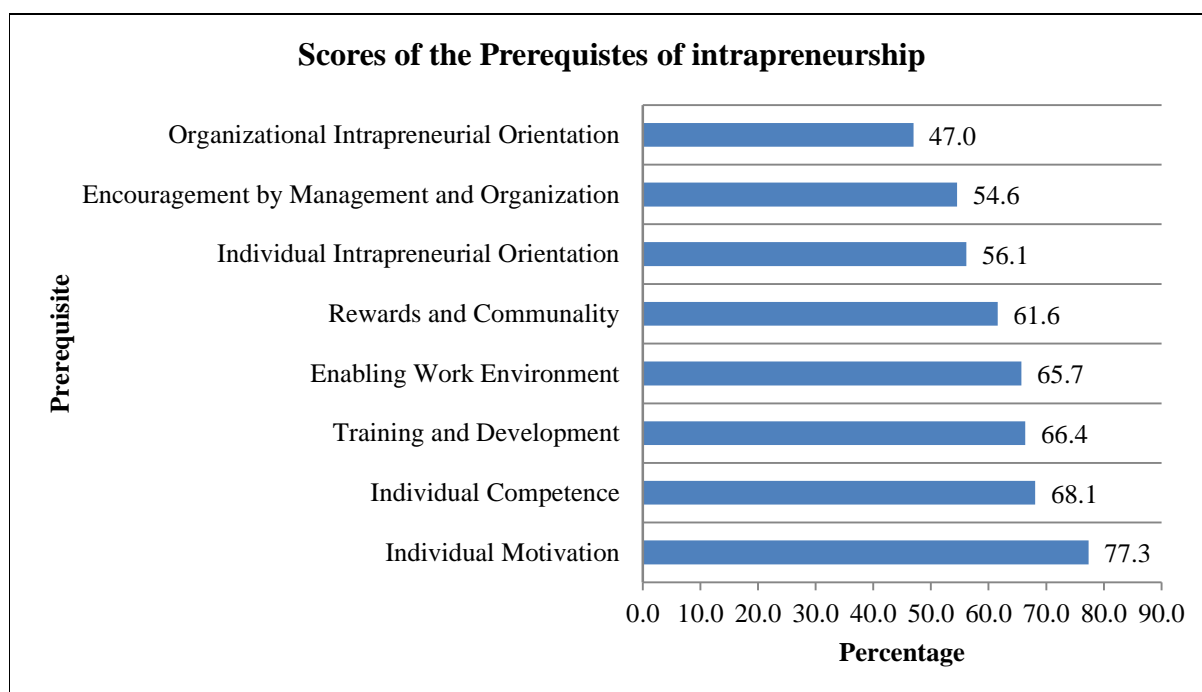
In order to gain a deeper understanding on the patterns in the biodata, cross tabulations with Chi-square tests were carried out among the characteristics of respondents and they yielded the following results: The percentage of participants that were had long tenure in the current organization differed significantly by highest education level,  $\chi^2(30, N = 177) = 52.647, p = .006$ . New entrants into the organizations had university and masters degree. While those with secondary school certificates had been in their organisations for between 5-15 years. Further, all PhD holders had been in their organization for over 10 years.

A chi-square test was performed and a significant relationship was found between age and highest education level,  $X^2(18, N = 177) = 64.607, p < .001$ . The younger employers were more educated. Chi-square test also indicated a significant relationship between highest education level and gender,  $X^2(6, N = 177) = 14.888, p = .021$ . There were more females with secondary school and college certificate education while there were more males with university, Masters and PhD, degrees.

### 4.3 Prerequisites of Intrapreneurship Evident in State Corporations

This section discusses study findings in relation to the first objectives on the prerequisites of intrapreneurship. The first objectives sought evidence on the prerequisites of intrapreneurship in state corporations. According to the theories of intrapreneurship that were discussed in the literature review, the prerequisites include management and organisational encouragement; individual motivation; rewards and communality; individual competence; enabling work environment; training and development; individual intrapreneurial orientation and organisational intrapreneurial orientation.

Respondents were requested to rate their agreement or disagreement with a series of statements, which are indicators of the prerequisites of intrapreneurship. Figure 4.1 summarises the results.



Source: Survey data (2010)

**Figure 4.1 Summary of the Prerequisites of Intrapreneurship Evident in all State Corporations**

The summary on Figure 4.1 indicates that all the prerequisites of intrapreneurship were present in state corporations, but to varying degrees. The highest scored prerequisite was individual motivation scoring 77% and the lowest was organisational intrapreneurial orientation scoring 47%. These results indicate that state corporations have staff members whose motivation to be entrepreneurial is high. Closely linked is competence to carry out intrapreneurial activities, which is also relatively high. However, the management and organisational settings do not highly encourage intrapreneurship and thus the orientation of the organisation towards intrapreneurship is low.

The sections that follow analyse these results further. The responses were weighted on a scale of 0-4 (where 1= 'strongly disagree', 2= 'disagree', 3 = 'agree' and 4 = 'strongly agree', 0 = 'cannot tell'). Respondents were requested to rate their perception of various items that comprise intrapreneurship. These points formed the weights for calculating the score for each prerequisite.

#### **4.3.1 Encouragement to be Intrapreneurial**

One of the main prerequisites of intrapreneurship is managerial and organisational factors that encourage intrapreneurship. Respondents were required to agree or disagree with seventeen statements. The combined results are presented in Table 4.4.

**Table 4.4 Encouragement by Management and Organisation**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. Management activities generate trust in employees	15 (8)	96 (54)	27(15)	1(1)	38(21)	<b>177(100)</b>	2.28	1.29
2. Management sees matters from employees point of view	7(4)	74(42)	52(29)	4(2)	40(23)	<b>177(100)</b>	2.02	1.23
3. Management is able to inspire everyone to work for the good of the organisation	19(11)	91(51)	29(16)	3(2)	35(20)	<b>177(100)</b>	2.32	1.29
4. Management encourages the development of new ways of operating	22(12)	97(55)	41(23)	3(2)	14(18)	<b>177(100)</b>	2.62	.99
5. At my workplace, individual work methods are valued	14(8)	107(60)	25(14)	6(3)	25(14)	<b>177(100)</b>	2.45	1.15
6. Innovativeness and creativity are thought of as important in my workplace	29(16)	81(46)	33(19)	4(2)	30(17)	<b>177(100)</b>	2.42	1.28
7. Change is seen as an opportunity at my workplace	10(6)	78(44)	42(24)	6(3)	41(23)	<b>177(100)</b>	2.06	1.28
8. Enough feedback is given at my workplace	17(10)	69(39)	48(27)	10(6)	33(19)	<b>177(100)</b>	2.15	1.25
9. Employees are encouraged to freely air their opinions	24(14)	66(37)	36(20)	5(3)	46(26)	<b>177(100)</b>	2.10	1.41
10. Suggestions originating from the employees are carried out at my workplace	13(7)	91(51)	40(23)	3(2)	30 (17)	<b>177(100)</b>	2.31	1.19
11. There is clear division of labour in my workplace	24(14)	97(55)	33(19)	1(1)	22(12)	<b>177(100)</b>	1.81	.90
12. The workplace offers good opportunities for training and education	36(20)	95(54)	35(20)	0(0)	11(6)	<b>177(100)</b>	2.82	.97
13. The workplace has clear rules of conduct	53(60)	94(53)	20(11)	0(0)	10(6)	<b>177(100)</b>	1.70	.74
14. Activities are carried out without delay in my workplace	6(3)	81(46)	57(32)	8(5)	25(14)	<b>177(100)</b>	2.20	1.08
15. People are encouraged to take risks at my workplace	7(4)	39(22)	53(30)	3(2)	75(42)	<b>177(100)</b>	1.44	1.34
16. Mistakes are regarded as learning experiences	5(3)	47(27)	60(34)	12(7)	53(30)	<b>177(100)</b>	1.66	1.24
17. The vision at my workplace guides me at my work	32(18)	110(62)	14(8)	2(1)	19(11)	<b>177(100)</b>	2.76	1.10

**Key: Percentage in parenthesis**

Source: Survey data (2010)

From the Table 4.4, 8% of respondents strongly agree and 54% agree that management activities generate trust in employees. Trust is critical in any innovative or risk taking behaviour from employees. However, a total of 16 % of the employees indicated that they disagree with the statement, indicating they mistrust the management. Further, an aggregate of 46% of the employees agreed that management sees matters from employees' point of view while 32% disagreed. A perception that management will not see matters from the viewpoint of employees has been found to be detrimental to innovativeness.

A total of 62% of employees perceived that management was able to inspire everyone. It was interesting to note that 67% of respondents agreed that management encourages new ways of operating, or innovativeness, though 25% disagreed with the statement. Also, it is clear that individual methods of doing work are valued according to 68% of respondents but 18% felt that their individual work methods are not valued, yet intrapreneurship requires that individual are allowed to experiment on new methods of delivery of service.

Further, the results on Table 4.4 show that innovativeness and creativity are thought to be important by 62% of the respondents but 21% disagree. In addition, an intrapreneurial orientation would see change as an opportunity and according to 50% of respondents, their organisations see change as an opportunity but 27% disagree with that statement. From the Table, 51% agreed that employees are allowed to air their opinions, while 23% of respondents disagreed that employees are encouraged to air their opinions.

In an environment that employees feel constrained to air their opinions, it is possible to reduce the intrapreneurial spirit. Related to encouragement to air opinions is the follow-up of carrying out the suggestions from employees. According to Table 4.4, 59% of

respondents agreed that suggestions from employees are carried out, but 24% disagreed with this statement.

Clear division of labour, as perceived by 68% of respondents, indicated an organisation that is mature and fixated on a certain way of doing things. Thus, the organisation had moved from the entrepreneurial mode to the managerial mode. Closely related to clear division of labour are rules of conduct. It was noted that 83% respondents indicated that the workplace had clear rules of conduct. These two aspects, though seemingly ideal in organisations, may be a barrier to intrapreneurship as they program employees to behave in a certain fixed manner.

The organisations included in the study offered good opportunities for training and development as was confirmed by 74% of the respondents, though 20% felt that the opportunities for training and development were wanting in their organisations. It was interesting to note that 49% agreed while 37% disagreed that activities are carried out without delay in the workplace: Delays are usually associated with procrastination, lethargy and lack of motivation, which have a negative effect on intrapreneurship.

One of the key dimensions of intrapreneurship is risk taking. 32% of respondents indicated that employees were not encouraged to take risks in the organisation. Closely associated with risk taking behaviour is need to regard mistakes as learning experiences. A further 42% of respondents disagreed with the statement that mistakes were regarded as learning experiences.

With Public Service organisations being required to develop strategic plans vide Republic of Kenya (2003), there is the trend for all organisations to have a Vision that is well stipulated and well communicated to all employees. Thus 80% of the respondents indicated that the Vision of the workplace guided them in their work. Only 9% disagreed with the statement. This could be because, 12% of the respondents had been in the organisation for less than one year, they may not have been aware of the Vision of the organisation.

#### 4.3.2 Individual Motivation to Perform Intrapreneurialy

Another prerequisite of intrapreneurship is an individual's motivation to act intrapreneurialy. Unless the individual employees have intrinsic motivation, they will not perform intrapreneurialy. The respondents were requested to rate their agreement with statements to indicate their level of motivation. The results are displayed in Table 4.5.

**Table 4.5 Perceptions on individual motivation**

Item/Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Cannot Tell	Total	Mean	Standard Deviation
1. I have confidence in my abilities	110 (62)	60(34)	1(1)	0(0)	6(3)	177(100)	3.51	.820
2. I want to actualize myself in my workplace	91(51)	70(40)	3(2)	0(0)	13(7)	177(100)	3.28	1.059
3. I put myself at stake in my work	58(33)	72(41)	19(11)	1(1)	27(15)	177(100)	2.75	1.334
4. I am willing to make responsible decisions	96(54)	70(40)	5(3)	2(1)	4(2)	177(100)	3.42	.802
5. I tolerate uncertainty well	54(31)	67(38)	12(7)	2(1)	42(24)	177(100)	2.50	1.523

**Key: Percentage in parenthesis**

Source: Survey data (2010)

From Table 4.5, 62% of the respondents strongly agreed that they had confidence in their abilities, a total of 91% wanted to actualize themselves in the workplace, 94% were willing

to make responsible decisions, 73% put themselves at stake in their work and 68% tolerated uncertainty well. Only 2% of respondents disagreed with the statement that they wanted to actualize themselves in their work place. This could indicate that they probably want to seek other places to actualize themselves; this small group would probably be unwilling to take risks or put themselves at stake as indicated by the 11% who disagreed that they would put themselves at stake in their work.

Intrapreneurship has an implied uncertainty, since it is about venturing into untapped areas, thus, the 8% who indicated that they do not tolerate uncertainty well may be implying that they are not motivated to be intrapreneurial. The overall score on individual motivation was 77%, which indicated there was a fertile environment for management to promote intrapreneurship.

### **4.3.3 Rewards and Communalities**

Another prerequisite of intrapreneurship is rewards and communalities in the organisation. Rewards and communalities refers to the state of an organisation in which staff perceive that issues are openly communicated, discussed and shared by all. This is critical as a prerequisite of intrapreneurship because it creates the necessary atmosphere of mutual sharing and benefit that encourages employees to be intrapreneurial. Table 4.6 displays the finding from the survey on these issues.

**Table 4.6 Perceptions on Rewards and Communality**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. Difficult decisions are discussed openly	17(10)	66(37)	57(32)	8(5)	29(16)	177(100)	2.19	1.195
2. People are rewarded well	14(8)	62(35)	68(38)	6(3)	27(15)	177(100)	2.17	1.135
3. Employees' productive activities are rewarded	12(7)	61(34)	51(29)	5(3)	48(27)	177(100)	1.91	1.315
4. Work is carried out in teams in my workplace	31(18)	100(56)	32(18)	2(1)	12(7)	177(100)	2.77	.981
5. I know what is expected of me in my work	61(34)	100(56)	4(2)	0(0)	12(7)	177(100)	3.12	.984
6. I easily get help in my work	29(16)	97(55)	26(15)	4(2)	21(12)	177(100)	2.62	1.153

**Key: Percentage in parenthesis**

Source: Survey data (2010)

From Table 4.6, 34% of respondents strongly agree and 56% agree that they knew what was expected from them, indicating clear job descriptions, work rules and regulations. Further, an aggregate of 74% of the respondents agreed that work was carried out in work teams, and 71% agreed that they easily get help in their work. This is an indicator of transparency, communality and openness. However, 32% disagreed and 5% strongly disagreed that difficult decisions were discussed openly. A lack of involvement in critical decision-making works against communality. Further, 42% disagreed with the statement that people are rewarded well, while 32% disagreed that people's productive activities are rewarded well. This implies that these respondents perceived that they were not well rewarded and this can work against intrapreneurial effort. Overall, the organisations' score on transparency, openness and communality was 62%, hence confirming a high degree of presence of this prerequisite in state corporations.

#### 4.3.4 Individual Competence

Individual competence as a prerequisite of intrapreneurship implies that intrapreneurial ventures are only viable if people who are competent in the respective areas create them. Competence of staff is critical for meaningful intrapreneurship to take place. The Table 4.7 displays responses on this aspect.

**Table 4.7 Perceptions on Individual Competence**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. I am familiar with the vision of my workplace i.e. the direction to be pursued in the future	52(29)	93(53)	6(3)	0(0)	26(15)	177(100)	2.82	1.275
2. I am eager to present new ideas at my workplace	54(31)	95(54)	13(7)	2(1)	13(7)	177(100)	2.99	1.044
3. My know-how is varied	41(23)	98(55)	14(8)	0(0)	24(14)	177(100)	2.75	1.214
4. I develop myself actively in my workplace	60(34)	91(51)	13(7)	0(0)	13(7)	177(100)	3.05	1.038
5. If my colleagues were asked, they would say I am sharp	29(16)	70(40)	15(8)	2(1)	61(34)	177(100)	2.02	1.567

**Key: Percentage in parenthesis**

Source: Survey data (2010)

From Table 4.7, 29% of respondents strongly agree and 53% agreed that they are familiar with the vision of the workplace; a total of 85% agreed that they develop themselves actively in the workplace and 79% stated that their expertise is varied. A further 84% stated that they are eager to present new ideas at the workplace while 56% agreed that their colleagues think they are sharp. However, 34% were modest and stated they cannot tell if their colleagues think they are sharp.

It is noteworthy that there were 8% of respondents who were not eager to present new ideas at their work places. This could be because as stated from Table 4.4, 32% disagreed

that management sees matters from employees' point of view, thus they feel discouraged from presenting new ideas; another 24% had indicated that suggestions from employees were not carried out in their organisations.

#### **4.3.5 Enabling Working Environment**

An enabling work environment is another key prerequisite that fosters intrapreneurship. This has to do with the extent to which the work environment encourages and enables staff to be intrapreneurial. The results are shown in Table 4.8.

**Table 4.8 Perceptions on Enabling Work Environment**

<b>Item/Indicator</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly disagree</b>	<b>Cannot tell</b>	<b>Total</b>	<b>Mean</b>	<b>Standard Deviation</b>
1. I have sufficient authority to carry out my duties well	42(24)	76(43)	39(22)	2(1)	18(10)	177(100)	2.69	1.153
2. I have responsibility for doing my work as well as possible	70(40)	77(44)	14(8)	0(0)	16(19)	177(100)	3.05	1.137
3. I can work spontaneously	51(29)	88(50)	21(12)	2(1)	15(8)	177(100)	2.89	1.100
4. My workplace has a good working atmosphere	25(14)	81(46)	41(23)	6(3)	24(14)	177(100)	2.44	1.191
5. My work load is suitable	24(14)	85(48)	34(19)	5(3)	29(16)	177(100)	2.40	1.248
6. Knowledge flows openly at my workplace	10(6)	91(51)	47(27)	1(1)	28(16)	177(100)	2.31	1.137

**Key: percentages are in parenthesis**

Source: Survey data (2010)

From Table 4.8, 24% of the respondents strongly agreed and 43% agreed that they had sufficient authority to carry out their duties well. Indeed 40% strongly agreed and 44% agreed that they had the responsibility for doing their work as well as possible. An aggregate of 79% stated they could work spontaneously and their workload was suitable. While 60% stated that, their working atmosphere is good. However, 18% said that they did not have sufficient authority to carry out their duties well, and 27% disagreed that knowledge flowed openly at the workplace. A further 22% disagreed that their workload was suitable. The intrapreneurial organisation should ensure that the staffs have sufficient authority to make any requisite changes in the way work is carried out. To do so the staff must feel facilitated by the working environment as well as a suitable workload to achieve this.

### 4.3.6 Training and Development

Another prerequisite of intrapreneurship is training and development. A pro- change culture is an end result of training and development interventions that may promote or steer change in the organisation. Training and development can be both employer and employee initiated. The responses are displayed in Table 4.9.

**Table 4.9 Perceptions on Staff Training and Development**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. I am able to develop my work myself	42(24)	98(55)	11(6)	2(1)	24(14)	177(100)	2.75	1.228
2. Professional development is important to me	108(61)	63(36)	2(1)	0(0)	4(2)	177(100)	3.53	.739
3. It is easy to seek help in my work	45(25)	85(48)	17(10)	4(2)	26(15)	177(100)	2.67	1.290
4. I like to work in work teams	70(40)	81(46)	13(7)	0(0)	13(7)	177(100)	3.10	1.061
5. Training and development is taken seriously here	47(27)	59(33)	45(25)	3(2)	23(13)	177(100)	2.59	1.263
6. Management supports the development of individuals	33(19)	73(41)	24(14)	3(2)	44(25)	177(100)	2.27	1.452
7. The organisational boundaries between departments and sections are tight.	20(11)	77(44)	41(23)	0(0)	39(22)	177(100)	1.68	1.062

**Key: Percentages are in parenthesis**

Source: Survey data (2010)

From Table 4.9, 61% of respondents strongly agreed while 36% agreed that professional development was important to them. In addition, an aggregate of 85% of the respondents indicated that they liked to work in teams and 81% are able to develop their work themselves; further 55% agreed that the organisational boundaries between departments and sections were tight. This could explain why 12% indicated that it was not easy to seek

help in their work. Though from the Table, collectively 60% agreed that management supported the development of individuals, it was noteworthy that 25% could not tell if management supported the development of individuals, 14% could not tell if they were able to develop their work themselves and 13% could not tell if training and development were taken seriously by the organisation. This could be an indicator of expectations not very well communicated by the supervisors. Thus, though training and development is critical for the development of intrapreneurial competences, there are still gaps that show need for improvement in this prerequisite.

#### **4.3.7 Individual Intrapreneurial Orientation**

Another prerequisite of intrapreneurship is the intrapreneurial orientation of the employees. This orientation positions people to act intrapreneurially. Responses in this aspect are in Table 4.10.

From Table 4.10, on the individual intrapreneurial orientation, 20% of respondents strongly agreed while 63% agreed that they tried new ideas and new approaches to problems. A further aggregate of 82% indicated that they made comments at meetings on new ways of doing things, while 75% stated that they usually support a friend's suggestion on new ways to do things. In addition, 71% agreed that they could be counted on to find a new use for existing methods or existing equipment, and 67% said they demonstrated originality while 71% plan on developing contacts with experts in their field located in different organisations.

**Table 4.10 Perceptions on Individual Intrapreneurial Orientation**

<b>Item/Indicator</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly disagree</b>	<b>Cannot tell</b>	<b>Total</b>	<b>Mean</b>	<b>Standard Deviation</b>
1. I try new ideas and new approaches to problems	35(20)	111(63)	16(9)	3(2)	12(7)	177(100)	2.87	.977
2. New ideas are considered seriously by management	14(8)	70(40)	46(26)	3(2)	44(25)	177(100)	2.04	1.316
3. I take things or situations apart to find a new use of existing methods or existing equipment	32(18)	93(53)	21(12)	0(0)	31(18)	177(100)	2.54	1.292
4. I can be counted on to find a new use for existing methods or existing equipment	36(20)	88(50)	19(11)	2(1)	32(18)	177(100)	2.53	1.332
5. Among my counterparts I am usually the first person to try out a new idea or method	12(7)	64(36)	29(16)	3(2)	69(39)	177(100)	1.70	1.460
6. I demonstrate originality	27(15)	92(52)	19(11)	0(0)	39(22)	177(100)	2.38	1.369
7. I like to work on a problem that has caused others great difficulty	39(22)	86(49)	19(11)	20(1)	31(18)	177(100)	2.56	1.330
8. I plan on developing contacts with experts in my field located in different companies	35(20)	91(51)	19(11)	1(1)	31(18)	177(100)	2.55	1.309
9. I budget on time and money for the pursuit of novel ideas	30(17)	94(53)	28(16)	0(0)	25(14)	177(100)	2.59	1.199
10. I make comments at meetings on new ways of doing things	40(23)	105(59)	18(10)	0(0)	14(8)	177(100)	2.89	1.016
11. I hardly ever stick to the rules or follow procedure	10(6)	23(13)	74(42)	31(18)	39(22)	177(100)	1.63	1.132
12. I discourage formal meetings to discuss ideas	11(6)	14(8)	74(42)	42(24)	36(20)	177(100)	1.56	1.091
13. I usually support a friends suggestion on new ways to do things	38(21)	94(53)	19(11)	0(0)	26(15)	177(100)	2.67	1.242
14. I probably will not turn down ambiguous job assignments	15(8)	73(41)	48(27)	11(6)	30(17)	177(100)	2.18	1.211
15. People who depart from the accepted organisational routine should not be punished	26(15)	47(27)	46(26)	22(12)	36(20)	177(100)	2.03	1.342
16. I hope to be known for the quantity of my work rather than the quality of my work when starting a new project	8(5)	25(14)	82(46)	45(24)	17(10)	177(100)	1.79	.959
17. I must be able to find enough variety of experience on my job or I will leave it	19(11)	54(31)	42(24)	8(5)	54(31)	177(100)	1.86	1.412
18. I am going to leave a job that doesn't challenge me	21(12)	58(33)	56(32)	5(3)	37(21)	177(100)	2.12	1.289

**Key: Percentage in parenthesis**

Source: Survey data (2010)

Further, an aggregate of 66% of the respondents indicated that they encourage formal meetings to discuss ideas. Formal meetings, though crucial, may be an antithesis to intrapreneurship because they could result in the shelving of good ideas 'until the next meeting'. The result of this could be that some people would have forgotten an innovative idea. In addition, the time allocated for the meeting may not permit brainstorming of new ideas. As such, formal meetings to discuss ideas slow down intrapreneurship.

From the table, 72% of the respondents agreed that they hoped to be known for the quality of their work rather than the quantity of work when starting a new project. When an idea is new, the quality develops with time and practice; a new idea is expected to be innovative if it improves processes and reduces down time and wastage. As such, intrapreneurship encourages the entrepreneur to first produce more, the quantity, and then afterwards refine the quality.

Further, from the table, it is evident that 59% mostly hardly stick to the rules or follow procedures. Rules and regulations are known to slow down innovativeness. It was also noted that 39% of the respondents could not tell if, among their counterparts, they were usually the first people to try out new ideas or methods. Ideally, the intrapreneurial person is the first to come into the innovative idea and last to get out. Thus, their inability to know their position on this matter may indicate that information sharing is low and their intrapreneurial orientation is still wanting to some extent.

### 4.3.8 Organisation Intrapreneurial Orientation

The other prerequisite is organisational intrapreneurial orientation. An organisation that is intrapreneurial positions its employees to act intrapreneurially and stands out from among its competitors. Table 4.11 presents the responses on indicators under this prerequisite.

**Table 4.11 Perceptions on Organisational Intrapreneurial Orientation**

Item/Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Cannot Tell	Total	Mean	Standard Deviation
1. Compared to our competitors, our organisation has a higher tendency to take risks	6(3)	53(30)	31(18)	8(5)	79(45)	177(100)	1.43	1.397
2. Compared to our competitors, our organisation has a higher tendency to engage in strategic planning activities	23(13)	75(42)	21(12)	1(1)	57(32)	177(100)	2.03	1.500
3. Compared to our competitors, our organisation has a higher ability to identify customer needs and wants	19(11)	69(39)	29(16)	0(0)	60(34)	177(100)	1.93	1.477
4. Compared to our competitors, our organisation has a higher level of innovation	17(10)	55(31)	34(19)	2(1)	69(39)	177(100)	1.71	1.482
5. Compared to our competitors, our organisation has a higher ability to persevere in making our vision of business a reality	20(11)	75(42)	27(15)	1(1)	54(31)	177(100)	2.03	1.453
6. Compared to our competitors, our organisation has a higher ability to identify new opportunities	26(15)	72(41)	28(16)	2(1)	49(28)	177(100)	2.14	1.451

**Key: Percentages are in parenthesis**

Source: Survey data (2010)

On organisational intrapreneurial orientation, in comparison with their competitors, it can be seen from Table 4.11, that 3% of respondents strongly agreed and 30% agreed that their organisation had a higher tendency to engage in strategic planning activities. A further aggregate of 50% agreed that their organisation had a higher ability to identify customer needs and wants. In addition, 54% indicated they had a higher ability to persevere in making their vision a reality, while 55% agreed that the organisation had a higher ability to

identify new opportunities. However, 22 % disagreed that their organisation had a higher tendency to take risks. Noteworthy, the numbers that could not tell on the items of organisational orientation to intrapreneurship were high, reaching up to 45% of those who could not tell if their organisation had a higher tendency to take risks.

#### **4.2.1 A General Assessment of the Prerequisites**

The researcher interviewed some officials from state corporations and the inspectorate of state corporations about their views on the performance of state corporations. It was noted that the corporations face many challenges. Key among them is the challenge of funding. The principle behind the establishment of state corporations is that an activity can work better when it is carried out in an independent organisation. Many state corporations have been successful in fulfilling this principle but a few are struggling. It was noted that regional development authorities' sector was especially weak in financing itself and relied heavily on the government treasury, even for personal emoluments. Similarly, the research institutes were also crippled by lack of adequate research funding.

The interviewees stated that the prerequisites of intrapreneurship were mainly focused on the individual. Other factors that needed to be in place for intrapreneurship to flourish in state corporations include organisational factors such as the governance structure. Politically appointed Boards manage state corporations. The net result of such appointments is that they rarely function professionally. Further, the interviewees held that there was need for adequate policies on various aspects. Specifically, there was need for an intrapreneurship policy, a reward and sanctions policy, a research and development policy and a human resources development policy. The proposal for these policies was because

the existing policies were not effective and were inadequate for meeting the needs of an intrapreneurial organisation.

### 4.3 Perceptions of the Staff in State Corporations on the Outcomes of Intrapreneurship

The second objective required information on the perceptions of the staff in state corporations on the outcomes of intrapreneurship. The following outcomes were measured in this study: job satisfaction, customer satisfaction and financial performance.

#### 4.3.1 Job Satisfaction

Job satisfaction describes how contented an individual is with his or her job and expresses employees' appreciation of work. The happier people are with their jobs, the more satisfied they are said to be. Job satisfaction is not the same as motivation, although they are linked. Motivation is a drive to perform while satisfaction is a result of favourable outcomes. The responses on employee job satisfaction are presented in Table 4.12

**Table 4.12 Perceptions on Job Satisfaction**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. I feel happy in my work	37(21)	84(47)	24(14)	3(2)	29(16)	177(100)	2.55	1.301
2. I value my work	84(47)	81(46)	5(3)	2(1)	5(3)	177(100)	3.34	.831
3. Others value my work	32(18)	74(42)	19(11)	2(1)	50(28)	177(100)	2.20	1.501
4. My work is interesting	48 (27)	95(54)	16(9)	0(0)	18(10)	177(100)	2.88	1.126
5. My duties at work are varied	51(29)	85(48)	28(16)	2(1)	11(6)	177(100)	2.92	1.025
6. I feel I am important to my workplace	54(31)	84(47)	17 (10)	2(1)	20(11)	177(100)	2.85	1.203
Average (%)	(29)	(47)	(10)	(1)	(13)	(100)		

**Key: Percentages are in parenthesis**

Source: Survey data (2010)

Table 4.12 indicates that an aggregate of 93% of respondents value their work, 81% find their work interesting, and 78% felt important in the workplace. However, 17% indicated that their duties were not varied, 16% of respondents did not feel happy in their work, which indicated dissatisfaction. Notably, 28% of respondents could not tell if other people valued their work. This is an indicator of lack of adequate feedback mechanisms and insufficient communality.

### 4.3.2 Respondents' Perception of Customer Satisfaction

Customer satisfaction is a measure of how products and services supplied by the organisation meet or surpass customer expectations. The responses are presented in Table 4.13.

**Table 4.13 Perceptions of Respondents on Customer Satisfaction**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. My workplace is known in the marketplace to be competent	37(21)	68(38)	16(9)	3(2)	53(30)	177(100)	2.19	1.554
2. Our customers are satisfied with services and/or products purchased from us	20(11)	89(50)	21(12)	0(0)	47(27)	177(100)	2.20	1.410
3. We respond to our customers' needs better than our competitors	15(8)	71(40)	27(15)	0(0)	64(36)	177(100)	1.85	1.475
4. We are familiar with our customers' needs	28(16)	91(51)	18(10)	0(0)	40(23)	177(100)	2.38	1.385
5. Our customer relations are long term	34(19)	81(46)	21(12)	0(0)	41(23)	177(100)	2.38	1.422
6. Our clients are happy with our price-quality relation	29(16)	45(25)	23(13)	0(0)	80(45)	177(100)	1.68	1.621
Average (%)	(15)	(42)	(12)	(0)	(31)	(100)		

**Key: Percentages are in parenthesis**

Source: Survey data (2010)

From Table 4.13, it is evident that 21% of the respondents strongly agreed while 38% agreed that their organisation was known in the market place as being competent. Collectively, 67% agreed that the organisation was familiar with the needs of the customers. Further, 62% perceived that the customers were happy with the services/products they received from the organisation. However, 15% disagreed that their organisation responded to customers better than their competitors, and 12% disagreed that the relationship with the customer was long-term. On average 31% could not tell about their organisation's performance on customer satisfaction.

### 4.3.3 Respondents' Perception on Financial Performance of the Organisation

This factor describes financial performance of the organisation. Specifically it refers to respondents' perceptions of the sales, cash flow and profitability in their organisations. The responses are presented in Table 4.14.

**Table 4.14 Perceptions on Financial Outcomes**

Item/Indicator	Strongly agree	Agree	Disagree	Strongly disagree	Cannot tell	Total	Mean	Standard Deviation
1. Compared to our competitors, in the last 5 years my workplace has improved in the sales of our products/services	23(13)	58(33)	19(11)	1(1)	76(43)	177(100)	1.72	1.584
2. In the last 5 years my workplace cash flow has increased	29(16)	55(31)	16(9)	0(0)	77(44)	177(100)	1.77	1.633
3. In the last 5 years my workplace has increased the profit margin steadily	17(10)	45(25)	22(12)	1(1)	92(52)	177(100)	1.40	1.542
Average response %	(13)	(30)	(11)	(0)	(46)	(100)		

**Key: percentages are in parenthesis**

Source: Survey data (2010)

From Table 4.14, it is evident that 13% of respondents strongly agreed while 33% agreed that, compared to their competitors, in the last 5 years the workplace had improved in the sales of their products/services. Further an aggregate of 46% were of the view that the cash flow had increased. However, 52 % could not tell if the profit margin had increased steadily. In fact, on the average, 46% of the respondents could not tell about the financial aspects of their organisation. Being unaware of such crucial information may indicate that information flow was inadequate.

#### **4.4 Cross Sector Comparisons of Performance on the Prerequisites and Outcomes of Intrapreneurship Variables**

In order to assess the performance of the various sectors in comparison with each other, further analysis was carried out. Table 4.15 presents a summary of the means of all the variables of the respondents disaggregated by sector and expressed as a percentage for each sector in the sample on the prerequisites and outcomes of intrapreneurship in state corporations in Kenya.

**Table 4.15 Summary of Cross Sector Scores of the Prerequisites and Outcomes of Intrapreneurship**

		PREREQUISITES								<i>Overall (Mean of the prerequisites of intrapreneurship)</i>	OUTCOMES		
Sector		Encouragement by management and organisation	Individual motivation	Transparency, openness and communality	Individual competence	Enabling work environment	Training and Development	Individual Intrapreneurial Orientation	Organisational Intrapreneurial Orientation		Individual's Job Satisfaction	Organisation's customer satisfaction	Financial performance
Tertiary Education and Training Corporations n=21	Mean (%)	48.9	84.5	54.2	73.1	64.1	68.0	63.0	49.8	<b>63.2</b>	71.0	64.7	42.9
	Std. Deviation	12.3	10.1	14.0	17.3	16.2	14.7	12.5	16.6	<b>9.5</b>	17.2	23.3	27.3
Regional Development Authorities n=20	Mean (%)	58.8	78.5	67.3	70.3	61.5	65.4	56.3	61.5	<b>64.9</b>	73.5	54.2	55.0
	Std. Deviation	8.8	13.2	14.5	12.8	18.4	19.1	13.3	20.8	<b>8.9</b>	19.8	22.8	20.5
Service Corporations n=21	Mean (%)	63.9	83.1	66.5	75.5	74.0	75.0	61.8	69.8	<b>71.2</b>	71.6	70.4	35.3
	Std. Deviation	8.7	14.4	12.2	15.2	14.2	7.3	12.7	14.1	<b>7.6</b>	18.6	14.8	37.6
Training and Research Corporations n=22	Mean (%)	51.4	76.8	55.3	64.1	63.4	72.2	51.8	40.7	<b>59.5</b>	66.5	38.4	29.5
	Std. Deviation	13.7	17.6	15.6	18.2	20.0	16.7	14.6	28.2	<b>11.0</b>	19.6	24.9	27.1
Public Universities n=21	Mean (%)	59.5	79.3	68.1	70.7	71.0	66.0	58.4	54.8	<b>66.0</b>	63.9	50.4	34.1
	Std. Deviation	7.2	16.5	8.9	17.3	12.5	9.6	13.2	25.6	<b>8.2</b>	19.6	25.6	30.6
Regulatory Corporations n=28	Mean (%)	44.1	62.3	50.0	72.9	62.4	52.3	55.2	35.0	<b>54.3</b>	70.7	59.4	42.9
	Std. Deviation	9.8	23.5	11.2	16.6	17.9	21.4	16.0	33.3	<b>9.6</b>	20.9	22.7	36.8
Commercial/ Manufacturing n=28	Mean (%)	60.8	89.6	66.5	54.1	71.9	70.7	49.5	22.2	<b>60.7</b>	79.2	40.9	40.2
	Std. Deviation	16.8	14.6	23.9	29.6	18.7	13.1	12.8	31.3	<b>11.5</b>	19.7	34.1	41.1
Financial Corporations n=16	Mean (%)	49.4	61.9	69.3	67.5	53.1	63.8	55.7	57.8	<b>59.8</b>	54.7	44.3	49.0
	Std. Deviation	21.2	26.6	20.2	28.6	21.9	17.1	19.4	33.7	<b>18.8</b>	28.5	26.3	40.5
Overall mean for all sectors N=177		54.6	77.0	62.1	68.5	65.2	66.7	56.5	48.9	<b>62.4</b>	68.9	52.8	41.1

Source: Survey data (2010)

Table 4.15 displays the disaggregated means (or score) expressed as a percentage for each sector in the sample on the prerequisites and outcomes of intrapreneurship in state corporations in Kenya. On encouragement by management and organisation, the overall score by all the organisations was 54.6%. The best performing were the service organisations at 63.9% while the lowest performer was regulatory corporations at 44.1%.

The organisations scored 77% on individual motivation to act intrapreneurial. This could imply that the state corporations have personnel with the motivation to be intrapreneurial. The top performer was the commercial/manufacturing sector at 89.6% while financial corporations had the lowest score with 61.9%. This may indicate need for interventions to improve individual motivation of the personnel in financial corporations.

From the Table 4.15, financial corporations were best performing on rewards and communality with 69.3% while regulatory corporations were lowest at 50%. As noted in the table, the regulatory corporations also scored lowly in individual motivation. This can be partly attributed to low scores in communality measures such as teamwork and rewards. The overall score on individual competence is 68.5% and this indicated that state corporations have employees who are competent to perform their job and be intrapreneurial, if all other factors were held constant. Service Corporations scored highly at 75.5% while Commercial/Manufacturing scored 54.1%.

To note, from these results is that the commercial/manufacturing organisations scored lowly in as far as individual competence is concerned, yet the sector scored superbly in individual motivation. This is an interesting combination because it indicates that if their

competence was to be increased, e.g. through training and development interventions, it would reap better outcomes because the staff would feel motivated.

Overall, the score of enabling environment was 65.2%. Service Corporations scored best with 74% while Finance Corporations were lowest at 53.1%. On training and development, the highest performance is by Service Corporations at 75% while the lowest is by regulatory corporations at 52.3%. Further, the Tertiary and Training Corporations scored best in individual intrapreneurial orientation at 63%, while the Commercial/Manufacturing were lowest at 49.5%. Overall, the score on organisational intrapreneurial orientation was 48.9%; Service organisations scored best at 69.8% while Commercial/Manufacturing had a low of 22.2%.

It is evident that on the overall prerequisites of intrapreneurship, regulatory corporations scored the lowest with 54.3%; Service corporations can be commended as top performers in their display of the prerequisites of intrapreneurship with 71.2%.

The outcomes of intrapreneurship also had interesting trends. On employee job satisfaction, Commercial/Manufacturing was top at 79.2% while Financial Sector was lowest at 54.7%. Service Corporations topped in customer satisfaction with 70.4% while Training and Research Corporations sector was lowest with 38.4%. The organisations scored an overall score of 41.1% on financial performance. Regional Development Authorities were top with 55% while Training and Research Corporations were lowest at 29.5%.

#### 4.5 Testing Hypothesis on Cross-sector Comparison of the Prerequisites of Intrapreneurship

The first null hypotheses of this study stated as follows: H<sub>01</sub>: There is no significant difference between state corporations in Kenya in terms of their performance on the intrapreneurial prerequisites. Analysis of Variance (ANOVA) was used to test if there were significant differences between the intrapreneurial prerequisites and outcomes in various sectors. The means in Table 4.15 were used for this analysis. The results are in Table 4.16.

**Table 4.16 ANOVA Table for Comparison of the Sector Means of the Prerequisites of Intrapreneurship**

Variable	Tests	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Encouragement by management and organisation	Between Groups	8162.894	7	1166.128	7.067	.000
	Within Groups	27886.776	169	165.011		
	Total	36049.670	176			
Individual motivation	Between Groups	16272.086	7	2324.584	7.443	.000
	Within Groups	52779.892	169	312.307		
	Total	69051.977	176			
Rewards and communality	Between Groups	9439.470	7	1348.496	5.364	.000
	Within Groups	42486.927	169	251.402		
	Total	51926.397	176			
Individual competence	Between Groups	8377.952	7	1196.850	2.887	.007
	Within Groups	70063.009	169	414.574		
	Total	78440.960	176			
Enabling work environment	Between Groups	6484.231	7	926.319	2.977	.006
	Within Groups	52578.858	169	311.118		
	Total	59063.089	176			
Training and Development	Between Groups	8568.185	7	1224.026	4.988	.000
	Within Groups	41468.711	169	245.377		
	Total	50036.896	176			
Individual Intrapreneurial Orientation	Between Groups	3453.980	7	493.426	2.405	.023
	Within Groups	34676.600	169	205.187		
	Total	38130.580	176			
Organisational Intrapreneurial Orientation	Between Groups	40616.326	7	5802.332	8.100	.000
	Within Groups	121067.408	169	716.375		
	Total	161683.734	176			
Organisational Intrapreneurial overall	Between Groups	4252.451	7	607.493	5.207	.000
	Within Groups	19718.062	169	116.675		
	Total	23970.513	176			

Source: Survey data (2010)

From the Analysis of Variance results, this study rejects that null hypothesis that there is no significant difference between the prerequisites of intrapreneurship in state corporations. Table 4.16 indicates that there is a significant difference among between the sectors in all the prerequisites of intrapreneurship. Thus, the perceptions of respondents on the levels of encouragement by management and organisation was significantly different among the different state corporations ( $F(7,169) = 7.067, p < .000$ ). Likewise, there is a significant difference between the individual motivations of staff across the state corporations ( $F(7,169) = 7.443, p < .000$ ). As well, rewards and communality differed significantly across the sectors ( $F(7,169) = 5.364, p < .000$ ).

Individual competence of staff was found to be significantly different between the state corporations ( $F(7,169) = 2.887, p = .007$ ), while the working environment was significantly different ( $F(7,169) = 2.977, p = .006$ ) in different organisations. Training and development in the sectors was also significantly different ( $F(7,169) = 4.988, p < .000$ ). Individuals in the state corporations displayed significantly different intrapreneurial orientation ( $F(7,169) = 2.405, p = .023$ ). It is also evident that the organisational intrapreneurial orientation was also significantly different among the state corporations ( $F(7,169) = 8.1, p < .000$ ).

This results therefore indicated that the service corporations, which had the highest overall score, were better displaying the prerequisites of intrapreneurship than the regulatory corporations which had scored the lowest score.

#### 4.6 Testing Hypothesis on Comparison of the Outcomes of Intrapreneurship

The second null hypotheses of this study stated as follows-  $H_02$ : There is no significant difference between Kenyan state corporations' with respect to the outcomes of intrapreneurship, in terms of a) job satisfaction, b) customer satisfaction and c) financial performance. Analysis of Variance (ANOVA) was used to test if there were significant differences between the intrapreneurial outcomes in various sectors. The means in Table 4.15 were used for this analysis. The results are in Table 4.17.

**Table 4.17 ANOVA Table for Comparison of the Sector Means of the Outcomes of Intrapreneurship**

Variable	Tests	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Individual's Job Satisfaction	Between Groups	7490.344	7	1070.049	2.566	.015
	Within Groups	70470.069	169	416.983		
	Total	77960.413	176			
Organisation's customer satisfaction	Between Groups	20512.247	7	2930.321	4.628	.000
	Within Groups	107010.901	169	633.201		
	Total	127523.148	176			
Financial performance	Between Groups	9668.730	7	1381.247	1.215	.297
	Within Groups	192064.634	169	1136.477		
	Total	201733.365	176			

Source: Survey data (2010)

The test of significant differences between the sectors as pertains to the outcomes of intrapreneurship indicates that there are significant differences where job satisfaction was concerned ( $F(7,169) = 2.566, p = .015$ ) and also on customer satisfaction ( $F(7,169) = 4.628, p < .000$ ). consequently, the null hypothesis that there is no significant difference in job satisfaction between the sectors was rejected. As well, the null hypothesis of no significant difference in customer satisfaction between the sectors was rejected. Thus, job satisfaction in commercial corporations sector is good while that in the financial

corporation's sector is significantly lower. Customer satisfaction in service corporations is significantly high while it is low in training and research corporations.

Analysis of variance of the financial performance displayed no significant differences ( $F(7,169) = 1.22, p=0.297$ ) between the various sectors represented by state corporations in the sample. Consequently, the null hypothesis of no significant difference in financial performance between the sectors was accepted. In interpreting the result for financial performance, it was noted that the performance is consistently low across the sectors; hence, it shows that this is a systemic issue that may require intervention by all state corporations. Moreover, the results may be because as Semi-Autonomous Government Agencies (SAGA), state corporations are not profit making organisations but are expected to have surpluses, thus emphasis on non-financial outcomes as opposed to financial outcomes.

#### **4.4 Testing Hypothesis on the Relationship between the Prerequisites and Outcomes of Intrapreneurship**

This section presents the findings of further analysis carried out on the score for the prerequisite of the prerequisites and outcomes to establish relationships. The third, fourth and fifth objectives sought to establish if there was a relationship between the prerequisites and outcomes of intrapreneurship. Analysis of the relationships between the prerequisites and outcomes were carried out using stepwise multiple regression analysis.

The sections that follow display the results using stepwise multiple regression using SPSS software. Stepwise multiple regressions, is a way of computing regression in stages. In stage one, the independent variable that is best correlated with the dependent variable is

included in the equation. In the second stage, the remaining independent with the highest partial correlation with the dependent, controlling for the first independent, is entered. This process is repeated, at each stage partialling for previously entered independents, until the addition of a remaining independent does not increase R-squared by a significant amount or until all variables are entered (McClave, et al., 2002). The resultant model summary table displayed R, R squared, and adjusted R squared. Regression tables also include the coefficients sub-table. The unstandardised and standardised coefficients are the coefficients of the estimated regression model. In this study, the unstandardised coefficients were used for interpretation because the data was already standardised into percentages prior to carrying out the analysis.

#### **4.4.1 The Relationship between the Prerequisites of Intrapreneurship and Job Satisfaction**

To assess the relationship between the prerequisites of intrapreneurship and job satisfaction, correlations were assessed then multiple regression analysis was carried out. The correlation between the eight aspects of the prerequisites of intrapreneurship and job satisfaction are displayed in Table 4.18.

**Table 4.18 Correlation Analysis of the Prerequisites of Intrapreneurship and Job Satisfaction**

Prerequisites		Individual's Job Satisfaction
Encouragement by management and organisation	Pearson Correlation	.430(**)
	Sig. (2-tailed)	.000
	N	177
Individual motivation	Pearson Correlation	.449(**)
	Sig. (2-tailed)	.000
	N	177
Rewards and Communality	Pearson Correlation	.221(**)
	Sig. (2-tailed)	.003
	N	177
Individual competence	Pearson Correlation	.200(**)
	Sig. (2-tailed)	.008
	N	177
Enabling work environment	Pearson Correlation	.628(**)
	Sig. (2-tailed)	.000
	N	177
Training and Development	Pearson Correlation	.324(**)
	Sig. (2-tailed)	.000
	N	177
Individual Intrapreneurial Orientation	Pearson Correlation	.364(**)
	Sig. (2-tailed)	.000
	N	177
Organisational Intrapreneurial Orientation	Pearson Correlation	-.022
	Sig. (2-tailed)	.773
	N	177

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: Survey data (2010)

From the above table, the individual's job satisfaction is significantly correlated with encouragement by management and organisation, individual competence, enabling work environment, training and development, and individual intrapreneurial orientation. However, there is no correlation with the organisational intrapreneurial orientation.

Stepwise regression analysis was further carried out and the results are in Table 4.19. This table displays two models generating the R, R squared, adjusted R squared, and the standard error. R, the multiple correlation coefficient, is the correlation between the observed and predicted values of the dependent variable. The values of R for models produced by the regression procedure range from 0 to 1. Larger values of R indicate stronger relationships. R squared is the proportion of variation in job satisfaction explained by the regression model. The values of R squared range from 0 to 1. Small values indicate that the model does not fit the data well. The sample R squared tends to optimistically estimate how well the model fits the population. Adjusted R squared attempts to correct R squared to more closely reflect the goodness of fit of the model in the population. The unstandardised and standardised coefficients are the coefficients of the estimated regression model. The variance inflation factor (VIF) is the reciprocal of the tolerance. As the variance inflation factor increases, so does the variance of the regression coefficient, making it an unstable estimate. Large VIF values ( $VIF > 2$ ) are an indicator of multicollinearity.

**Table 4.19 Stepwise Regression Analysis for Job Satisfaction and the Prerequisites of Intrapreneurship**

<i>Model summary</i>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.628(a)	.395	.391	16.420		
2	.672(b)	.451	.445	15.685		
a Predictors: (Constant), Enabling work environment						
b Predictors: (Constant), Enabling work environment, Individual motivation						
<i>ANOVA(c)</i>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30778.089	1	30778.089	114.156	.000(a)
	Residual	47182.323	175	269.613		
	Total	77960.413	176			
2	Regression	35155.234	2	17577.617	71.452	.000(b)

Residual	42805.178	174	246.007
Total	77960.413	176	

a Predictors: (Constant), Enabling work environment

b Predictors: (Constant), Enabling work environment, Individual motivation

c Dependent Variable: Individual's Job Satisfaction

### Coefficients

Model 2	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	8.391	5.500		1.525	.129		
Enabling work environment	.616	.069	.536	8.886	.000	.868	1.152
Individual motivation	.270	.064	.254	4.218	.000	.868	1.152

### Excluded Variables(c)

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance
Encouragement by management and organisation	.016(b)	.226	.821	.017	.600	1.666	.600
Rewards and Communality	-.073(b)	-1.167	.245	-.088	.797	1.254	.708
Individual competence	-.028(b)	-.464	.644	-.035	.886	1.129	.825
Training and Development	-.016(b)	-.245	.806	-.019	.749	1.334	.725
Individual Intrapreneurial Orientation	.035(b)	.531	.596	.040	.733	1.365	.733
Organisational Intrapreneurial Orientation	-.057(b)	-1.003	.317	-.076	.991	1.009	.860

a Predictors in the Model: (Constant), Enabling work environment

b Predictors in the Model: (Constant), Enabling work environment, Individual motivation

c Dependent Variable: Individual's Job Satisfaction

Source: Survey data (2010)

From table 4.19, stepwise multiple regression analysis was used to test if the eight prerequisites of intrapreneurship significantly predicted job satisfaction. The results of the regression indicated of the eight predictors, only two significantly explained 44.5% of the variance in job satisfaction (adjusted  $R^2 = .445$ ,  $F(2,174) = 71.452$ ,  $p < .01$ ). It was found that enabling work environment significantly predicted job satisfaction ( $\beta = .616$ ,  $p <$

.001), as did individual motivation ( $\beta = -.270$ ,  $p < .01$ ). Other prerequisites were excluded because they were not found to be statistically significant in predicting job satisfaction.

From the Table 4.19, enabling work environment and individual motivation were the significant predictors of job satisfaction. The regression equation for predicting job satisfaction was:

**Equation 1 Model for Job Satisfaction**

$\text{Job satisfaction} = 8.391 + 0.616 \text{ enabling work environment} + 0.27 \text{ individual motivation}$
--

Further, from the Table 4.19, on excluded variables, it can be noted that the p-value of the Beta coefficients was too high and that the partial correlations were low thus rejecting these variables as predictors of job satisfaction.

The third hypothesis stated: H<sub>03</sub>: There is no significant relationship between intrapreneurial prerequisites and job satisfaction in state corporations of Kenya. From the findings, this study has established that there is a significant relationship between two intrapreneurial prerequisites (enabling work environment and individual motivation) and job satisfaction in state corporations of Kenya and thus rejects the null hypothesis.

**4.4.2 The Relationship between Intrapreneurship and Customer Satisfaction**

Establishing the relationship between intrapreneurship and customer satisfaction involved performing correlation and regression analysis. Table 4.20 displays the correlation analysis.

**Table 4.20 Correlation between the Prerequisite of Intrapreneurship and the Perceptions of Customer Satisfaction**

Prerequisite		Organisation's customer satisfaction
Encouragement by management and organisation	Pearson Correlation	.172(*)
	Sig. (2-tailed)	.022
	N	177
Individual motivation	Pearson Correlation	.234(**)
	Sig. (2-tailed)	.002
	N	177
Rewards and Communality	Pearson Correlation	.117
	Sig. (2-tailed)	.122
	N	177
Individual competence	Pearson Correlation	.408(**)
	Sig. (2-tailed)	.000
	N	177
Enabling work environment	Pearson Correlation	.288(**)
	Sig. (2-tailed)	.000
	N	177
Training and Development	Pearson Correlation	.130
	Sig. (2-tailed)	.085
	N	177
Individual Intrapreneurial Orientation	Pearson Correlation	.501(**)
	Sig. (2-tailed)	.000
	N	177
Organisational Intrapreneurial Orientation	Pearson Correlation	.571(**)
	Sig. (2-tailed)	.000
	N	177

\*\* Correlation is significant at the 0.01 level (2-tailed).  
the 0.05 level (2-tailed).

\* Correlation is significant at

Source: Survey data (2010)

From Table 4.20, an organisation's customer satisfaction is significantly and positively correlated with encouragement by management and organisation, individual motivation, individual competence, enabling work environment, and individual intrapreneurial orientation and organisational intrapreneurial orientation. Training and development as well as rewards and communality were not found to have significant correlations.

Stepwise regression analysis was carried out on customer satisfaction and the independent variable. The results in Table 4.21 display R, R squared, adjusted R squared, and the standard error. The unstandardised and standardised coefficients are also presented as are the coefficients of the estimated regression model. The variance inflation factor (VIF) is also presented. In addition, the table lists the excluded variables and corresponding  $\beta$  values.

**Table 4.21 Stepwise Regression Analysis for Customer Satisfaction and the Prerequisites of Intrapreneurship**

***Model Summary***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.571(a)	.326	.323	22.156
2	.649(b)	.422	.415	20.590
3	.667(c)	.445	.435	20.227
4	.682(d)	.465	.452	19.925

a Predictors: (Constant), Organisational Intrapreneurial Orientation

b Predictors: (Constant), Organisational Intrapreneurial Orientation, Individual Intrapreneurial Orientation

c Predictors: (Constant), Organisational Intrapreneurial Orientation, Individual Intrapreneurial Orientation, Enabling work environment

d Predictors: (Constant), Organisational Intrapreneurial Orientation, Individual Intrapreneurial Orientation, Enabling work environment, Rewards and Communality

***ANOVA(e)***

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41619.066	1	41619.066	84.785	.000(a)
	Residual	85904.082	175	490.880		
	Total	127523.148	176			
2	Regression	53756.017	2	26878.009	63.399	.000(b)
	Residual	73767.131	174	423.949		
	Total	127523.148	176			
3	Regression	56743.965	3	18914.655	46.232	.000(c)
	Residual	70779.183	173	409.128		
	Total	127523.148	176			
4	Regression	59238.910	4	14809.727	37.304	.000(d)
	Residual	68284.238	172	397.001		
	Total	127523.148	176			

a Predictors: (Constant), Organisational Intrapreneurial Orientation

b Predictors: (Constant), Organisational Intrapreneurial Orientation, Individual Intrapreneurial Orientation

c Predictors: (Constant), Organisational Intrapreneurial Orientation, Individual Intrapreneurial Orientation, Enabling work environment

d Predictors: (Constant), Organisational Intrapreneurial Orientation, Individual Intrapreneurial Orientation, Enabling work environment, Rewards and Communality

e Dependent Variable: Organisation's customer satisfaction

***Coefficients(a)***

Model 4	Unstandardised Coefficients		Standardised Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	-1.940	7.366		-.263	.793		
Organisational Intrapreneurial Orientation	.447	.055	.504	8.097	.000	.804	1.243
Individual Intrapreneurial Orientation	.459	.124	.251	3.710	.000	.679	1.472
Enabling work environment	.356	.101	.242	3.528	.001	.659	1.516
Rewards and Communality	-.251	.100	-.160	-2.507	.013	.762	1.312

a Dependent Variable: Organisation's customer satisfaction

***Excluded Variables for Customer Satisfaction***

Excluded variables	beta	p	Tolerance (collinearity statistics)	Partial correlation
Individual competence	.080	.239	.686	.090
Encouragement by management and organisation	-.050	.494	.594	-.052
Individual motivation	.020	.747	.777	.025
Training and Development	-.013	.844	.690	-.015

Source: Survey data (2010)

From table 4.21, stepwise multiple regression analysis was used to test if the eight prerequisites of intrapreneurship significantly predicted customer satisfaction. The results of the regression indicated that the eight predictors, four significantly explained 45.2% of the variance in job satisfaction (adjusted  $R^2 = .452$ ,  $F(4,172) = 37.304$ ,  $p < .001$ ). It was found that organisation intrapreneurial orientation significantly predicted customer satisfaction ( $\beta = .447$ ,  $p < .001$ ); individual intrapreneurial orientation was also significant ( $\beta = .459$ ,  $p < .001$ ); enabling work environment significantly predicted customer satisfaction too ( $\beta = .356$ ,  $p = .001$ ); as did rewards and communality ( $\beta = -.251$ ,  $p < .013$ ).

Other prerequisites were excluded because they were not found to be statistically significant in predicting customer satisfaction. The model had organisational

intrapreneurial orientation, individual intrapreneurial orientation, enabling work environment and rewards and communality as the significant predictors of customer satisfaction. Thus, from Table 4.20 the following model on customer satisfaction was derived:

**Equation 2 Model on customer satisfaction**

$\text{Customer satisfaction} = 0.447 \text{ organisational intrapreneurial orientation} + .459 \text{ individual intrapreneurial orientation} + .356 \text{ enabling environment} - .251 \text{ rewards and communality} - 1.94$
---

The fourth hypotheses (H<sub>04</sub>) stated that there is no significant relationship between intrapreneurial prerequisites and customer satisfaction in state corporations of Kenya. From the results of this study, this hypothesis was rejected because prerequisites of intrapreneurship were found to be significantly related to customer satisfaction.

**4.4.3 The Relationship between Intrapreneurship and Perception of Financial Performance**

Results of correlation analysis carried out between perceptions of financial performance and the prerequisites of intrapreneurship are presented in Table 4.22.

**Table 4.22 Correlation between Financial Performance and the Prerequisites of Intrapreneurship**

Prerequisite		Financial performance
Encouragement by management and organisation	Pearson Correlation	.077
	Sig. (2-tailed)	.309
	N	177
Individual motivation	Pearson Correlation	.158(*)
	Sig. (2-tailed)	.035
	N	177
Rewards and Communality	Pearson Correlation	.110
	Sig. (2-tailed)	.146
	N	177
Individual competence	Pearson Correlation	.214(**)
	Sig. (2-tailed)	.004
	N	177
Enabling work environment	Pearson Correlation	.068
	Sig. (2-tailed)	.371
	N	177
Training and Development	Pearson Correlation	-.042
	Sig. (2-tailed)	.579
	N	177
Individual Intrapreneurial Orientation	Pearson Correlation	.257(**)
	Sig. (2-tailed)	.001
	N	177
Organisational Intrapreneurial Orientation	Pearson Correlation	.227(**)
	Sig. (2-tailed)	.002
	N	177

\*\* Correlation is significant at the 0.01 level (2-tailed).  
the 0.05 level (2-tailed).

\* Correlation is significant at

Source: Survey data (2010)

Results in Table 4.22 indicated that perceptions of financial performance are significantly correlated to individual motivation, individual competence, individual intrapreneurial orientation and organisational intrapreneurial orientation. The rest of the independent prerequisites were not significantly correlated.

Stepwise regression analysis was carried out on financial performance and the independent variables. The results in Table 4.23 display R, R squared, adjusted R squared, and the standard error. The unstandardised and standardised coefficients are also presented and are the coefficients of the estimated regression model. The variance inflation factor (VIF) is also presented. The table also lists the excluded variables and corresponding  $\beta$  values.

**Table 4.23 Stepwise Multiple Regression between the Prerequisites and Perceptions of Financial Performance**

<i>Model Summary</i>								
Model		R	R Square	Adjusted R Square		Std. Error of the Estimate		
1		.257(a)	.066	.060		32.816		
a Predictors: (Constant), Individual Intrapreneurial Orientation								
<i>ANOVA(b)</i>								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	13274.507	1	13274.507	12.327	.001(a)		
	Residual	188458.857	175	1076.908				
	Total	201733.365	176					
a Predictors: (Constant), Individual Intrapreneurial Orientation								
b Dependent Variable: Financial performance								
<i>Coefficients(a)</i>								
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.655	9.750		.785	.433		
	Individual Intrapreneurial Orientation	.590	.168	.257	3.511	.001	1.000	1.000
a Dependent Variable: Financial performance								
<i>Excluded Variables(b)</i>								
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Encouragement by management and organisation	-.007(a)	-.097	.923	-.007	.894	1.119	.894
	Individual motivation	.061(a)	.750	.454	.057	.820	1.219	.820
	Rewards and Communality	.043(a)	.558	.577	.042	.924	1.082	.924
	Individual competence	.110(a)	1.289	.199	.097	.728	1.373	.728

Enabling work environment	-.052(a)	-.646	.519	-.049	.815	1.227	.815
Training and Development	-.146(a)	-	.060	-.142	.885	1.130	.885
Organisational Intrapreneurial Orientation	.152(a)	1.890	.054	.146	.858	1.165	.858

a Predictors in the Model: (Constant), Individual Intrapreneurial Orientation

b Dependent Variable: Financial performance

Source: Survey data (2010)

From Table 4.23, the results of stepwise multiple regression analysis indicated out of the eight predictors, only one explained 6% of the variance in perceptions of financial performance (adjusted R square = .06;  $F(1,175) = 12.33$ ,  $p = 0.01$  - using the stepwise method). It was found that individual intrapreneurial orientation significantly predicted financial performance ( $\beta = .590$ ,  $p = .001$ ). Other prerequisites were excluded because they were not found to be statistically significant in predicting job satisfaction. The predictive model therefore is:

### Equation 3 Financial Performance Model

$$\text{Financial performance} = 7.655 + 0.59 \text{ individual intrapreneurial orientation}$$

Indeed the excluded variables displayed in Table 4.23 show low t-values; some values are negative, but their large high p-values, mean that the beta values are not statistically significant. Thus, Table 4.23 confirms that the variables were not strong enough to be significant predictors of financial performance hence were not included in the model.

The fifth hypothesis of this study stated that there is no significant relationship between intrapreneurial prerequisites and financial performance in state corporations of Kenya. The results indicate that there is a significant relationship between one prerequisite of

intrapreneurship (individual intrapreneurial orientation) and financial performance in state corporations. Consequently, the null hypothesis was rejected.

#### **4.6.1 Analysing the Antecedent Effect of Excluded Prerequisites**

The findings on the relationship between the prerequisites and outcomes of intrapreneurship in this study have excluded the following prerequisites from the outcomes using stepwise multiple regression analysis, encouragement by management and organisation, training and development, and individual competence. However, as noted in the correlations (see table 3.2), these variables were significantly correlated with other prerequisites of intrapreneurship. An analysis of the excluded variables regressed to the included variables was carried out using multiple regression in order to establish any causal or antecedent effects.

The goal of multiple regression is to enable a researcher to assess the relationship between a dependent (predicted) variable and several independent (predictor) variables. The result of multiple regression is the development of a regression equation (line of best fit) between the dependent variable and several independent variables. All included prerequisites were in these cases dependent variables while the excluded variables were the predictors. The results are contained in the sections following:

##### ***4.4.3.1 Dependent variable: Individual motivation***

Multiple regression analysis was carried out between individual motivation scores and the scores on the excluded variables i.e. individual competence, Encouragement by management and organisation, Training and Development significantly predicted scores of individual motivation. The results in Table 4.24 display R, R squared, adjusted R squared,

and the standard error. The unstandardised and standardised coefficients are also presented, as are the coefficients of the estimated regression model. The VIF is also presented, that indicates no multicollinearity.

**Table 4.24 Multiple Regression Between and the Excluded Prerequisites of Intrapreneurship and Individual Motivation**

<i>Model Summary</i>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.544 <sup>a</sup>	.296	.284	16.766		
a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development						
<i>ANOVA<sup>b</sup></i>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20424.494	3	6808.165	24.221	.000 <sup>a</sup>
	Residual	48627.483	173	281.084		
	Total	69051.977	176			
a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development						
b. Dependent Variable: Individual motivation						
<i>Coefficients<sup>a</sup></i>						
Model	Unstandardised Coefficients	Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta		Tolerance	VIF
(Constant)	22.870	6.841		3.343	.001	
Encouragement by management and organisation	.569	.095	.411	5.998	.000	.867
Training and Development	.171	.081	.146	2.122	.035	.861
Individual competence	.177	.061	.189	2.920	.004	.972
a. Dependent Variable: Individual motivation						

Source: Survey data (2010)

As presented in Table 4.23, the results of the regression indicated the three predictors explained 28.4% of the variance (adjusted  $R^2=.284$ ,  $F(3,173)=24.221$ ,  $p<.001$ ). It was

found that encouragement by management and organisation was a significant antecedent of individual motivation ( $\beta = .569$ ,  $p < .001$ ), as was training and development ( $\beta = .171$ ,  $p = .035$ ). In addition, individual competence significantly predicted individual motivation ( $\beta = .177$ ,  $p = .004$ ).

#### 4.4.3.2 Dependent variable: Enabling Work Environment

Multiple regression analysis was carried out between enabling work environment scores and the scores of the excluded variables. The results in Table 4.24 display R, R squared, adjusted R squared, and the standard error. The unstandardised and standardised coefficients are also presented, as are the coefficients of the estimated regression model. The VIF is also presented and it indicates no multicollinearity.

**Table 4.25 Multiple Regression Between and the Excluded Prerequisites of Intrapreneurship and Enabling Work Environment**

<i>Model Summary</i>								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	.658 <sup>a</sup>	.433	.423	13.912				
a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development								
<i>ANOVA<sup>b</sup></i>								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	25578.762	3	8526.254	44.052	.000 <sup>a</sup>		
	Residual	33484.326	173	193.551				
	Total	59063.089	176					
a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development								
b. Dependent Variable: Enabling work environment								
<i>Coefficients<sup>a</sup></i>								
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	3.088	5.677		.544	.587		
	Encouragement by management and organisation	.543	.079	.425	6.907	.000	.867	1.153
	Training and Development	.318	.067	.293	4.751	.000	.861	1.161
	Individual competence	.173	.050	.200	3.441	.001	.972	1.028
a. Dependent Variable: Enabling work environment								

Source: Survey data (2010)

From Table 4.24, multiple regression analysis was used to test if individual competence, Encouragement by management and organisation, Training and Development significantly predicted scores of enabling work environment. The results of the regression indicated the three predictors explained 42.3% of the variance (adjusted  $R^2=.423$ ,  $F(3,173)=44.052$ ,  $p<.001$ ). It was found that encouragement by management and organisation was a significant antecedent of enabling work environment ( $\beta = .543$ ,  $p< .001$ ), as was training and development ( $\beta =.318$ ,  $p<.001$ ). In addition, individual competence significantly predicted enabling work environment ( $\beta=.173$ ,  $p=.001$ ).

#### ***4.4.3.3 Dependent variable: Individual Intrapreneurial Orientation***

Multiple regression analysis was carried out between individual intrapreneurial orientation scores and the scores of the excluded variables (individual competence, Encouragement by management and organisation, Training and Development) to test if they significantly predicted scores of individual intrapreneurial orientation. The results in Table 4.25 display R, R squared, adjusted R squared, and the standard error. The unstandardised and standardised coefficients are also presented, as are the coefficients of the estimated regression model. The VIF is also presented and it indicates no multicollinearity.

**Table 4.26 Multiple Regression Between and the Excluded Prerequisites of Intrapreneurship and Individual Intrapreneurial Orientation**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613 <sup>a</sup>	.375	.365	11.733

a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14314.285	3	4771.428	34.659	.000 <sup>a</sup>
	Residual	23816.295	173	137.666		
	Total	38130.580	176			

a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development

b. Dependent Variable: Individual Intrapreneurial Orientation

**Coefficients<sup>a</sup>**

Model		Unstandardised Coefficients		Standardised Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	11.321	4.787		2.365	.019		
	Encouragement by management and organisation	.203	.066	.198	3.066	.003	.867	1.153
	Training and Development	.173	.057	.199	3.066	.003	.861	1.161
	Individual competence	.326	.042	.468	7.673	.000	.972	1.028

a. Dependent Variable: Individual Intrapreneurial Orientation

Source: Survey data (2010)

The results of the regression indicated the three predictors explained 36.5% of the variance (adjusted  $R^2 = .365$ ,  $F(3,173) = 34.659$ ,  $p < .001$ ). It was found that encouragement by management and organisation was a significant antecedent of individual intrapreneurial orientation ( $\beta = .203$ ,  $p = .003$ ), as was training and development ( $\beta = .173$ ,  $p = .003$ ). In addition, individual competence significantly predicted individual intrapreneurial orientation ( $\beta = .326$ ,  $p < .001$ ).

#### 4.4.3.4 Dependent Variable: Organisational Intrapreneurial Orientation

Multiple regression analysis was carried out between organisational intrapreneurial orientation scores and the scores of the excluded variables which were individual competence, encouragement by management and organisation, training and development to establish if they significantly predicted scores of organisational intrapreneurial orientation. The results in Table 4.27 display R, R squared, adjusted R squared, and the standard error. The unstandardised and standardised coefficients are also presented, as are the coefficients of the estimated regression model. The VIF is also presented and it indicates no multicollinearity.

**Table 4.27 Multiple Regression Between and the Excluded Prerequisites of Intrapreneurship and Organisational Intrapreneurial Orientation**

##### *Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.365 <sup>a</sup>	.133	.118	28.461

a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development

##### *ANOVA<sup>b</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21544.411	3	7181.470	8.865	.000 <sup>a</sup>
	Residual	140139.322	173	810.054		
	Total	161683.734	176			

a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development

b. Dependent Variable: Organisational Intrapreneurial Orientation

##### *Coefficients<sup>a</sup>*

	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	8.873	11.613		.764	.446		
Encouragement by management and organisation	.263	.161	.124	1.632	.105	.867	1.153
Training and Development	-.145	.137	-.080	-1.054	.293	.861	1.161
Individual competence	.490	.103	.341	4.753	.000	.972	1.028

a. Dependent Variable: Organisational Intrapreneurial Orientation

Source: Survey data (2010)

From the results of the regression presented in table 4.27, the three predictors explained 11.8% of the variance (adjusted  $R^2 = .118$ ,  $F(3,173) = 8.865$ ,  $p < .001$ ). It was found that individual competence significantly predicted rewards and communality ( $\beta = .490$ ,  $p < .001$ ). However, encouragement by management and organisation was not a significant antecedent of organisational intrapreneurial orientation ( $\beta = .263$ ,  $p = .105$ ), nor was training and development ( $\beta = -.145$ ,  $p = .293$ ).

#### 4.4.3.5 Dependent Variable: Rewards and Communality

Multiple regression analysis was carried out between rewards and communality scores and the scores of the excluded variables. The results in Table 4.27 display R, R squared, adjusted R squared, and the standard error. The unstandardised and standardised coefficients are also presented, as are the coefficients of the estimated regression model. The VIF is also presented and it indicates no multicollinearity.

**Table 4.28 Multiple Regression Between and the Excluded Prerequisites of Intrapreneurship and Rewards and Communality**

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584 <sup>a</sup>	.341	.330	14.062

a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development

##### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17717.823	3	5905.941	29.868	.000 <sup>a</sup>
	Residual	34208.574	173	197.737		
	Total	51926.397	176			

a. Predictors: (Constant), Individual competence, Encouragement by management and organisation, Training and Development

b. Dependent Variable: Rewards and Communality

##### Coefficients<sup>a</sup>

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	13.112	5.738		2.285	.024		
Encouragement by management	.502	.080	.419	6.317	.000	.867	1.153

and organisation							
Training and Development	.276	.068	.271	4.079	.000	.861	1.161
Individual competence	.040	.051	.049	.777	.438	.972	1.028
a. Dependent Variable: Rewards and Communality							

Source: Survey data (2010)

Multiple regression analysis was used to test if individual competence, Encouragement by management and organisation, Training and Development significantly predicted scores of rewards and communality. The results of the regression indicated the three predictors explained 33% of the variance (adjusted  $R^2 = .330$ ,  $F(3,173) = 29.868$ ,  $p < .001$ ). It was found that encouragement by management and organisation significantly predicted rewards and communality ( $\beta = .502$ ,  $p < .001$ ), as did training and development ( $\beta = .276$ ,  $p < .001$ ). However, Individual competence was not a significant antecedent of rewards and communality ( $\beta = .040$ ,  $p = .438$ ).

#### **4.5 Discussion of the Results of the Study**

This study sought to determine the prerequisites of intrapreneurship that influence the outcomes in state corporations in Kenya. This section discusses the findings of the study in the light of the findings of other researchers in this area. In so doing it will highlight some theoretical, practical and managerial implications of the findings.

##### **4.6.2 Prerequisites of Intrapreneurship Evident in State Corporations**

The findings from this study have indicated that all the prerequisites are evident to varying degrees with the highest being individual motivation and the lowest being organisational intrapreneurial orientation. The prerequisite of encouragement by management and organisation had respondents stating that managers encourage staff to be intrapreneurial. This agrees with Holt, Mathew and Clohessy (2007) who found that managers could, through deliberate actions, affect the level of intrapreneurship within a given organisation. This finding however disagrees with what Kitheka (2005) found. Focusing on the civil service in Kenya, he studied factors that hinder civil servants from being entrepreneurial and found that there is discouragement from the top management team to be intrapreneurial. Holt et al. (2007) found that leaders are likely to get the most return by expressing their management support, providing organisational members some discretion and autonomy, and rewarding and reinforcing innovative, proactive, and prudent risk taking behaviours.

On the other hand, the organisation setting may work against intrapreneurship. This study found that there were rigid rules of conduct and organisational boundaries were tight in the organisations under study. Research has found that to be fully innovative, the enterprise needs to have a mind-set of innovation at all levels and in all the functions of the

organisation (Khandwalla, 2006). Those with a yen for innovation need to have the freedom to interact with one another freely so that innovation can take place. Thus, this aspect may be lacking considering that, this study has found that the organisational boundaries between department and units is tight. Further, Dess, et al. (1999) argue that traditional organisational models built around rigid hierarchies and clearly defined boundaries are poorly suited for today's entrepreneurial organisations, as they tend to limit flexibility and stifle communication.

Individual motivation to perform intrapreneurially was highly evident in the state corporations. However, 11% of staff members stated that they were not willing to put themselves at stake in their work, and thus would probably not be intrapreneurial. On this aspect, Regulatory and Financial sector organisations scored significantly lower than other state corporations.

Rewards and communality were evident in the state corporations generally. Noteworthy, the respondents almost unanimously agreed that they know what was expected of them, indicating clear job descriptions. The problem of such job descriptions is that they introduce rigidity and fixation on how things should be done, thus endangering spontaneity in innovation and risk taking which are key in intrapreneurship. Many respondents felt that their productive activities are not rewarded well. Rewards are crucial to motivate intrapreneurship. As Monsen et al. (2007) found out, employees are more willing to participate in a new corporate venture when the profit sharing is high than when it is low. Further, Hornsby and Kuratko (2003) found that the use of bonuses as reinforcement or compensation is important, given the relationships between satisfaction and variables such as productivity and withdrawal behaviours (absenteeism and tardiness), indicating that

developing a corporate entrepreneurship culture could favourably influence these variables. They concluded that firms wishing to sustain their corporate entrepreneurship culture may want to develop equitable rewards.

This study found that many respondents had the competence to drive intrapreneurship in their organisations. They were also willing to present new ideas at their work places as well as actively develop themselves at the workplace. However, it was noted that the commercial manufacturing sector in particular scored low in individual competence but high in individual motivation. Performance is a function of both ability or competence and motivation. Someone with 100% motivation and 75% competence can often achieve above-average performance. Nevertheless, a worker with only 25% competence will not be able to achieve the type of performance you expect, regardless of his or her level of motivation (Mindtools, 1995). This calls for training intervention as necessary.

Training and development as a prerequisite of intrapreneurship was also well evidenced in the state corporations. Being public organisations, the state corporations are governed by rigid rules and regulations and promotion is based on attainment of certain certificates. Thus, the high scores on training may not be taken in isolation as evidence of intrapreneurship. Indeed, Wakkee, Elfring and Monaghan (2008) reiterated that the effect of training on intrapreneurial behaviour depended on the level of self- efficacy.

The work environment was enabling to a large extent but a few respondents felt that knowledge did not flow openly in the organisation and that they did not have sufficient authority to carry out their duties well. Yet the intrapreneurial organisation should ensure that the staffs have sufficient authority to make any requisite changes in the way work is

carried out. To do so, the staff must feel facilitated by the working atmosphere as well as a suitable workload to achieve this. It was evident that most of the organisations have a work environment that may require improvement especially in the areas of flow of knowledge and information. For example, in her study in the manufacturing sector, Riot (2010) noted that information flow was limited to people in top management and the marketing department while other critical employees in other levels did not seem to benefit from the insiders' training and knowledge, which is seen as the key advantage of intrapreneurs. Thus, it would explain why there is no unified agreement on aspects of the enabling environment. The researcher's findings are also in concord with what Ahmad, Malek, Iraj and Yousef (2004) found in their study, that existing organisational environment in a public sector organisation, was not so suitable for improving intrapreneurship in different levels of an organisation. They therefore recommended that organisational structure and rules should be modified towards intrapreneurialism in the organisation.

This study found that intrapreneurial orientation of individuals is about average, overall, because whereas most respondents stated that they try out new ideas and approaches to doing things, and that they can be counted on to find new use of existing methods and equipment, they emerged as needing more motivation to be intrapreneurial. The need to perfect new ideas before implementation is an antithesis of intrapreneurship. Thus, respondents emerged as hesitant, wanting to follow the existing rules and regulations and not wanting to try out new ideas. This is in tandem with the findings of Bosma, Stam and Wennekers (2010), who carried out a comparative inter-country analysis of intrapreneurship in organisations and found that, intrapreneurship is not a very widespread phenomenon. They stated that on average, less than 5 percent of employees were found to be intrapreneurs. The prevalence of intrapreneurship was found to be about twice as high

in high-income countries than in low-income countries. Thus, to improve the intrapreneurial orientation of staff in state corporations required generalized intervention in all sectors.

The organisational intrapreneurial orientation of the state corporations was about average. About half of the respondents felt that their organisation was better than its competitors in strategic planning activities, risk taking, perseverance to see the vision succeed and new venture identification.

The instruments used for data collection required respondents to rate their organisations in comparison with their competitors. The findings of this study were that many respondents were not able to compare their organisations with their competitors. Further probing revealed that the state corporations did not regard themselves as having competitors. Indeed, many state corporations were formed to provide unique services to the public at a cost and were working towards being self-sustaining and having surpluses or profits. This kind of attitude about competition, or lack thereof, could be detrimental to intrapreneurship because it causes the staff to be lax; and have a monopolistic attitude of perpetual existence even if no profits are made. This may be the reason why state corporations have become a burden to the taxpayer (PSCGT, 2002). Yet, research has found that intrapreneurship in the public sector entrepreneurship can be successful just as in the private sector (Fox, 2008; Morris & Jones, 1999). Thus, Bellone and Goerl (1992) in their research stressed that public sector entrepreneurship was a dynamic approach to administrative responsibility that included generating new sources of revenue, providing enhanced services, as well as helping facilitate increased citizen education and participation.

### **4.6.3 Outcomes of Intrapreneurship**

Job satisfaction was found to be good overall in state corporations since a large proportion of respondents indicated high levels of satisfaction. A few however did indicate that they did not feel happy in their work and some could not tell if others valued them.

Customer satisfaction displayed average results. Even though many respondents agreed that, their organisations are known to be competent and responsive to customer needs, a few felt that they did not respond to their customers better than their competitors. A few also felt that their customer relations were not long term yet long-term customers are key to the success of any intrapreneurial venture.

The rating of financial performance was inconclusive because almost half of the respondents could not tell about the financial performance of their organisations. The explanation of this could lie in information sharing - that such information is classified and neither readily available nor communicated to staff.

### **4.6.4 Relationship between the Prerequisites and Outcomes of Intrapreneurship**

This study found that, of the eight prerequisites of intrapreneurship, five dimensions have significant influence on the outcomes. Specifically, enabling work environment and individual motivation accounted for 44.5% ( $R^2 = 0.445$ ) of the variance in job satisfaction. Organisational intrapreneurial orientation, individual intrapreneurial orientation, enabling work environment and rewards and communality account for 45.2% ( $R^2 = 0.452$ ) of the variance in customer satisfaction. Individual intrapreneurial orientation accounted for 6% ( $R^2 = 0.060$ ) of the variance in financial performance. These findings are in tandem with various researchers such as Kuratko, Ireland, and Hornsby (2001, pg. 69), who found that

corporate entrepreneurship activities in a large firm resulted in diversified products and markets, as well as being key to producing "impressive financial results". Stewart (2009) showed that intrapreneurial orientation not only affected employee performance, but also affected other organisational outcomes, such as job satisfaction. Several quantitative studies have further linked corporate entrepreneurship to increased growth and increased profitability (Kroeger, 2007; Zahra & Covin, 1995; Zahra & Garvis, 2000). Further, other studies have found that intrapreneurship is positively linked to intangible outcomes, like knowledge, skill development, and job satisfaction (Adonisi, 2003; Hornsby & Kuratko, 2003; Ireland, Kuratko, & Covin, 2003).

In fact, from the results of this study, state corporations may be experiencing what Narasimhan and Flamholtz (2007, pg. 1) refer to as 'growing pains'. The authors define 'growing pains' as the symptom that something has gone wrong with the organisation or with the strategic organisational development. Organisations are expected to experience a variety of growing pains as they develop because of the inability of the existing organisational infrastructure to support the rapid expansion of the organisation. These pains are due to the imbalance between the existing organisational infrastructure and the lack of fit between building blocks of organisational development and the organisation's size or stage of development. Such growing pains might be instrumental in stifling corporate entrepreneurship spirit. The supposition here is that if an organisation is unable to effectively carry out time-critical activities that are necessary for its daily survival, for instance meeting project deadlines, with its given infrastructure, then it will not have the infrastructure or resources to undertake innovative projects that are not "urgent" and are more long-term in nature. Intrapreneurship efforts might therefore be postponed in order to be considered when the organisation ostensibly has more "time and resources" to deal with

it. Another aspect of growing pains is that these pains can crop up at any time, even in cases of organisations whose current systems and infrastructure are suitable to support corporate entrepreneurship efforts. This is because although the existing infrastructure is enough to bear the organisation in its present stage of development, these systems become inadequate when the organisation moves into the next stage of its growth. Some classic symptoms of organisational growing pains evident in literature and listed by Narasimhan and Flamholtz (2007, pg. 10) were also observed in this study:

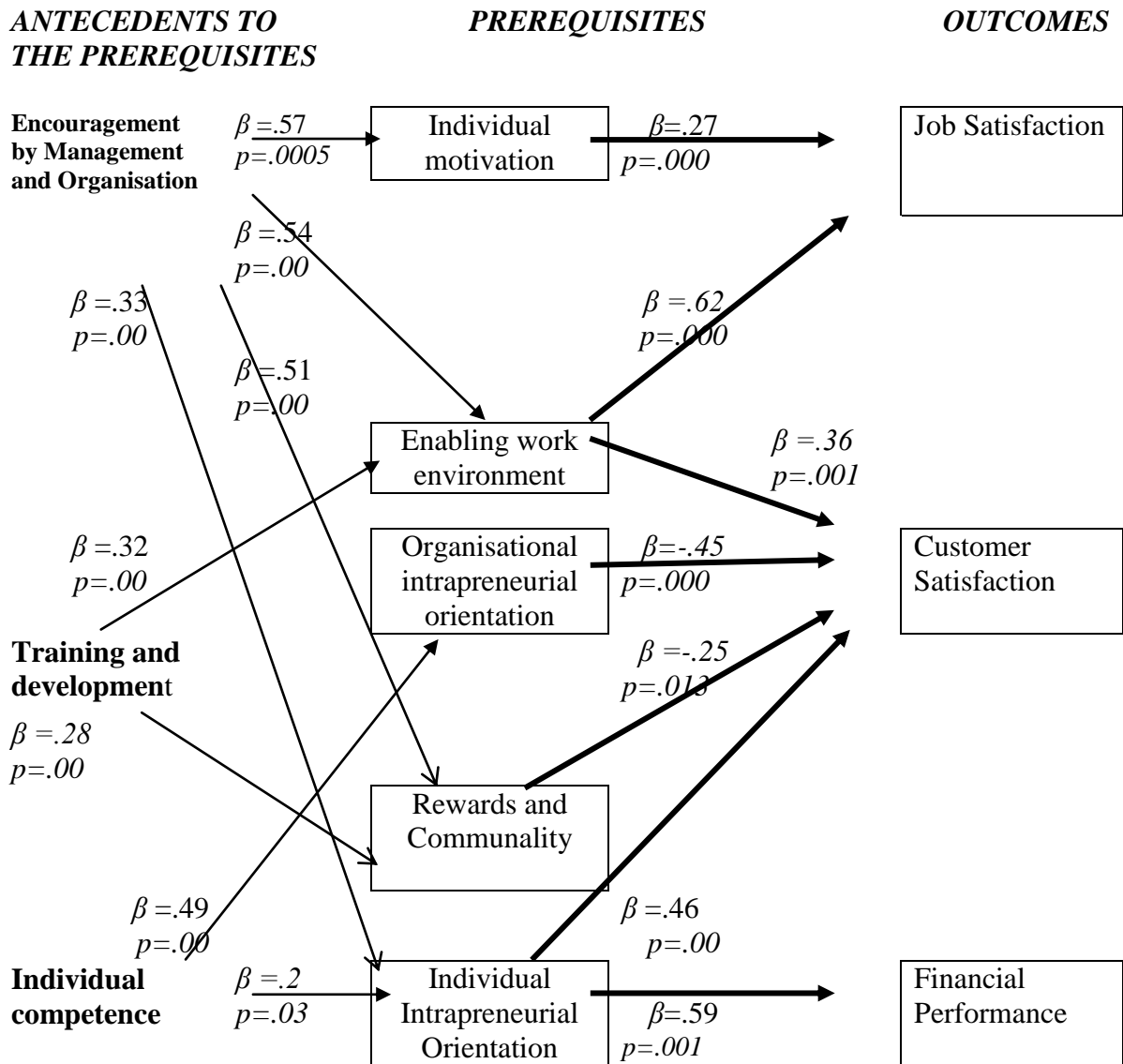
- a) Staff felt that they would not be able to get their work done. Evidently, 33% of respondents in this study indicated that they did not have sufficient authority to carry out their work well. This might in turn lead to morale issues in the organisation.
- b) Many people were not aware of what others were doing. Indeed 44% were not agreeable with the statement that knowledge flowed freely in their organisations. A further 27% stated that they could not easily get help in their work place. This could create a situation where departments within the organisation do whatever they wanted to do and say that the remaining tasks were “not their responsibility”.
- c) Some people lacked an understanding of where the firm was heading. Demonstrably, 20% of employees indicated that their organisation had no clear direction, an indication of the growing pain symptom.
- d) When plans were made there is very little follow up and things were therefore not done. As was seen, 51% of respondents specified that there were delays in getting things done, pointing to the possibility that the organisations did not have an adequate system to monitor their goals.

Another interesting explanation on the relationships between the prerequisites and outcomes is that the prerequisites that seem not to have any direct influence or predictive

value may be explained by their pioneering effect. This is explained further in the following section.

#### 4.6.5 Modelling Intrapreneurship in State Corporations of Kenya

Based on the findings in this study, the model on Figure 4.2 was developed:



**Figure 4.2 Model of the Prerequisites and Outcomes of Intrapreneurship**

Figure 4.2 displays the direction of the influence of the prerequisites on the outcomes of intrapreneurship. The strength or predictive power is shown on each as  $\beta$  (Beta Coefficient) with its corresponding level of significance. For the purposes of assigning the relationships

between the variables, the higher the absolute figure as well as the smaller the p-value, the stronger the influence. Note that the three excluded variables i.e. encouragement by management and organisation, training and development and individual competence are here presented as the antecedents of the prerequisites. Antecedent and mediating effects exist in literature. For example, Stull (2005) noted in his research on factors facilitating intrapreneurship that some variables work as facilitators to the prerequisites, while other factors are mediating variables that facilitate intrapreneurship.

The antecedent effects of other factors were also studied by Matsuno, Mentzer and Ozsomer (2002), who were able to show that an intrapreneurial orientation positively influenced financial measures of performance, and furthermore, discovered that this relationship is mediated by a market orientation. Specifically, these authors found that an intrapreneurial orientation accounted for 74% of the positive impact of market orientation on performance. Antoncic and Hisrich's (2001) findings suggest that organisational support can be an important direct predictor of corporate entrepreneurship, as well as an indirect influence, through corporate entrepreneurship, on performance. Said and Mohamad (2005) found that managers perceive that their firms' external environment in terms of its dynamism, hostility and technological sophistication makes a highly positive contribution to intrapreneurial behaviour. In addition, managers perceive that their firms' intrapreneurial orientation makes a highly positive contribution to the firms' performance.

This model is an improvement of Miller's (1983) model of intrapreneurship that is discussed under Figure 2.3. In comparison, Miller's (1983) model discussed the potential elements that determine firm performance as organisational culture and setting and the skills and attitudes of managers and employees. These have emerged in the current study

as the antecedents to the prerequisites. Thus, five key prerequisites have emerged: individual motivation to act intrapreneurially, enabling work environment, organisational intrapreneurial orientation, rewards and communality and individual intrapreneurial orientation.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of findings, the conclusions made and recommendations.

### **5.2 Summary of Findings**

The purpose of this study was to determine the intrapreneurial prerequisites that influence organisational outcomes in state corporations in Kenya. The prerequisites of intrapreneurship that were studied were eight, including encouragement by management and the organisation; individual motivation; rewards and communality; individual competence; training and development; enabling working environment; individual intrapreneurial orientation; and organisational intrapreneurial orientation. The outcomes of intrapreneurship that were studied were employee job satisfaction, customer satisfaction and financial performance. In order to accomplish this, the researcher used a cross sectional descriptive research design. A stratified random sample of eight state corporations was chosen and questionnaires were administered to managers and employees. The questionnaire comprised of Likert-type questions of which the summated weighted means formed the scores for further analysis using analysis of variance and multiple regression analysis.

The key findings of this study were based on the objectives of the study. The first objective was to establish cross-sectoral differences in the prerequisites of intrapreneurship evident in state corporations of Kenya. It was found that all the prerequisites of intrapreneurship were evident in state corporations but in varying degrees and there were significant differences between the scores. Generally, Service Corporations emerged as the best performers on the prerequisites, scoring 71%, while Financial Corporations (60%),

Training and Research Corporations (59%) and Regulatory Corporations (54%) were at the bottom levels. The first null hypothesis,  $H_{01}$ : There is no significant difference in intrapreneurial prerequisites between state corporations in Kenya was rejected. There were significant differences between the state corporations in encouragement by management and organisation  $F(7, 169) = 7.07, p = .00$ ; individual motivation  $F(7, 169) = 7.44, p = .00$ ; rewards and communality  $F(7, 169) = 5.36, p = .00$ ; individual competence  $F(7, 169) = 2.89, p = .007$ ; enabling work environment  $F(7, 169) = 2.98, p = .006$ ; training and development  $F(7, 169) = 4.99, p = .00$ ; individual intrapreneurial orientation  $F(7, 169) = 2.41, p = .023$  and; organisational intrapreneurial orientation  $F(7, 169) = 8.10, p = .00$ .

The second objective was to determine cross-sectoral differences in the perceptions of the outcomes of intrapreneurship among staff in state corporations of Kenya. The findings on the outcomes of intrapreneurship revealed that the extent varied across the sectors. Job satisfaction was scored best at 69%, but employees' perceptions of customer satisfaction, at 53%, and financial performance, at 41%, were not very well scored. A large proportion of the respondents stated that they could not tell the answers to the questions posed in the questionnaires on customer satisfaction and financial performance. However, the information gathered was still adequate to analyze and make inferences on. Thus, the second hypothesis -  $H_{02}$ : There is no significant difference between Kenyan state corporations' with respect to employee's perceptions of the outcomes of intrapreneurship was partly rejected. The findings revealed that there are significant difference with respect to job satisfaction  $F(7, 169) = 2.57, p = .015$  and customer satisfaction  $F(7, 169) = 4.63, p = .000$ . On the other hand, there was no significant difference between the state corporations in terms of their perceptions of their respective financial performance  $F(7, 169) = 1.22, p = .297$ .

On the relationship between the prerequisites and outcomes of intrapreneurship, this study found that enabling work environment and individual motivation had a significant influence on the variance on job satisfaction,  $R^2 = .445$ ,  $F(2,174) = 71.45$ ,  $p = 0.00$ . Organisational intrapreneurial orientation, individual intrapreneurial orientation, enabling work environment and rewards and communality had a significant influence on the variance in customer satisfaction,  $R^2 = 0.452$ ;  $F(4,172) = 37.304$ ,  $p = 0.00$ . Finally, individual intrapreneurial orientation had a significant influence on the variance in financial performance,  $R^2 = .06$ ;  $F(1,175) = 12.33$ ,  $p = 0.01$ . Consequently,  $H_03$ : there is no significant relationship between intrapreneurial prerequisites and job satisfaction in state corporations of Kenya was rejected.  $H_04$ : there is no significant relationship between intrapreneurial prerequisites and employees' perceptions of customer satisfaction in state corporations of Kenya was rejected, and  $H_05$ : there is no significant relationship between intrapreneurial prerequisites and employees' perceptions of financial performance in state corporations of Kenya was also rejected.

In discussing these interrelationships, encouragement by management and organisation, training and development and, individual competence, which, hitherto, were not significantly explaining the variance in the outcomes of intrapreneurship, were found to be antecedent to the prerequisites of intrapreneurship.

This study sheds light on our understanding and evaluation of the prerequisites and outcomes of intrapreneurship. Based on the data collected and analyzed, this study concludes that the prerequisites are evident in varying degrees in the state corporations. Further, there are significant differences between the dynamics of intrapreneurship across

the state corporation sectors. Overall, some prerequisites had a higher influence on the outcomes than others did. Encouragement from management, training and development, and individual competence did not emerge as having any significant influence on the outcomes of intrapreneurship in state corporations in Kenya.

### **5.3 Conclusions**

From this study it can be concluded that there is a significant relationship between the prerequisites of intrapreneurship and the outcomes. Each outcome is predicated by a different set of prerequisites. The variability in the outcomes that was accounted for by the prerequisites suggested that there are other factors, beyond the scope of this study that have an effect on the outcomes. In fact, what was most interesting is that three of the factors, initially thought to be prerequisites had an antecedent effect on other prerequisites. This has theoretical implications to the understanding of the prerequisites on intrapreneurship in organisations. Further, this conclusion has managerial implications for the practice of management. This means that for intrapreneurship to take place and the outcomes envisaged to be accomplished, certain aspects need to be in place. Specifically, the staff are expected to be motivated to act intrapreneurially. Secondly, there should be an enabling work environment, an environment that encourages intrapreneurship; innovativeness, creativity, self-renewal, and proactiveness. Thirdly, the organisation has to be intrapreneurial in its orientation especially as it competes with other organisations for the customers that it serves. This will result in more customers, which result in more business taking place. Fourthly, there are expected to be rewards for individuals who are intrapreneurial since this fosters a sense of communality and ownership. Finally, the individuals should be intrapreneurial in their orientation. That is, they should be innovative and willing to seek new solutions to their challenges at work and be willing to take risks.

What this study has concluded is that the above-mentioned five prerequisites will not be evident unless there is encouragement by the management for intrapreneurship; the culture of training and development and the individual staff members should have the competence necessary for their intrapreneurial orientation to bear fruit. Moreover, it was puzzling to note that many respondents were not able to respond to questions on the satisfaction of their customers and on the financial performance of their organisations. The conclusion on this was that many workers do not consider their organisations holistically. They are not aware of how their organisations perform financially or how they relate with their customers. This resulted in low influences between the prerequisites and outcomes, contrary to theory and previous research, which had shown that there was a very strong influence of the prerequisites on the performance of the organisation.

## **5.4 Recommendations**

### **5.4.1 Recommendations for Intrapreneurial Policy and practice**

This study sought to investigate the prerequisites of intrapreneurship as determinants of intrapreneurial outcomes in state corporations of Kenya and found that there is a significant relationship between the prerequisites and outcomes of intrapreneurship. It is therefore recommended that organisations nurture and develop the areas represented by the prerequisites so as to achieve sustained growth in their organisations. Further, it was noted that there were varying degrees of influence of the prerequisites on the outcomes across various sectors. It is thus recommended that benchmarking and study visits across organisations could be carried out, especially by the low performing organisations to study the high performing organisations with the aim of improvement. Organisation that scored lowly in the prerequisites had various hindrances such as communication and information

flows and may therefore need to improve in these areas of weakness if intrapreneurial behaviours are expected to be improved in the organisation. In addition, formal processes such as strict rules and regulation, tight organisational boundaries, firm rules of conduct, rigid job descriptions scored negatively in the intrapreneurship scale. Such processes can stifle new ideas as well as new ways of doing things, new methods or new markets and strategies. It is therefore recommended that such formal processes should be reviewed in state corporations. This can be achieved through multidisciplinary teamwork approaches to organisational design. In addition, a general review of the parastatal sector in Kenya can reengineer the intrapreneurial character of state corporations.

For intrapreneurship to take place and the outcomes envisaged to be accomplished, certain aspects need to be in place. Specifically, the staff are expected to be motivated to act intrapreneurially. Secondly, there should be an enabling work environment, an environment that encourages intrapreneurship; innovativeness, creativity, self-renewal, and proactiveness. Thirdly, the organisation should be intrapreneurial in its orientation especially as it competes with other organisations for the customers that it serves. This will result in more customers, which results in more business taking place. Fourthly, there is need to improve rewards and reward systems especially those linked to innovative undertakings and attainment of performance goals. Rewards could be in the form of bonuses and stock options. This is expected to encourage intrapreneurship. Finally, the individuals should be intrapreneurial in their orientation. That is, they should be innovative and willing to seek new solutions to their challenges at work and be willing to take risks.

Individual intrapreneurial orientation is key to achieving outcomes such as financial performance and customer satisfaction. It is therefore recommended that training programs

to build and strengthen this aspect be developed and implemented in state corporations. Each organisation's budget should include adequate provision for training and development as well as funds for research and innovations. Since today's external business environment is increasingly dynamic and turbulent, and since a strong intrapreneurial orientation can enhance firm performance, the practical consideration from these findings is that managers may want to develop methods and programs to increase the level of intrapreneurial orientation in the firm. In other words, managers should work on ways to increase innovativeness, risk-taking, and proactiveness.

Thus, arising from the conclusions on hypotheses tested in this study, it is noted that the prerequisites of intrapreneurship are a vital element in improving financial performance, customer satisfaction and job satisfaction. It is therefore recommended that the prerequisites of intrapreneurship and their antecedents should be enhanced to reap improved outcomes.

#### **5.4.2 Suggestions for Further Research**

For future research, it is recommended that more objective measures on financial performance be utilized. This is in view of the fact that perceptual measures assume that the respondents are informed about the financial performance of their organisation. This study noted that a large proportion of respondents could not tell about the profitability and cash flow performance in their organisations.

Future research could investigate the factors that may mediate on or be antecedent to the prerequisites of intrapreneurship. As well, future studies should delve further into factors that influence the intrapreneurship outcomes. An assessment of the efficacy of

intrapreneurial programs in state corporations could also be investigated in order to give clear links to improved performance.

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## APPENDIX 1      DISTRIBUTION OF TARGET POPULATION

### STATE CORPORATIONS IN KENYA

NAME	Number of employees*	CATEG ORY	Ministry
<b>FINANCIAL</b>			
1. AGRICULTURAL FINANCE CORPORATION (AFC)		PC8	Agriculture
2. CONSOLIDATED BANK OF KENYA (COBAK)		PC8	Finance
3. DEPOSIT PROTECTION FUND BOARD (DPFB)		PC8	Finance
4. INDUSTRIAL AND COMMERCIAL DEVELOPMENT CORPORATION (ICDC)	85	PC8	Trade And Industry
5. INDUSTRIAL DEVELOPMENT BANK (IDB)	17	PC8	Trade And Industry
6. KENYA INDUSTRIAL ESTATES (KIE)	174	PC8	Trade And Industry
7. KENYA NATIONAL ASSURANCE CO.		PC8	Finance
8. KENYA POST OFFICE SAVING BANK (POST BANK)		PC8	Finance
9. KENYA REINSURANCE CORPORATION	119	PC8	Finance
10. KENYA REVENUE AUTHORITY (KRA)	4359	PC8	Finance
11. KENYA ROADS BOARD (KRB)		PC8	Roads And Public Works
12. KENYA TOURISM DEVELOPMENT CORPORATION (KTDC)	24	PC8	Tourism And Wildlife
13. NATIONAL BANK OF KENYA (NBK)		PC8	Finance
14. NATIONAL HOSPITAL INSURANCE FUND (NHIF)		PC8	Health
15. NATIONAL SOCIAL SECURITY FUND (NSSF)	1745	PC8	Labour And Human Resource Development
<b>COMMERCIAL/MANUFACTURING</b>			
16. AGRO-CHEMICAL AND FOOD COMPANY (ACFC)		PC7	Agriculture
17. CHEMELIL SUGAR COMPANY (CSC)	271	PC7	Agriculture
18. EAST AFRICAN PORTLAND CEMENT COMPANY (EAPC)	473	PC7	Trade And Industry
19. GILGIL TELECOMMUNICATIONS INDUSTRIES (GTI)		PC7	Information And Communication
20. JOMO KENYATTA FOUNDATION (JKF)	129	PC7	Education, Science And Technology
21. KENYA AIRPORTS AUTHORITY (KAA)	1365	PC7	Transport
22. KENYA BROADCASTING CORPORATION (KBC)	689	PC7	Information And Communication
23. KENYA LITERATURE BUREAU (KLB)	398	PC7	Education, Science And Technology
24. KENYA MEDICAL SUPPLIES AGENCY (KEMSA)		PC7	Health
25. KENYA ORDINANCE FACTORIES CORPORATION (KOFC)	100	PC7	Office Of The President (DOD)
26. KENYA PIPELINE COMPANY (KPC)	1493	PC7	Energy
27. KENYA PORTS AUTHORITY (KPA)		PC7	Transport
28. KENYA SAFARI LODGES AND HOTELS		PC7	Tourism And Wildlife
29. KENYA SEED COMPANY (KSC)	198	PC7	Agriculture
30. KENYA WINE AGENCIES (KWAL)		PC7	Trade And Industry
31. KENYATTA INTERNATIONAL CONFERENCE CENTRE		PC7	Tourism And Wildlife
32. NATIONAL CEREALS AND PRODUCE BOARD (NCPB)	885	PC7	Agriculture
33. NATIONAL HOUSING CORPORATION (NHC)		PC7	Lands Settlement And Housing
34. NATIONAL OIL CORPORATION OF KENYA (NOCK)		PC7	Energy
35. NATIONAL WATER CONSERVATION AND PIPELINE CORPORATION (NWC&PC)		PC7	Water And Irrigation
36. NUMERICAL MACHINING COMPLEX (NMC)	11	PC7	Trade And Industry
37. NZOIA SUGAR COMPANY (NSC)	165	PC7	Agriculture
38. POSTAL CORPORATION OF KENYA (PCK)	313	PC7	Information And Communication
39. PYRETHRUM BOARD OF KENYA (PBK)		PC7	Agriculture
40. SCHOOL EQUIPMENT PRODUCTION UNIT (SEPU)		PC7	Education,

41.	SOUTH NYANZA SUGAR COMPANY (SONY SUGAR)	386	PC7	Science And Technology
42.	UNIVERSITY OF NAIROBI ENTERPRISES AND SERVICES LIMITED(UON)		PC7	Agriculture Education, Science And Technology
<b>REGULATORY CORPORATIONS</b>				
43.	CAPITAL MARKETS AUTHORITY (CMA)	38	PC6	Finance
44.	CATERING TRAINING AND TOURISM DEVELOPMENT LEVY TRUSTEES (CTDLT)	137	PC6	Tourism And Wildlife
45.	COFFEE BOARD OF KENYA (CBK)	41	PC6	Agriculture
46.	COMMISSION FOR HIGHER EDUCATION (CHE)		PC6	Education, Science And Technology
47.	COMMUNICATIONS COMMISSION OF KENYA (CCK)		PC6	Information And Communication
48.	COUNCIL FOR LEGAL EDUCATION (CLE)		PC6	Justice And Constitutional Affairs
49.	ELECTRICITY REGULATORY BOARD (ERB)		PC6	Energy
50.	EXPORT PROCESSING ZONE AUTHORITY (EPZA)	108	PC6	Trade And Industry
51.	EXPORT PROMOTION COUNCIL (EPC)		PC6	Trade And Industry
52.	HORTICULTURAL CROPS DEVELOPMENT AUTHORITY (HCDA)	28	PC6	Agriculture
53.	INVESTMENT PROMOTION CENTRE (IPC)		PC6	Trade And Industry
54.	KENYA BUREAU OF STANDARDS (KEBS)	655	PC6	Trade And Industry
55.	KENYA CIVIL AVIATION AUTHORITY (KCAA)		PC6	Transport
56.	KENYA DAIRY BOARD (KDB)		PC6	Livestock And Fisheries
57.	KENYA INDUSTRIAL PROPERTY INSTITUTE (KIPI)	72	PC6	Development Trade And Industry
58.	KENYA PLANT HEALTH INSPECTORATE SERVICES (KEPHIS)		PC6	Agriculture
59.	KENYA SISAL BOARD	9	PC6	Agriculture
60.	KENYA SUGAR BOARD (KSB)		PC6	Agriculture
61.	MARITIME AUTHORITY		PC6	Transport
62.	NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)		PC6	Environment And National Resources
63.	NATIONAL IRRIGATION BOARD (NIB)		PC6	Water And Irrigation
64.	NYAYO TEA ZONES DEVELOPMENT AUTHORITY	307	PC6	Agriculture
65.	NGO- COORDINATION BOARD (NGO-CB)	39	PC6	Office Of The Vice President/Home Affairs
66.	RETIREMENT BENEFITS AUTHORITY (RBA)		PC6	Finance
67.	TEA BOARD OF KENYA (TBK)	12	PC6	Agriculture
68.	WATER SERVICES REGULATORY BOARD (WSRB)		PC6	Water And Irrigation
<b>PUBLIC UNIVERSITIES</b>				
69.	EGERTON UNIVERSITY (EU)		PC5	Education, Science And Technology
70.	JOMO KENYA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY (JKUAT)		PC5	Education, Science And Technology
71.	KENYATTA UNIVERSITY (KU)		PC5	Education, Science And Technology
72.	MASENO UNIVERSITY (MU)		PC5	Education, Science And Technology
73.	MOI UNIVERSITY (MU)		PC5	Education, Science And Technology
74.	UNIVERSITY OF NAIROBI (UON)		PC5	Education, Science And Technology
<b>TRAINING AND RESEARCH CORPORATIONS</b>				
75.	COFFEE RESEARCH FOUNDATION (CRF)	52	PC4	Agriculture
76.	KENYA AGRICULTURAL RESEARCH INSTITUTE (KARI)	3504	PC4	Agriculture

77.	KENYA FORESTRY RESEARCH INSTITUTE (KEFRI)	221	PC4	Environment And Natural Resources
78.	KENYA INDUSTRIAL RESEARCH AND DEVELOPMENT INSTITUTE (KIRDI)	157	PC4	Trade And Industry
79.	KENYA INSTITUTE OF ADMINISTRATION (KIA)	101	PC4	Ministry of Public Affairs
80.	KENYA INSTITUTE OF POLICY RESEARCH AND ANALYSIS (KIPRA)		PC4	Planning And National Development
81.	KENYA MARINE AND FISHERIES RESEARCH INSTITUTE (KEMFRI)	39	PC4	Livestock And Fisheries Development
82.	KENYA MEDICAL RESEARCH INSTITUTE (KEMRI)		PC4	Health
83.	KENYA SUGAR RESEARCH FOUNDATIONS (KESREF)	117	PC4	Agriculture
84.	NATIONAL MUSEUMS OF KENYA (NMK)	623	PC4	Office Of The Vice President/Home Affairs
85.	TEA RESEARCH FOUNDATION		PC4	Agriculture
<b>SERVICE CORPORATIONS</b>				
86.	AGRICULTURAL DEVELOPMENT CORPORATION (ADC)		PC3	Agriculture
87.	BOMAS OF KENYA (BOK)	141	PC3	Culture, Social Services, Gender And Sports
88.	CENTRAL WATER SERVICES BOARD		PC3	Water And Irrigation
89.	COAST WATER SERVICES BOARD		PC3	Water And Irrigation
90.	HIGHER EDUCATION LOANS BOARD (HELB)		PC3	Education, Science And Technology
91.	KENYA ACCOUNTANTS AND SECRETARIES NATIONAL EXAMINATION BOARD (KASNEB)	114	PC3	Finance
92.	KENYA FERRY SERVICES (KFS)		PC3	Transport
93.	KENYA NATIONAL EXAMINATIONS COUNCIL (KNEC)		PC3	Education, Science And Technology
94.	KENYA NATIONAL LIBRARY SERVICES (KNLS)		PC3	Culture, Social Services, Gender And Sports
95.	KENYA TOURIST BOARD (KTB)		PC3	Tourism And Wild Life
96.	KENYA WILDLIFE SERVICE (KWS)		PC3	Tourism And Wildlife
97.	KENYATTA NATIONAL HOSPITAL (KNH)	4717	PC3	Health
98.	LAKE VICTORIA NORTH WATER SERVICES BOARD		PC3	Water And Irrigation
99.	LAKE VICTORIA SOUTH WATER SERVICES BOARD		PC3	Water And Irrigation
100.	LOCAL AUTHORITIES PROVIDENT FUND (LAPF)		PC3	Local Government
101.	MOI TEACHING AND REFERRAL HOSPITAL (MTRH)		PC3	Health
102.	NAIROBI WATER SERVICES BOARD		PC3	Water And Irrigation
103.	NATIONAL AIDS CONTROL COUNCIL (NACC)	73	PC3	Office Of The President
104.	NATIONAL COUNCIL FOR LAW REPORTING		PC3	Justice And Constitutional Affairs
105.	NATIONAL SPORTS STADIA MANAGEMENT BOARD	129	PC3	Culture. Social Services, Gender And Sports
106.	NORTHERN WATER SERVICES BOARD		PC3	Water And Irrigation
107.	RIFT VALLEY WATER SERVICES BOARD		PC3	Water And Irrigation
108.	TEACHERS SERVICE COMMISSION (TSC)		PC3	Education, Science And Technology
109.	WATER RESOURCES MANAGEMENT AUTHORITY (WSMA)	14	PC3	Water And Irrigation
110.	WATER SERVICES TRUST FUND (WSTF)		PC3	Water And Irrigation
<b>REGIONAL DEVELOPMENT AUTHORITIES</b>				

111. COAST DEVELOPMENT AUTHORITY (CDA)	106	PC2	Regional Development Authorities
112. EWASO NYIRO NORTH DEVELOPMENT AUTHORITY (ENNDA)		PC2	Regional Development Authorities
113. EWASO NYIRO SOUTH DEVELOPMENT AUTHORITY (ENSDA)		PC2	Regional Development Authorities
114. KERIO VALLEY DEVELOPMENT AUTHORITY (KVDA)	37	PC2	Regional Development Authorities
115. LAKE BASIN DEVELOPMENT AUTHORITY (LBDA)		PC2	Regional Development Authorities
116. TANA AND ARTHI RIVERS DEVELOPMENT AUTHORITY (TARDA)		PC2	Regional Development Authorities
<b>TERTIARY EDUCATION AND TRAINING CORPORATIONS</b>			
117. COOPERATIVE COLLEGE (CC)		PC1	Corporative Development And Marketing Information And Communications
118. KENYA COLLEGE OF COMMUNICATION TECHNOLOGY (KCCT)		PC1	Health
119. KENYA MEDICAL TRAINING COLLEGE (KMTC)		PC1	Tourism And Wildlife
120. KENYA UTALII COLLEGE (KUC)	571	PC1	Water And Irrigation
121. KENYA WATER INSTITUTE (KWI)		PC1	
TOTAL			
	25,561		
<i>*Number In payroll as of 1/11/06 as availed from PSC Source PSC (2006) and Republic of Kenya (2004).</i>			



7. Years employed in this organisation

- Less than 1 year       2-5 years       5 - 10 years  
 11-15 years       16 – 20 years       more than 20 years

## **SECTION 2: On Entrepreneurship in your Organisation**

Make a judgment of how the management and you have been in the past three (3) years in the following aspects. Mark  only one number on each line.

	Strongly agree	Agree	Cannot tell	Disagree	Strongly disagree
<b>A. Encouragement by management and organisation</b>					
1. Management activities generate trust in employees					
2. Management sees matters from employees point of view					
3. Management is able to inspire everyone to work for the good of the organisation					
4. Management encourages the development of new ways of operating					
5. At my workplace, individual work methods are valued					
6. Innovativeness and creativity are thought of as important in my workplace					
7. Change is seen as an opportunity at my workplace					
8. Enough feedback is given at my workplace					
9. Employees are encouraged to freely air their opinions					
10. Suggestions originating from the employees are carried out at my workplace					
11. There is clear division of labour in my workplace					
12. The workplace offers good opportunities for training and education					
13. The workplace has clear rules of conduct					
14. Activities are carried out without delay in my workplace					
15. People are encouraged to take risks at my workplace					
16. Mistakes are regarded as learning experiences					
17. The vision at my workplace guides me at my work					
18. Knowledge flows openly at my workplace					
<b>B. individual motivation</b>					
19. I have confidence in my abilities					
20. I want to actualise myself in my workplace					
21. I put myself at stake in my work					

	Strongly agree	Agree	Cannot tell	Disagree	Strongly disagree
22. I am willing to make responsible decisions					
23. I tolerate uncertainty well					
<b>C. Rewards and communality</b>					
24. Difficult decisions are discussed openly					
25. People are rewarded well					
26. Employees' productive activities are rewarded					
27. Work is carried out in teams in my workplace					
28. I know what is expected of me in my work					
29. I easily get help in my work					
<b>D. Individual competence</b>					
30. I am familiar with the vision of my workplace i.e. the direction to be pursued in the future					
31. I am eager to present new ideas at my workplace					
32. My know-how is varied					
33. I develop myself actively in my workplace					
<b>E. enabling work environment</b>					
34. I have sufficient authority to carry out my duties well					
35. I have responsibility for doing my work as well as possible					
36. I can work spontaneously					
<b>F. Training and Development</b>					
37. I am able to develop my work myself					
38. Professional development is important to me					
39. It is easy to seek help in my work					
40. I like to work in work teams					
41. Training and development is taken seriously here					
42. Management supports the development of individuals					
43. The organisational boundaries between departments and sections are tight.					
<b>G. Individual Intrapreneurial orientation</b>					
44. My workplace has a good working atmosphere					
45. My work load is suitable					
46. I try new ideas and new approaches to problems					
47. New ideas are considered seriously by management					
48. I take things or situations apart to find a new use of existing methods or existing equipment					
49. I can be counted on to find a new use for existing methods or existing equipment					
50. Among my counterparts I am usually the first person to try out a new idea or method					
51. I demonstrate originality					

	Strongly agree	Agree	Cannot tell	Disagree	Strongly disagree
52. I like to work on a problem that has caused others great difficulty					
53. I plan on developing contacts with experts in my field located in different companies					
54. I budget on time and money for the pursuit of novel ideas					
55. I make comments at meetings on new ways of doing things					
56. If my colleagues were asked, they would say I am sharp					
57. I hardly ever stick to the rules or follow procedure					
58. I discourage formal meetings to discuss ideas					
59. I usually support a friends suggestion on new ways to do things					
60. I probably will not turn down ambiguous job assignments					
61. People who depart from the accepted organisational routine should not be punished					
62. I hope to be known for the quantity of my work rather than the quality of my work when starting a new project					
63. I must be able to find enough variety of experience on my job or I will leave it					
64. I am going to leave a job that doesn't challenge me					
<b>H. Organisational intrapreneurial orientation</b>					
65. Compared to our competitors, our organisation has a higher tendency to take risks					
66. Compared to our competitors, our organisation has a higher tendency to engage in strategic planning activities					
67. Compared to our competitors, our organisation has a higher ability to identify customer needs and wants					
68. Compared to our competitors, our organisation has a higher level of innovation					
69. Compared to our competitors, our organisation has a higher ability to persevere in making our vision of business a reality					
70. Compared to our competitors, our organisation has a higher ability to identify new opportunities					
<b>I. Job satisfaction</b>					
71. I feel happy in my work					
72. I value my work					
73. Others value my work					

	Strongly agree	Agree	Cannot tell	Disagree	Strongly disagree
74. My work is interesting					
75. My duties at work are varied					
76. I feel I am important to my workplace					
<b>J. Customer satisfaction</b>					
77. My workplace is known in the marketplace to be competent					
78. Our customers are satisfied with services and/or products purchased from us					
79. We respond to our customers' needs better than our competitors					
80. We are familiar with our customers' needs					
81. Our customer relations are long term					
82. Our clients are happy with our price-quality relation					
<b>K. Financial Outcomes</b>					
83. Compared to our competitors, in the last 5 years my workplace has improved in the sales of our products/services					
84. In the last 5 years my workplace cash flow has increased					
85. In the last 5 years my workplace has increased the profit margin steadily					

*Thank you for your cooperation in completing this questionnaire about your world of work.*

*Kind regards*

**Esther Njiru**

### APPENDIX 3 INTERVIEW SCHEDULE

This is a survey about entrepreneurship in state corporations. It is premised by the need for state corporations to be financially self-sustaining.

1. Generally, how do you assess performance in state corporations?
2. On a scale of 1-5 where 1 is poor and 5 is excellent, rate the overall performance of EACH of the following state corporations. (Give reasons)

Name of state corporation	Rating	Reasons

3. What challenges are facing state corporations in developing a culture of innovativeness, creativity and entrepreneurship?
4. Which State Corporations are earmarked for privatisation? Why?
5. In a research done on state corporations it was concluded that: for entrepreneurship to take place and the outcomes envisaged to be accomplished, certain aspects need to be in place. Specifically,
  - i. The staff are expected to be motivated to act intrapreneurially.
  - ii. There are expected to be an enabling work environment,
  - iii. There are expected to be rewards for individuals who are intrapreneurial
  - iv. The staff need to be intrapreneurial in their orientation.
6. Do you think these conclusions are valid? Please explain
7. What other factors need to be in place for entrepreneurship to flourish in state corporations?
8. In your opinion, how can the performance of State Corporations in Kenya be improved?
9. Any other comments on entrepreneurship in the state corporations?

***Thank you for your cooperation***