ORGANIZATIONAL ANTECEDENTS TO
INTRAPRENEURSHIP: KENYA PHARMACEUTICAL
INDUSTRY

BY
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UNITED STATES INTERNATIONAL UNIVERSITY AFRICA

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ORGANIZATIONAL ANTECEDENTS TO INTRAPRENEURSHIP: KENYA PHARMACEUTICAL INDUSTRY

BY

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Research Project Report Submitted to the Chandaria School of Business in Partial Fulfilment of the Requirement for the Degree of Masters in Business Administration (MBA)

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SUMMER 2017
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution, or university other than the United States International University in Nairobi for academic credit.

Signed: ___________________________ Date: ______________________

Humphreys Javan Arunga (ID 633786)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________ Date: ______________________

Fred Newa

Signed: ___________________________ Date: ______________________

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ABSTRACT
The purpose of intrapreneurship strategy is to engage an organization in innovation in order to develop the organization’s ability to cope with the dynamic internal and external environment. The involvement of employees in organizational entrepreneurial activities has been identified as an important topic. While intrapreneurship is widely researched from the viewpoint of managers, it is scantly investigated from the standpoint of employees. Previous researchers have ignored employees’ perceptions concerning the quality of support they receive from their organization and its impact on their intrapreneurial behavior. The main objective of the study was to examine the organizational antecedents that predispose an enterprise to intrapreneurship behavior from its employees.

Borrowing from previous literature, five organizational antecedents were identified. These included management support, work discretion, rewards/reinforcements, time availability, and organizational boundaries. The study examined the relationship between the said variables to individual employee’s intrapreneurial orientation. To measure these constructs the Corporate Entrepreneurship Assessment Instrument (CEAI) and Entrepreneurial Orientation (EO) instrument were used respectively.

The study used explanatory and descriptive research design to scrutinize the relationship between the variables. The population of the study consisted of 1091 pharmaceutical sales representatives (PSRs) currently registered with the Kenya Pharmacy and Poisons Board. A sample of 175 PSRs was selected using proportionate stratified random sampling. A structured questionnaire was administered in data collection from respondents. Correlation and regression analysis was undertaken to establish the level of relationships.

The study found a significant positive correlation between management support, work discretion, and rewards/reinforcements to intrapreneurship orientation. Time availability had no significant correlation to intrapreneurship orientation while organizational boundaries had a significant negative correlation to intrapreneurship orientation. Further regression analysis was undertaken on variables that exhibited significant relationships, in this regard a regression analysis between management support and intrapreneurship orientation yielded a regression coefficient of 0.482, a regression analysis between work discretion and intrapreneurship orientation yielded a regression coefficient of 0.165, a
regression analysis between rewards/reinforcements and intrapreneurship orientation yielded a regression coefficient of 0.35, and finally a regression coefficient between organizational boundaries and intrapreneurship orientation yielded a regression coefficient of negative 0.56. The findings of this study demonstrate that organizational climate has a strong direct effect on intrapreneurship orientation of the employees.

The study arrived at a conclusion that Pharmaceutical Sales Representatives in Kenya perceive the companies they work for, as providing a favorable climate for intrapreneurial activities. Since out of the five antecedents isolated for intrapreneurship, three of them yielded a significant positive effect on intrapreneurship orientation. On management support, the study concludes that it is incumbent upon the top management to create an internal environment that is perceived by employees to be supportive of intrapreneurial activities. Providing work independence so as employees have some latitude in decision making is seen as a positive contributor to intrapreneurial attitude amongst employees. Rewards and reinforcements can stimulate an entrepreneurial thinking in employees this can lead to inherent intrapreneurial initiatives by employees.

Time availability is still an amorphous concept in Kenyan cultures since the study failed to establish a significant linkage of time availability to intrapreneurship orientation. Organizational boundaries are the result of decisions about capability, the negative correlation between organizational boundaries and intrapreneurship orientation obtained in this research may be attributed to the type of respondents that study employed and also taking note that that fluidity in organizational boundaries is a product of organizations culture.

The study findings are very relevant for any organization since understanding and reacting to the organizational climate is essential in strategic management. Resources should be allocated to obtain extensive information concerning target markets and to develop important relationships with distributors and final clients. The research project confirms the validity of existing measurement instruments and establishes relationships between constructs that will inform on strategic decisions in Kenya pharmaceutical industry.
The study recommends that there is a need for organization decision makers to augment on efforts towards variables of management support, rewards reinforcements, and work discretion since these have a direct positive correlation with employee’s intrapreneurship orientation. Firstly the study recommends that organizations should offer management support, when senior leaders don't walk the talk, no amount of entrepreneurial efforts made by “ground soldiers” will work. Top Management commitment to innovation, openness to change at all levels, and most importantly, delegation of appropriate authority to managers and employees to try new ideas sends a clear message to employees that the company is serious about creating an entrepreneurial environment. Organizations should also provide employees with resources, time, and material. As discussed in chapter two, companies such as 3M and Google let employees spend 15% to 20% of their time working on side projects of their choice. Employees should know that they have resources available to embark on new and innovative projects.

Lastly, a supportive organizational structure should be designed. Complex hierarchy and elaborate policies are designed to bring order, but they also impede entrepreneurial activity. Simplify approval procedures, cut the red tape, and keep organizational flexibility. Finding an optimum intrapreneurial climate regarding the mentioned antecedents is further suggested. The study further recommends more longitudinal work to properly assess the temporal stability of the intrapreneurship measurements in the Kenyan scenario.
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I further extend my appreciation to all the respondents for their cooperation and assistance in filling the questionnaires.
DEDICATION

This is a dedication to my lovely Mother, Mrs. Rosebella Auma Obatsa

“Your arms are always open when I need a hug. Your heart understands when I need a friend. Your gentle eyes are stern when I need a lesson. Your strength and love has guided me and given me wings to fly.”
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

The propagation of an entrepreneurial mindset and behaviors in organizations has become of paramount importance to organizations that are trying to remain competitive and efficient in the rapidly changing global marketplace (Rutherford & Holt, 2007). The creation of dynamism and wealth in any nation depends on the competitiveness of its industry and this is in turn fundamentally relies on the abilities of the entrepreneurs and managers (Cuervo, Ribeiro, & Roig, 2007). With increasing turbulence in economies, it has become imperative for business leaders not only to be speedy but also to be innovative, flexible, and adaptable. The business scenario is very dynamic, the notable factors responsible for this dynamism include: change in the market, change in consumers’ taste, competition and technological changes (Olughor, 2014).


The fundamental aim of these research project was assess and correlate aspects of organizational climate that predisposes employees to entrepreneurial behavior in organizations. Entrepreneurship behavior in organization is a construct that has attracted a multitude of research in western countries but unfortunately little research has been undertaken in Kenya (Linyiru, Karanja, & Gichira, 2016; Moige, Mukulu, & Orwa, 2016; Michael & Ngugi, 2016; Hughes & Mustafa, 2016). It is therefore of vital importance to
examine these constructs in Kenya and relate the findings to other previous studies. We must acknowledge that there is a dearth of studies on the construct of intrapreneurship in Africa, while western countries present a plethora of studies on the same. It therefore emerges that a study similar to this one will present crucial guidelines not only to management readership but to whole academic fraternity.

Acknowledging the works of Hayton and Kelley (2006) in their research on promoting corporate entrepreneurship, they observed that individual competencies are fundamental to the companies’ ability to nurture and sustain innovation and in creation of new businesses. This is by use of existing and new knowledge and recognizing, evaluating, and capturing entrepreneurial opportunities. (Hayton & Kelley, 2006). Robbins, Judge and Campbell (2010), believe that today’s successful organization must foster intrapreneurship or become “candidates for extinction”, and that victory will go to the organizations that “maintain their flexibility, continually improve their quality, and beat their competition to the marketplace with a constant stream of innovative products and services”. It is imperative to alienate our minds from associating entrepreneurship to only the smaller and medium-sized organizations, we should also consider entrepreneurship to be a vital element of larger organizations, more so nurturing the attitude of intrapreneurship among employees

This research focused on entrepreneurial behaviors by employees in organizations by examining the relationship between internal organizational factors and intrapreneurship orientation. Internal factors being independent variable while intrapreneurship orientation the dependent variable. In examining these constructs the Corporate Entrepreneurship Assessment Instrument (CEAI) (Kuratko, Hornsby, & Covin, 2014) and Entrepreneurial Orientation (EO) instruments (Bolton & Lane, 2012) were applied respectively

Different labels have been proposed for identifying entrepreneurship orientation within organization, for convenience we here label the phenomenon as ‘intrapreneurship’ based on Sharma and Chrisman (2007). When researchers apply this term it usually refers to individuals rather than organizations or boardroom-level decision makers, the converse of these is corporate entrepreneurship. (Hisrich, & Antoncic, 2003). We define Intrapreneurship as the identification and exploitation of opportunities by individual workers to progress their organization. Intrapreneurship is characterized by employees’ innovation, proactive and risk-taking behaviors. (Sharma & Chrisman, 2007). On the other
hand however, Corporate Entrepreneurship is top-down process of creating corporate change, renewal, and flexibility through a managerial disposition towards innovative, proactive and risk taking behaviors.

Stevenson and Jarillo (2007) define intrapreneurship as a process by which individuals inside organizations pursue opportunities independent of the resources under their control”. Antoncic and Hisrich (2003) visualize intrapreneurship as an emergent behavioral intentions and behaviors that are related to departures from the customary ways of doing business in existing organizations.

Far from definitions, the detailed behavioral content of intrapreneurship is still pretty un-researched, more so in Kenyan context. Intrapreneurship is such an important aspect that cannot ignored any more, previous studies have linked organizational success to Intrapreneurship for example (Hayton, Hornsby, & Bloodgood, 2013; Moige, Mukulu, & Orwa, 2016; Mokaya , 2012). Intrapreneurship has proven to increase a firm’s financial performance, especially for firms that operate in turbulent environments (Rauch, Wiklund, Lumpkin, & Frese, 2009). It will be naïve to disregards intrapreneurship as part of competitive strategy for firms (Hadad, 2015). Muzaffer and Bahrija (2015) asserts that intrapreneurship affects a firm’s financial growth.

Explicating the intrapreneurship orientation construct in academia poses a significant challenge, starting from seminal works of Miller (1983), Miller proposes Entrepreneurship orientation as a construct that correlates with innovative, proactive and risk taking. “An entrepreneurial firm is one that engages in product market innovation, undertakes somewhat risky Ventures, and is first to come up with proactive innovations” (Miller, 1983). Later on Covin and Wales (2012) included two more dimensions of autonomy and competitive aggressiveness in the entrepreneurial orientation thus making it to five. In this study intrapreneurship is analyzed as a unidimensional construct amalgamating the three dimensions proposed by Miller (1983).

According to Lumpkin and Dess (1996) innovativeness is an individual’s tendency to engage in new ideas, novelty, experimentation, and creative processes that can result in new products, services, or technological developments. Risk taking is taking bold actions by pursuing the unknown, and committing significant resources to ventures in
unpredictable environments. Proactiveness is looking into the future characterized by the introduction of new products and services ahead of the rivalry. Covin and Wales (2012) defines autonomy as the independent action of an individual or a team in bringing forth idea or a vision and carrying it through to completion. Competitive aggressiveness refers to a firm's predisposition to directly and intensely challenge its competitors to achieve entry or improve position, basically outperforming business rivals in the marketplace (Covin & Wales, 2012).

In addition to working towards a cohesive definition of intrapreneurship, previous researchers have also analyzed the possible antecedents that encourage workers to be entrepreneurial. Researchers have tried to identify possible antecedents within and without the organization (Miller, 1983; Antoncic & Hisrich, 2004; Hornsby, Kuratko, & Zahra, 2002; Bharadwaj, Sushil, & Momaya, 2011; Stevenson & Jarillo, 1990; Baruah & Ward, 2014).

The internal environment covers a broad scope of ideas relative to internal factors responsible for intrapreneurship orientation. Taking cognizant of other influences of intrapreneurship, this research was limited to internal environment since it is within the pretext of management control as opposed to individual and external environment. Borrowing from the work of Kuratko, Hornsby and Covin (2014) we categorize the internal factors as top management support, work discretion, rewards and reinforcement, time availability and organisational boundaries. It important to note earlier research by same authors had categorized the internal factors as rewards, top management support, resource availability, organizational structure, and risk taking. The research acknowledges the work of Hughes and Mustafa (2016) in which they questioned the applicability of the variables as identified by Kuratko et al (2014) in Kenyan context but having given no alternative the research adopts Kuratko et al scale.

Using five dimensions listed above Kuratko, Hornsby and Covin (2014) developed the Corporate Entrepreneurship Assessment Instrument (CEAI). The CEAI is a diagnostic tool which is used to measure individuals perceptions of the five internal environment dimensions which are conducive to the promotion of an corporate entrepreneurship.
The focus point of study will be the Kenya Pharmaceutical Industry. According to Business International Monitor (2017), pharmaceutical sales in Kenya reached a value of Kenya shillings 83.83 billion in 2015 and it is expected that by 2021 the Kenyan drug market will reach a value of Kenya shillings 151.61 billion, refer to Appendix I for detailed projections (BMI Research, 2017).

The pharmaceutical industry consists of manufacturers, distributors and retailers, they all play pivotal role in helping the Ministry of Health meet the countries health needs. Companies in the three categories are either large multinational corporations (MNCs), subsidiaries, joint ventures or locally owned corporations. Despite painting a rosy picture of sales, the pharmaceutical industry faces a myriad of complex issues that keep growing day by the day, these includes customer demands, unorthodox intra-industry competition and counterfeit medicine importation (Muse, Njeru, & Waiganjo, 2016; Wilson & Fenoff, 2011). The multitude of competitive forces such as intensity of competition, new entrants, substitute products and supplier and buyer power have transformed the environment a great deal creating the need for firms to change their competitive strategy (Friedli, Lembke, & Bellm, 2014).

The sales force forms a significant sub-population in the pharmaceutical industry workforce. Pharmaceutical Sales Representatives (PSRs) are employed by pharmaceutical companies to disperse information about the products of their company to a variety of medical professionals. They convince healthcare practitioners to prescribe more of the medications manufactured or distributed by their company. Currently there are one thousand one hundred and ninety registered pharmaceutical representative in Kenya, representing sixty three pharmaceutical manufacturers and distributors in Kenya (Pharmacy and Poisons Board, Kenya, 2017). These study will employ pharmaceutical representatives as the units of analysis.

1.2 Statement of the Problem
In the continuously changing economic environment firms should always seek for new opportunities on the market where they can develop and sustain their competitive edge and outperform their rivals. Incorporating intrapreneurship in an organization strategy not only enables a company to protect its existing market share but also to seek growth. With the
changing technology, the ongoing economic/financial crunch, and increasing competition from Chinese companies, Kenyan pharmaceutical companies are finding business sustainability real rough. Just recently, January 2017, the World Bank Lead Economist Mr. Apurva Sanghi raised a red flag that multinational companies were leaving Kenya at a rate that had never been witnessed before. Most of them blamed the unchecked influx of cheap imports into the local market. (Oduor, 2017).

The abilities of Kenyan firms to change, improve, and create new value have become even more salient. The complexity of doing business has given rise to several organizational transformations and in order to remain afloat and be successful, organizations need to tackle both external and internal challenges by constantly working on their products, services, and business models to maintain a competitive advantage. Previous research has advocated for intrapreneurship as a panacea of current challenges facing organizations (Behram & Özdemirci, 2014; Baruah & Ward, 2014; Bloodgood, Hornsby, Burkemper, & Sarooghi, 2015; De Jong & Wennekers, 2008; Michael & Ngugi, 2016). An understanding of the intrapreneurship concept therefore, becomes of utmost significance. Intrapreneurs are self-driven, hands-on, and pragmatic individuals who are at ease with inventive moves within the limits of an organization in quest of an innovative product or service (Khan, Budhwani, & Shaikh, 2011).

The present Kenya scenario calls for an intrapreneurial attitude within the general workforce, this is a situation where traditional Porter's generic strategy matrix has proved inadequate. The picture shows distressed firms struggling to stay afloat, understanding and adopting an intrapreneurial culture within the Kenyan workforce will minify the challenges.

1.3 General Objective
The primary objective of this study was to examine the organizational internal antecedents of intrapreneurship within Kenyan pharmaceutical industry.

1.4 Specific Objectives
1.4.1 To examine the influence of management support on intrapreneurship orientation among Pharmaceutical Sales Representatives in Kenya.
1.4.2 To examine the influence of work discretion on intrapreneurship orientation among Pharmaceutical Sales Representatives in Kenya.

1.4.3 To examine the influence of rewards and reinforcements on intrapreneurship orientation among Pharmaceutical Sales Representatives in Kenya.

1.4.4 To examine the influence of time availability on intrapreneurship orientation among Pharmaceutical Sales Representatives in Kenya.

1.4.5 To examine the influence of organizational boundaries on intrapreneurship orientation among Pharmaceutical Sales Representatives in Kenya.

1.5 Rationale of the Study

Management research has a duality in its purpose, it must stimulate intellectual discourse for academics and yet be pertinent to managerial readership. The motivation for this study was to highlight perspectives of intrapreneurship by demonstrating a measurable correlation between organizational job factors and intrapreneurship orientation. The study sought to understand the actual organizational factors that spur intrapreneurship within organizations. A great deal of research has been done on factors that promote entrepreneurship world over, but to date little theoretical or empirical research has considered organizational antecedents of becoming an intrapreneur in Kenyan context. (Monsen, Patzelt, & Saxton, 2011; Antoncic & Hisrich, 2004; Chigamba, Rungani, & Mudenda, 2014).

All the researchers on the topic of intrapreneurship have confirmed a positive relationship between intrapreneurship and firm performance, with such far reaching conclusions it becomes of great significance for a study that is localized. The study should be able to advice on the instruments at the disposal of organization that stimulate intrapreneurship.

1.5.1 Benefits to the Kenya Pharma Industry

The study informs on the actual organizational climate that Kenyan pharmaceutical industry can adopt in dealing with the prevailing turbulence. According to business family foundation, intrapreneurship allows renewal, growth, and an infusion of energy in existing businesses (Pellissier, 2017). Going through the findings of this study, pharmaceutical companies are going to benefit by understanding the organizational antecedents within the management precincts that can be enhanced or added to nurture intrapreneurship.
1.5.2 Benefits to Pharmaceutical Sales Representatives
The PSRs are at Crossroad today, struggling to meet the growing expectation from their companies. The study guides the PSRs on ways of being innovative and hence aligning with management expectations.

1.5.3 Benefits to General Management Readership
The study informs on strategies that organizations can adopt in nurturing intrapreneurial attitude within. Kenyan organizations could adopt the individual Intrapreneurial orientation measure presented in this study as a way of tracking progress and assessing the effectiveness of interventions designed to improve intrapreneurship. Correlations between intrapreneurship and firm performance is well articulated in literature, the practicability can only happen in the precincts of the organization.

1.5.4 Benefits to Academic Fraternity
To the academics the study confirms the applicability of similar studies tools in others geographic areas to Kenya. The validity and reliability of the instruments employed in others scenarios was confirmed.

1.5.5 Government / Policy Makers
When companies realize significant growths, part of the profits are invested in form of new business units or expansion this leads to creation of job opportunities and economic vitality in the country. For this reason, knowledge on intrapreneurship strategies and practices, employee intrapreneurial behavior and their effects on organizational performance is of great significance to policy makers.

1.6 Scope of the Study
The study covered pharmaceutical companies in Kenya, the population was based on companies that are registered with pharmacy and poisons board (PPB) and employ pharmaceutical sales representatives (PSRs). The study focused on all pharmaceutical sales representatives in the country. Data from PPB indicated that there were 1091 PSRs in Kenya working for 63 companies, 95% are based in Nairobi. Data was collected in the month August 2017. Taking cognizant of multiple variables that have influence on
intrapreneurship, this study limits itself to only internal organizational factors as defined by (Kuratko, Hornsby, & Covin, 2014).

1.7 Definition of Terms

1.7.1 Autonomy
Refers to the independent actions of an individual or team in bringing forth an idea or a vision and carrying it through to completion (Covin & Wales, 2012).

1.7.2 Competitive aggressiveness
Propensity to directly challenge competitors by making effort to outperform them in the entry improvement of their position in the information provision market (Covin & Wales, 2012).

1.7.3 Corporate Entrepreneurship
The development of new ideas and opportunities within large or established businesses, directly leading to the improvement of organizational profitability and an enhancement of competitive position or the strategic renewal of an existing business (Hornsby, Kuratko, & Zahra, 2002).

1.7.4 Entrepreneurship
The capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make a profit. The most obvious example of entrepreneurship is the starting of new businesses. In economics, entrepreneurship combined with land, labor, natural resources and capital can produce profit. Entrepreneurial spirit is characterized by innovation and risk-taking, and is an essential part of a nation's ability to succeed in an ever changing and increasingly competitive global marketplace. (Cuervo, Ribeiro, & Roig, 2007)

1.7.5 Entrepreneurial Orientation
A set of behaviors” that have the qualities of risk-taking, innovativeness, proactiveness, autonomy, and competitive aggressiveness (Covin & Wales, 2012)
1.7.6 Innovativeness
Individual’s tendency to engage in new ideas, novelty, experimentation and creative processes that can result in new products (Lumpkin & Dess, 1996).

1.7.7 Intrapreneurship
Practice of entrepreneurship in an established firm. Intrapreneurship applies the 'start up' style of management (characterized by flexibility, innovation, and risk taking) to a secure and stable firm. The objective is to fast track product development (by circumventing the bureaucracy) to take advantage of a new opportunity or to assess feasibility of a new process or design (Sharma & Chrisman, 2007).

1.7.8 Proactiveness
1.7.8 Looking into the future characterized by the introduction of new products and services ahead of the rivalry (Miller, 1983)

1.7.9 Pharmacy and Poisons Board
Under the laws of Kenya, Chapter 244, The Pharmacy, and Poisons Board is the main drugs regulatory authority. The board has a mandate in regulating the practice of pharmacy and the manufacture and trade in drugs and poisons (Pharmacy and Poisons Board, Kenya, 2017).

1.7.9 Risk taking
Taking bold actions by pursuing the unknown, and committing significant resources to ventures in unpredictable environments (Miller, 2011)

1.7.10 Organizational boundaries:
The magnitude to which the organizational structure augments the flow of information between the external environment and the organization and among its departments/divisions (Kuratko, Hornsby, & Covin, 2014).

1.8 Chapter Summary
In chapter one, the background of the research has been elucidated, the chapter outlined the rationale of interrogating organizational antecedents to intrapreneurship. The document
follows a research based approach as outlined by United States International University School of Business Administration Research Project Hand Book. The document consists of five chapters. Chapter two will discuss similar studies that have been performed in different settings. In chapter three the research methodology will explained. A presentation of results and findings will be in chapter four. Finally discussions, conclusions, and recommendations will constitute chapter five.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The main aim of this chapter is identifying what other researchers have done in the area of Corporate Entrepreneurship and Intrapreneurship. Following the objectives of the study, this chapter will examine both theoretical and empirical literature of each item. The review is meant to enhance an understanding of the previous contributions to the constructs. The findings of the review will help the researcher in identifying gaps in knowledge and thus create the entry point for this study. The chapter will mainly delve on previous research on each of the five independent variables as defined by the objectives. The dependent variable (Intrapreneurship orientation) will be examined at the beginning of review of the first objective.

2.2 Management Support as an Antecedent of Intrapreneurial Orientation

Top management members are the senior executives who are responsible for one or more functional areas in organizations (Menz, 2012). Top management is said to be supportive of intrapreneurial ideas when it exhibits a desire in facilitating and promotion of entrepreneurial activities by championing innovative ideas and providing the necessary resources (Zbierowski, 2016). The perception by employees of top management as’ inconsistent, intermittent or sporadically enthusiastic and devoid of commitment to growth of the company destroys intrapreneurial spirit (Tripathy, 2006).

Intrapreneurship activities directly correlates with the desire of top management in supporting the intrapreneurship endeavors, and can only nourish if there is definite support from the top management (Bloodgood, Hornsby, Burkmper, & Sarooghi, 2015; Banumathi & Samudhararajakumar, 2015; Antoncic & Hisrich, 2004). Top management support is the best predictor of both entrepreneurial behavior and process innovation (Lekmat & Chelliah , 2014; Wood, Holt, Reed, & Hudgens, 2014; Armesh, Wei, & Marthandan, 2014).

Zbierowski (2016) attributes corporate entrepreneurship to positive aspects of leadership from top management. Ling, Simsek, Lubatkin and Veiga (2008) expounds on the integral
role of transformational leadership in nurturing corporate entrepreneurship, in a study of small and medium enterprises he elaborated the influence of transformational CEOs on top management behavioral integration, risk propensity, decentralization of responsibilities and long-term compensation.

A study of Thai manufacturing industry, Sebora and Theerapatvong (2010) attributed employees positive intrapreneurship behaviour to top management support. Similar studies in in South Africa have also emphasised the role of top management support in cultivating corporate entrepreneurship initiatives (Schachtebeck & Nieuwenhuizen, 2015; Villiers-Scheepers, 2010; Adonisi & Wyk, 2012).

Managerial support can be manifested in three ways, one is regular access to training so employees can possess ample knowledge and skills both of which will be used in the innovation process since proficiency is the foundation of creativity, another is access to time, and resources that is required in developing or implementing novel ideas (Desai, 2015). Intrapreneurship can either be an induced or autonomous behavior, management plays a critical role in inducing the behavior in employees (Hashimoto & Nassif, 2014).

There is a consensus in all empirical literature that management support has a definite positive influence on entrepreneurial initiatives in the organization except for a study by Hughes and Mustafa (2016). The study emphasizes the contributing role of culture since the variables as defined by Kuratko, Hornsby and Covin (2014) have not been comprehensively subjected to Kenyan studies.

2.2.1 The Concept of Intrapreneurship

The word intrapreneurship was first used by Pinchot in 1978 in the paper named, intra-corporate entrepreneurship, thus the name intrapreneurship, Pinchot points out that in order for firms to grow and prosper in a rapidly changing society and economy, entrepreneurial thinking within the company is a necessary prerequisite (Desai, 2015). Research in Intrapreneurship has mainly focused on ways in which companies could create new businesses that generate new revenue streams and value for business owners. In connection with this, various definitions of intrapreneurship appear in literature, according to Guth and Ginsberg (1990), Intrapreneurship consists of two phenomena’s, the creation of new
ventures within existing organizations and transformation of on-going organizations through strategic rebirth.

The most quoted definition is that of Sharma and Chrisman (1999), they define intrapreneurship as the process whereby an individual or a group of individuals, in association with an existing organization, create new organizations or instigate renewal or innovation in an organization. Antoncic and Hisrich (2004), broadened the definition by simply stating that intrapreneurship is entrepreneurship within an organization. Overall, in any organization that exhibits intrapreneurship, there is always an understanding of the outcomes of innovation and a general acceptance of risk (Bloodgood, Hornsby, Burkemper, & Sarooghi, 2015).

Miller (1983) described entrepreneurial firms as being innovative, with very low-risk averseness and acting proactively by utilizing available market asymmetries. In contrast, non-entrepreneurial firms failed to innovate within the firm, were highly risk averse, and were simply copy cats of competition rather than being proactive and pursuing newly available market opportunities. The three aspects as described by Miller forms our attributes for measuring intrapreneurship among employees in organizations. The entrepreneurial nature of an individual is revealed based on the presence/absence and strength of the above attributes. It is these attributes which then contributes to the degree of intrapreneurial behavior in an individual based on Miller’s study.

The failure of once giant Swiss Watch industry is attributed to the conservative nature of the Swiss culture, the Swiss value system inhibits proactiveness, risk-taking, and competitive aggressiveness which are fundamental aspects of entrepreneurial orientation (Tajeddini & Mueller, 2012).

Moige, Mukulu and Orwa (2016) studied effects of corporate entrepreneurship on the performance of food fortification companies in Kenya, they concluded that corporate entrepreneurship increased performance in food fortification companies in Kenya. The results of Moige et al study resonate with an earlier study by Mokaya (2012) on edible oil companies in Kenya. Simillar findings were obtained in public sector institutions (Michael & Ngugi, 2016; Linyiru, Karanja, & Gichira, 2016). Both studies paint intrapreneurship as a panacea of the challenges currently facing state corporations in Kenya.
2.2.2 Dimensions of Intrapreneurship
From previous research, several empirical methods have been put forward for measuring entrepreneurship orientation. According Venkataraman (1989) Entrepreneurial orientation consists of six dimension of strategic orientation, including aggressiveness, analysis, defensiveness, futurity, proactiveness, and riskiness. Naman and Slevin (2012) amalgamated original works of Covin and Miles (1999), Khandwalla (1977) and Miller and Friesen (1982) to come up with of a 7-point Likert Scale.

The most widely used scale in literature is that by Miller (1982), empirical review of the entrepreneurship literature by Wales, Gupta, and Mousa (2013) observed roughly 80% of prior studies have adopted Miller’s conceptualization. Miller’s (1982) study identifies three dimensions to entrepreneurship; innovativeness, risk taking and proactiveness. Covin and Wales (2012) used the same dimensions but added two more dimensions autonomy and competition aggressiveness. This research adopts Bolton and Lane (2012) three dimensions of intrapreneurship orientation. The dimensions are based on Miller’s (1982) conceptualization but the questions are directed at individual competencies as opposed to an organization.

2.2.2.1 Innovativeness
The innovativeness dimension of intrapreneurship deals with new ideas, experiences, originality, and creative processes which are separate issues from current practice and trends related to technologies (Lumpkin & Dess, 1996; Miller, 1983). The innovativeness aspect indicates the organizational attitude and willingness to offer new and original products or services by way of experimentation and research. In absence of innovation, all the other dimensions of entrepreneurship do not hold a lot of weight this makes innovation the most important dimension of entrepreneurship (Gürbüz & Aykol, 2009).

According to Zhao (2005), innovation and entrepreneurship are synonyms that go hand in hand, and a combination of the two is required for organizational success and sustainability in today's dynamic and changing environment. Morris (2008) outlines innovation in an organization as a possibility of the following scenarios new to the world product or service, new to the market product or service or new product or service line in business. Addition to a product line or service lines, Product improvement or revision, new application for
product or service, repositioning for product or service and cost reduction for product or service are also considered as innovation.

Lwamba, Bwisa and Sakwa (2013) examined the influence of innovation on financial performance in Kenya manufacturing sector, they segregated innovation in three categories of product, process and organizational innovation. Two constructs (product and organizational innovativeness) had a positive and significant effect on the financial performance of the firms.

2.2.2.2 Risk taking
Risk taking is related to the willingness in investing highly into projects whose results are unknown (Miller, 1983). The dimension of risk taking widely reflects the desire of a company/individual to refrain from copying what other companies have done and purely engage in unique assignments (Wiklund & Shepherd, 2005). Risk-taking encompasses a tendency to take extreme courageous actions such as embarking on a new enterprise, transferring a lot of resources to ventures with indefinite outcomes (Lumpkin & Dess, 1996).

In their seminal study on corporate entrepreneurship Lumpkin and Dess (1996) classified risk in three categories business risk, financial risk, and personal risk. Business risk is when an organization ventures in the unknown without knowing the probability of success, this risk is typically associated with organizations that enter unverified markets or commit themselves to unproven technologies. Financial risk is when an organization either borrows immensely or commits a large portion of its resources in order to grow, analysis of the risk is pertinent to financial experts and finally personal risk which occurs when an individual takes a decision to follow a particular specific strategic course. The effects of these decisions could possibly influence the course of the entire organization as well as have important implications for their careers.

Owing to the fact that, it is individuals that make the decisions within an organization, it is important to understand how the risk taking propensity of an individual affects their Intrapreneurial Orientation within the organization. Morris (2008) posits that there is a complex relationship between risk and innovation. When innovation is ignored the risk is
as high as to when innovation is adopted in organizations. A study on companies listed by Nigeria stock exchange found a negative relationship between risk taking with both returns on assets and returns on equity (Olaniran, Namusonge, & Muturi, 2016), this is in contrast of a similar done on Small and medium enterprises in Kenya (Wambgu, Gichira, Wanjau, & Mung’atu, 2015)

2.2.2.3 Proactiveness
According to Lumpkin and Dess (1996), proactivity is understood to be an “opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment”. Madsen (2007), visualizes proactivity as a posture of anticipating and acting on future wants and needs in the marketplace thereby creating the first-mover advantage against the competitors. Being a first mover comes with definite advantages such as securing access to rare resources, gaining new knowledge of key factors and issues, carving out market share and a position that is easy to defend and costly for rivals to surpass (Covin & Wales, 2012)

2.2.2.4 Competitive aggressiveness
The intensity of a business efforts to outperform its competitors by a strong offensive posture directed at overcoming industry rivals and may also be quite reactive as when a company defends its market position or aggressively enters a market that a rival identified with (Covin & Wales, 2012) In a study of contractor's competitive aggressiveness in Indonesia, Setiawan, Erdogan and Ogunlana, (2015) identified five factors as the key strategies of competitive aggressiveness among contractors. These include acting as a problem solver for clients, being different compared to competitor, building and maintaining clients' confidence in the company's trustworthiness and reliability, maintaining good relationships with clients and finally positioning on markets that are concerned about quality. It is important to note that on competitive aggressiveness is a response to competition trends and demands that already exist in the marketplace. It is a reaction to threats to competitors (Covin & Wales, 2012).
2.2.2.5 Autonomy

Autonomy is when an individual or a team independently bring forth an idea or a vision and executes it to completion (Covin & Wales, 2012). Autonomy directly affects job satisfaction and is also a major motivation for entrepreneurial activities within organizations (Guth & Ginsberg, 1990; Eghtedari, Hosseini, Malekmohammadi, & Chizari, 2013; Lumpkin, Cogliser, & Schneider, 2009). Gard, Baltes and Katzy (2017) decries the use of autonomy as a single dimensional construct in previous entrepreneurship studies. They classify autonomy in sub categories as; functional Autonomy, decision Autonomy, Strategic Autonomy and Structural Autonomy. The same study concludes that there needs to be moderation in levels of autonomy that employees exhibit, since high levels of autonomy presents the risk that business development teams may flop due to lack of control and direction.

2.3 Work Discretion as an Antecedent of Intrapreneurial Orientation

Work discretion or the extent to which employees are allowed to make decisions themselves regarding how to perform their work is a significant antecedent to intrapreneurial behavior (Kuratko, Hornsby, & Covin, 2014). In this context, discretion is defined as the extent to which employees are free to choose and how to organize their own work (Kuratko, Hornsby, & Covin, 2014). Anytime employees have discretion delegated to them, they have the formal right to choose which actions they prefer within specified limits (Stea, Foss, & Foss, 2015). Various organizational factors have an impact on an employee’s creative performance, in particular, an employee’s job-related independence is more relevant for the creative performance (Sia & Appu, 2015).

Job autonomy and employee work discretion are used synonymously in the proceeding discussion, according to Hackman and Oldham’s (1976) autonomy is “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out. Nicholson (1984) divides autonomy into three dimensions, namely, ability in choosing goals, ways of accomplishing these goals and timing to achieve these goals.
De long (2015) defines autonomy of an individual as the “degree to which the work ensures the substantial independence of an individual in the process of work-planning and in determining the procedures of its implementation. In other words, it sets out the range, in which the employees can decide, which tasks they will do and how. In the consequence, autonomy provides the employees with the possibility of self-determination, which allows having a more direct impact on the results of the company.

Parker and Collins (2010) postulate that provision of the employees by the management with a greater level of work discretion or autonomy is closely connected with their proactive behaviors, which are related to a greater foreseeing and a problem solving attitude. Autonomy enables and motivates employees to contribute to the company and encourages the employees at all levels of the firm to act independently and to take initiatives. For example, sales representatives have to deal with the demands of the customers in “real time” and therefore they have to act without direct control of their immediate supervisors. Higher level of discretion of these cadre of employees permits them to work actively on the opportunities which can appear while dealing with the clients and solving the problems, which occur in such interfaces (Baker, Rapp, Agnihotri, & Andzulis, 2015).

Baker et al (2015) further expounds on the subject of autonomy in regards to employees. Employees perceive autonomy as direct authority, independence, and self-reliance, therefore they can use all the available resources without need for discussion with their managers in exceptional scenarios. Despite the obvious necessity of work discretion in organizations, Lumpkin, Brigham, and Moss (2010), established that at times, such practices seem to be time-consuming, destructive, and more expensive than the work environments that is based on rules and procedures or standard operating procedures (SOPs).

According to Cabrera, Collins, and Salgado, 2006), knowledge sharing among employees is more pronounced in organizations that exhibit greater work discretion. Subsequently, work discretion is perceived as a strong indicator of the innovative behavior in employees. Revealing employee’s innovative behavior must be accompanied by optimum levels of work discretion in organization (Spiegelaere, Gyes, Witte, Niesen, & Hootegem, 2014). Haar and Spell (2009) equate work discretion to some form of organizational reward and
renemuration, autonomy can be perceived as a kind of non-monetary reward as it is positively connected to job satisfaction.

Previous scholars have made a dichotomous separation between hierarchical and flexible organizations. Management design literature tends to develop even more complex arrangements. Mintzberg (1990) within the context of these two broad distinctions identifies two types of flexible (organic) organization. The first has a high capacity for adaptation and innovation and the second is a simple, adhocratic organizations. There is a distinct difference in forms of work organization and types of work in the two organic organizations; where as work discretion is at the highest in operating adhocracy organizations. Minimum work discretion is exhibited in simple organic organizations. The simple form relies on direct supervision by one individual (owner manager) and a classic example of this type of organization is the small and medium enterprises. Adhocracies rely on mutual adjustment in which employees coordinate their own work by communicating informally with each other.

Lam (2005) identifies two types of organic structures; operating adhocracy and the J-form. In operating adhocracy the expertise of individual professionals is paramount, the existing project structures fuse the knowledge of these experts into creative project teams that carry out innovative projects. There are high levels of work discretion that provides scope for exploring new knowledge and adhocracies tend to show a superior capacity for corporate entrepreneurship. J-Form organization is an amalgamation of bureaucracy and flexibility of an adhocracy.

Hackman and Oldham’s (1980) job characteristic model incorporates autonomy as one of five core job dimension (i.e. task variety, task identity, task significance, autonomy, and feedback). These elements positively affect employees’ psychological states and thus lead to better work consequences including higher intrinsic work motivation, quality of performance, work satisfaction, lower absenteeism, and low turnover.

When work is delegated to employee a feeling of competence is fostered, such a feeling has results in autonomous motivation which leads to increased effort, behavioral diligence, and overall value creation (Stea, Foss, & Foss, 2015). However employees must understand delegated decisions can be overruled and discretion can be permanently reduced since these
kind of decision are usually loaned (Coyle-Shapiro & Kessler, 2000). Difenbach and Meynhardt (2012) found that work discretion provides middle management with the opportunity to innovate and behave more entrepreneurially in public sector organizations in Germany.

In a research conducted by Bakker (2004) among 605 students and 178 music teachers from 16 different music schools. The research concluded that job contextual variables which include work discretion, supervisory coaching, social support, and performance feedback had a positive influence on the balance between teacher’s skills which in turn contributed to their work enjoyment and intrinsic work motivation (Bakker, 2005).

Job autonomy is inversely related to turnover and hence leads to an increase in job satisfaction and organizational commitment (Ahuja, Chudoba, Kacmar, Mcknight, & George, 2007). Perception by employees for a high degree of job autonomy is commensurate to organizational support (Akram, Ali, & Hassaan, 2013). A study of mid-level managers in a manufacturing company in Chennai, India, found a positive relationship between work discretion with intrapreneurial orientation (Banumathi & Samudhararajakumar, 2015).

An operational culture that is flexible is paramount in maintaining a positive intrapreneurial spirit (Adonisi & Wyk, 2012). According to Platzer, Winzker and Pretorius (2011) flexibility resulting from increasing adaptability and innovation, can support the implementation of an entrepreneurial vision. The tenure and skills that an employee exhibit is important in determining the autonomy an employee is given by the organization (Iliopoulou & White, 2010). Armesh, Wei, and Marthandan (2014) in the study on Iranian manufacturing SMEs used the variable work independence instead of work discretion, the study found a significant positive relationship between work independence and intrapreneurial orientation.

Lekmat and Chelliah (2014) found a negative influence of work discretion on the process of innovation, in a study investigating the link between the five internal organizational factors to intrapreneurship, work discretion and time availability had negative influence on intrapreneurship while the remaining management support, rewards, and organizational boundaries had positive influence on corporate entrepreneurship. Similar negative
relationship between work description and intrapreneurship had also been observed in a study by Alprakan, Bulut, Gunday, Ulusoy and Kilic (2010), the study explored the impacts of the internal supportive environment on intrapreneurial activities in manufacturing firms in Turkey.

Work discretion was found to enhance employee creativity in a study of Taiwanese manufacturing companies that examined the influence of innovative cognitive style, proactive personality and working conditions on employee creativity by taking an interactional perspective (Chang & Chen, 2013).

In the research that investigated whether job design is a necessary prerequisite for entrepreneurial behaviour in organizations, de Jong, Parker, Wennekers and Wu (2015) identified job autonomy as a necessary antecedent to intrapreneurship. Srivastava and Agrawal (2010), underpin the importance of organizational structure, collaborative work environment and support from leaders as opposed to rewards in creating intrapreneurial spirit in employees.

Hughes and Mustafa (2016) have a completely different view of the five antecedents as proposed by Kuratko, Hornsby and Covin (2014) by incorporating the dimension of cultural differences. They examined that management philosophies in Kenya are dominated by principles of classical management, in which there are sharp divergences and status differences between management and workers. As such Kenyan employees are expected to do their work and obey management at all times. Having said that, the antecedents and their effect on intrapreneurial orientation as conceptualized by Kuratko becomes different. Pertaining work discretion, the interpretation by the subordinates may not achieve the intended desire.

2.4 Rewards and Reinforcement as an Antecedent of Intrapreneurial Orientation

Reinforcement involves development and use of systems that enhance entrepreneurial behavior which highlights significant accomplishments and encourage the pursuit of challenging work (Kuratko, Hornsby, & Covin, 2014). Kuratko et al (2014) further asserts that, the design of reward system should be based on clear goals, feedback, individual
influence, and results. Compensation appears in literature as a necessary antecedent to innovation and intrapreneurship in organizations (Lerner, Azulay, & Tishler, 2009). Reward systems that propel an attitude of risk-taking and innovation have been shown to have a strong effect on individual’s entrepreneurial behavior (La Nafie, Nimran, Musadieq, & Suyad, 2014).

Morris, Kuratko and Covin (2010) have classified reward system in different categories including financial, status and power, career and personal development, as well as the psychological motivators; self-actualization, esteem and social rewards such as friendships and a sense of belonging.

The basis of efficient performance by individuals in organizations is explained in the literature by various behavioral theories, these theories provide a deep insight into an individual’s behavior. The inner incentives are paramount, but each individual relies on certain external incentive, which augments the effort to achieve and share knowledge. Efforts to perform need to be directly related to certain consequences (Zakaria, Hussin, Noordin, Sawal, & Zakaria, 2011).

Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) have long been utilized by management scholars in elucidating motivational basis behind employee behaviors and the formation of positive employee attitudes (Wikhamn & Hall, 2012). Social exchange theory relates to a series of interactions that depends on each other, contingent on the actions of the other partner in the organizational relationship and generate definite obligations (Cropanzano & Mitchell, 2005).

Agency theory approach has also been used in examining employee’s indulgence in corporate entrepreneurship activities with rewards as a predecessor. Jones and Butler (1992) on the premise of agency theory authenticated that rewards to employees may mitigate agency problems (Monsen, Patzelt, & Saxton, 2011). Agency theory postulates that the essence of the relationships within organizations is the result of interplay between a principal (owner) and an agent (employee) in which the principal entrusts work to the agent. According to agency theory employees feel differing degrees of aversion to work effort (Douglas & Shepherd, 2002).
Agency theory is helpful in understanding the link between vertical or horizontal integration of the firm with employee compensation strategy. As firms expand into unrelated product markets, corporate directors have less expertise regarding such product markets, thus reducing their ability to monitor the behaviors of business unit managers. An alternative contracting arrangement is to link business unit manager’s rewards or incentives strongly to formula-driven, outcome-based plans that depend on business unit performance (Lerner, Azulay, & Tishler, 2009).

Gohari, Ahmadloo, Boroujeni and Hosseinipour (2013) classify rewards into two broad categories; intrinsic and extrinsic rewards. Intrinsic reward refers to the intangible accolades such as praise and acknowledgment while extrinsic reward refers to the tangibles such as salary, promotion, freedom in office and job security. Both types of rewards are closely associated with staffs’ accomplishments within an organization.

The basis of reinforcement in academic literature is built in Skinner’s theory of 1963, according to Skinner positive reinforcement involves the addition of a reinforcing stimulus following an action from an employee that is desirable in future (Maritim, 2016).

According to Amabile (1997), organizational leaders need to orient themselves to meeting the needs of creative employees by fostering an entrepreneurial environment where managers are not only provided with operational work discretion toward achieving innovation goals but also rewarded accordingly for engaging in such behavior. Organizational theorists have argued that for employees to be encouraged to think “outside of the box,” Managers must come up with desirable reward systems from an employee perspective. Such systems may include extrinsic rewards such as stock options, cash bonuses, and accelerated promotions as well as intrinsic rewards which are nonfinancial in nature, these include public praise and recognition (Brazeal, Schenkel, & Azriel, 2008). Carrier (1996) in an exploratory case study of small businesses, reports that intrapreneurs want both monetary and non-monetary rewards. The monetary rewards envisioned were salary raise and stocks. The non-monetary was the possibility of taking further continuation in intrapreneurial action.
Where employees have a choice of how to spend their time and energy, rewards have a direct effect on that choice, the incentive schemes and the reward system decide which initiatives are followed and which ones are residual (Åmo, 2006). The unreliable reward system could have hugely damaging effects on the financial performance of the organization (Zakaria, Hussin, Noordin, Sawal, & Zakaria, 2011). Bhardwaj, Sushil and Momaya (2011) in a study that looked at drivers and enablers of corporate entrepreneurship, identified rewards as possible initiators of intrapreneurship, according to Bhardwaj rewards are important since they motivate employees to engage in innovative behavior that will support the realization of intrapreneurship activities.

Villiers-Scheepers (2011) posits that motivation of employees towards intrapreneurial can be achieved by providing social incentives, formal acknowledgment and giving employees organizational freedom. The fact that employees are able to initiate and implement intrapreneurial activities is in itself an intrinsic motivation, therefore according to Wunderer, (2001), there is no any further requirement for extrinsic rewards. Wanderer’s (2001), postulation is based on the meta-analytical review by Deci, Koestner, & Ryan (1999 where they established that extrinsic rewards negatively affected intrinsic motivation. He argued that there were some initiatives were so intrinsically rewarding in themselves, that no extrinsic reward was required to perform those activities.

Based on data collected from 271 employees and their supervisors in a study that examined the effects of tangible and intangible forms of creativity-contingent rewards on employee creativity, Yoon, Sung, Choi, Lee and Kim (2015) established that, intangible rewards for creativity are positively related to intrinsic and extrinsic task motivations; tangible rewards for creativity are negatively related to extrinsic task motivation; and finally employee creativity, as rated by the supervisor, is positively related to extrinsic motivation, but not to intrinsic motivation.

To prevent good employees from leaving the organization, monetary awards should be part of the reward system (Hisrich, & Antoncic, 2003). The appropriate reward system will have an impact on the outcome of intrapreneurial activities (Hornsby, Kuratko, & Zahra, 2002). Inculcating reward systems in organizational human resources practices gives an organization a competitive advantage, more so in periods of economic downturn (Giannikis & Nikandrou, 2013)
A study in Turkey manufacturing firms, Alprakan, Bulut, Gunday, Ulusoy and Kilic (2010) found no relationship between offering rewards and employee intrapreneurial intentions. According to Wood, Holt, Reed, and Hudgens (2014) in a study of Air Force Organizations, there is a significant positive relationship between an act of giving rewards to employees who had come up with new ideas and intrapreneurial orientation. A study by Monsen, Saxton, and Patzelt (2007) proposes that expected utility of the project’s incentive package is the main determinant of employee’s basic decision to participate in a corporate venture project.

Twomey and Harris (2000), in the study that examined human resource management practices and entrepreneurship, found a positive relationship between reward and recognition systems and entrepreneurial behavior among employees. Block and MacMillan (1993) emphasized the need of appropriate incentive plans coupled with critical path milestone planning for encouraging internal ventures in the organization. Lekmat and Chelliah (2014) observed a positive relationship between rewards/reinforcement antecedents to intrapreneurship orientation, this was in the study of Thai Companies. Inadequacy of rewards and recognition is sighted as an organizational Constraints on innovation and intrapreneurship among public sector employees (Manimala, Jose, & Thomas, 2006)

Unlike other studies that have examined the role of many variables on entrepreneurship orientation, a study by Lerner, Azula and Tishler (2009) chose to only examine the compensation mechanisms to corporate entrepreneurs. They found out that entrepreneurs prefer compensation that is related to the internal venture’s performance this is in contrast to Hashimoto & Nassif (2014), observation that saw the need for rewarding irrespective of the outcome of the entrepreneurial project.

Despite the broad consensus regarding the role of rewards and reinforcement in corporate entrepreneurship, the empirical results are rather mixed. Some of the studies have emphasized the roles of financial compensation as an instigator of corporate entrepreneurship (Bhardwaj, Sushil, & Momaya, 2011; Hornsby, Kuratko, & Zahra, 2002; La Nafie, Nimran, Musadieq, & Suyad, 2014; Twomey & Harris, 2000). While other studies found no impact of rewards on corporate entrepreneurship (Alprakan, Bulut, Gunday, Ulusoy, & Kilic, 2010).
As noted above, earlier investigations that have examined the effects of extrinsic rewards on creativity have yielded generally conflicting results. In 1971 study, Kruglanski, Friedman, and Zeevi, (1971), were able to show that contingent rewards diminishes individuals’ creativity. They gave two creativity tasks to Israeli high school students who either had or had not been promised a reward for their participation. It is interesting to note that the final results showed that non-rewarded students exhibited higher creativity than rewarded students did.

2.5 Time Availability as an Antecedent of Intrapreneurial Orientation
Several scholars have underpinned time availability as a critical precursor to entrepreneurial processes in organizations (Adonisi & Wyk, 2012; Alprakan, Bulut, Gunday, Ulusoy, & Kilic, 2010; Antoncic & Hisrich, 2004; Baruah & Ward, 2014; Bierwerth, Schwens, Isidor, & Kabst, 2015; De Jong & Wennekers, 2008; Hashimoto & Nassif, 2014; Kuratko, Hornsby, & Covin, 2014). Time availability is concerned with workloads estimation to guarantee that individuals have the time needed to develop new ideas and innovations and supporting their efforts to accomplishing corporate goals (Ireland, Kuratko, & Morris, 2006).

“It’s no coincidence that Microsoft and Facebook both got started in January. At Harvard that is (or was) Reading Period, when students have no classes to attend because they’re supposed to be studying for finals.” (Graham, 2017). In 1974, 3M scientist Art Fry came up with an ingenious invention. He thought if he could apply an adhesive to the back of a piece of paper, he could create the perfect bookmark, one that kept place in his church hymnal. He called it the Post-It Note. The novel idea by Fry was conceived during his “15 percent time,” a program at 3M that allowed employees to use a portion of their paid time to chase rainbows and hatch their own innovative ideas (McNerney, 2002). It might seem like unnecessary employee benefit. But the “15 percent time,” has actually produced many of the company’s best-selling products and has set a precedent for some of the top technology companies of the day, like Hewlett-Packard and Google.

According to Berends and Antonacopoulou (2014) time is a multifaceted construct with three dimensions, which include duration, timing, and the temporal modalities of past, present, and future. Duration refers to the degree of expansion in time, it is something that
has a length and can be expressed in terms of a particular timeframe, and this means that
time can be measured by clocks and calendars. There is a close interlinkage between
duration and speed because speed concerns the amount of development or change relative
to duration. This dimension is more relevant to management scholars because it is
omnipresent: for example, the time that a company has been in existence, or the time taken
to roll out a new product (Berends & Antonacopoulou, 2014).

The second dimension of time is timing, the dimension of timing is about events occurring
in relation to other events. Timing is at the moment whereas duration is about the length of
time. The timing of organizational routines is quite often triggered by events. (Berends &
Antonacopoulou, 2014). The last dimension of time is about the temporal modalities of
past, present, and future. The temporal modalities concern how a person’s experience at
any particular moment has a connection to the past or the future. The three dimensions are
interwoven in actual processes and there is no clear cut divisions and isolatable principles
that exist parallel to each other (Berends & Antonacopoulou, 2014).

It also important to note that previous research has not explicitly defined time as a
subjective or objective parameter, these two contrasting views of time also permeate in
studies on time in organizations. Time is viewed as either a social time concept or the clock
time (Lee & Liebenau, 1999). The clock time concept characterizes time in absolute and
objective terms, time is seen as homogeneous and divisible in structure, linear, and uniform
in its flow, time exists independently of objects and events (Lee & Liebenau, 1999). On the
other hand, the social time concept characterizes time on the basis culture, the organization,
and professional levels. Different cultures and groups having different ideas of time (Lee
& Liebenau, 1999), in this view time vary tremendously across different societies and
cultures.

In objective time studies, the clock emerged as a primary tool in the conceptualization of
the variable. This perspective has been adopted by a majority of social science studies, time
is treated as quantitative, continuous, homogeneous, and measurable. Contrast to the
objective characterization of the variable, time is also viewed as a product of beliefs,
customs, and norms of individuals and groups. In this conceptualization time is a subjective
item (Lee & Liebenau, 1999).
The binary division of time has attracted criticism from Orlikowski and Yates (2002), they argue that while focusing on one side or the other one misses to see how temporal structures emerge from and are embedded in the varied and ongoing social practices of people in different communities. Temporal structures powerfully shape those practices in turn, this perspective provides a conceptualization of time that bridges the subjective and objective dichotomy that underlies much of the existing literature.

Time norms are quite varied in different organizations and can be analyzed based on different dimensions (Lerner, Zahra, & Kohavi, 2007). Schriber and Gutek (1987) analyzed and identified fifteen different time norms in organizations. Example include setting work vs. nonwork time boundaries, focus on punctuality, defining work pace, allocating time, referring to planning vs. implementation in exploiting time, and preference for routine vs. variety, which indicates the degree of the repetitiveness and regularity of the tasks a person performs within a given time frame and showing the swiftness required and density of assignments in given durations. The degree of awareness of time is central to employee’s acceptance or rejection in some organization, while in others it is of no significance (Schriber & Gutek, 1987).

Studies have also examined individual differences in regard to the time construct (Lerner, Zahra, & Kohavi, 2007). An analysis of 24 previous studies on time-related attitudes or behaviors by Smythe and Robertson (1999) concluded on an overall time personalities classification at individual governing responses to different time-related situations.

Bevins and Smet (2017) of McKinsey posit that it is imperative for an organization to handle the time problem systematically rather than leave it to individual employees. Bevin and Smet confirm that the current time problem many organizations are experiencing is as a result of always-on communications, the growing complexity of global organizations and the pressures imposed by profound economic uncertainty.

The current executives have a feeling that there is simply no enough hours in the day to get things done. There a failure by organizational theorists in articulating the exact use of time in organizations, it assumed that there is commensurate time usage among all organizational participants (Goddard, 2001).
Slack time plays a critical role in innovation by facilitating creative activities, such as ideation, experimentation, and prototype development (Richtnér, A’hlström, & Goffin, 2014). Google allows its employees to devote 20% of their time to projects of personal interest, the 20% rule encourages innovation (Vise & Malseed, 2005). It’s not about doing something in your spare time but it’s about creating time for innovation, the comments are attributed to one Google engineer called Joe Beda (Vise & Malseed, 2005). Wella and 3M are other known companies with similar slack time policy as Google (Menzel, Aaltio, & Ulijn, 2007). Google founders described the importance of slack time philosophy “We encourage our employees, in addition to their regular projects, to spend 20% of their time working on what they think will most benefit Google, this empowers them to be more creative and innovative. Many of our significant advances have happened in this manner.”

In a study that examined effective factors in organizational entrepreneurship climate by Marzban, Moghimi, and Ramezan (2013), where the research population was the middle managers of the University of Tehran. The results showed that time availability, management support, freedom of operation and work discretion/autonomy, reward and reinforcement, and organizational boundaries have positive and meaningful impacts on the entrepreneurship climate of the University of Tehran.

A study by Nohria and Gulati (1996) proposes finding an optimal time for innovation in organization since there is U-shaped relationship between slack and innovation in organizations: Both too little and too much time may be detrimental to innovation, this in contrast to a similar study by Oerlemans and Pretorius (2008) that found a direct relationship between amount of slack resources and innovation. The ambiguity about the usefulness of slack time in research may be the reason why most companies have not adopted slack time as part of their time policy (Agrawal, Catalini, & Goldfarb, 2014) Lerner, Zahra and Kohavi (2007) regard time norms are one of the most critical antecedents in determining the ability of an established organization in nurturing intrapreneurship. Time is a resource that can be leveraged for entrepreneurial firm’s advantage (Covin & Miles, 1999)

Closer home, Kassa, and Raju (2014), in an empirical study of Ethiopian leather footwear manufacturers found a strong correlation between time availability variable and innovation; further regression analysis showed that reward system, as well as time availability, contributed the highest for innovation than the rest of the variables.
Organizational policies, processes, and procedures toward adequate time inevitably encourage employees to assume risks for putting their novel ideas into action (Baruah & Ward, 2014).

Hughes and Mustafa (2016) observes in an emerging economy setting, slack time for entrepreneurial initiatives among African employees may be meaningless, Kenyan employees tend to focus on immediate tasks with known outcomes because of cultural preferences (Hughes & Mustafa, 2016). Lekmat et al (2014) had a similar observation on Thai manufacturing companies.

2.6 Organizational Boundaries as an Antecedent of Intrapreneurial Orientation

A supportive organizational structure and existence of fluid boundaries between different departments or division enhance entrepreneurship orientation by employees (Kuratko, Hornsby, & Covin, 2014). Literature presents extremely early works beginning in the late 50s that investigated the relationship between firm’s boundaries, organizational design, and ability to innovate (Lakhani, Lifshitz - Assaf, & Tushman, 2013). Based on the early scholarship a number of studies investigating the relationships between a firm’s boundaries, organizational design and intrapreneurship have been undertaken. The ability of a firm and its managers to delve into a strategic analysis of underlying innovation tasks and understand the associated knowledge requirements in effectively delivering new products provides a great avenue for organizational boundaries design.

According to Lamont and Molnar (2002), there are two types of boundaries in social sciences; social boundaries and symbolic boundaries. Symbolic boundaries are conceptual distinctions made by social actors to categorize objects, people, practices, time, and space. They allow to capturing the dynamic dimensions of social relations, and to separate people into groups and generate feelings of similarity and membership. On the other hand social boundaries allow “researchers to develop a relational and systemic perspective on knowledge production sensitive to historical processes and symbolic strategies in defining the content and institutional contours of professional and scientific activity” (Lamont & Moln´ar, 2012).
Dumez & Jeunemaitre (2010) define a boundary as a potential or an actual mechanism that rarefies or regulates flows between two heterogeneous spaces, and makes these flows visible. Activation of boundaries is artificial thus non-existence of natural boundaries, the degree of rarefaction and regulation of flows across boundaries depends on scales of analysis (Dumez & Jeunemaitre, 2010. According to Cadenasso, Pickett, Weathers and Jones (2003) boundary definition is explicit in biology where a boundary is visualized as the regulator of flow between two heterogenous spaces).

Diverse theoretical perspectives may assist in delineation of organizational boundaries. The predominant categorization is based on transaction cost rhetoric, assets specificity and the frequency of transactions. Aspects with respect to economies of scale and scope define a minimum efficient size of the organization (Dumez & Jeunemaitre, 2010). Another insight in structuring organizational boundaries is also visible in knowledge based theories (Kogut & Zander, 1993). The perspectives outlined are important in understanding the current existing scenarios by showing the consideration of transaction costs, scale and scope of economics and the availability of knowledge basis in organizational boundary design. However, they do not clearly state with precision where organizational boundaries would and should be eventually drafted.

In practice, placing both external and internal boundaries is more justifiable with reference to a capability approach. As much as a myriad of economic factors come into consideration when decisions of placing boundaries are made, other variables, such as the bargaining power of unions, competencies, identities and power connections are vital (Lakhani, Lifshitz - Assaf, & Tushman, 2013). It also important to note firm’s boundaries are designed in a way that protects dependencies in task environment and that boundary are put around critical tasks, power and competence contingencies (Lakhani, Lifshitz - Assaf, & Tushman, 2013).

In construing the organizational boundary phenomena aspects of the firm's external environment come in play because operators outside the firm are also an important source of functional new innovations (Lakhani, Lifshitz - Assaf, & Tushman, 2013). A good example is the open source software movement, these provided an alternative innovation ecosystem where outside players design, develop, distribute and support complex products.
Boundaries in the traditional companies were “hardwired” into the very structure of the organization. Power and authority were manifested in the hierarchy of occupational titles. Pools of specialized expertise were exhibited in different independent functional departments. Then finally, dedicated business units were a reflection of a company’s products and markets (Hirschhorn & Gilmore, 1992). Hirschhorn and Gilmore (1992) further articulated that, despite the rigidity of the traditional organizational structure, it had a singular advantage: the roles of managers and employees within this structure were clear, simple, and relatively stable. Organizational boundaries functioned like markers on a map. These made it clear on reporting lines and employee responsibility, Boundaries oriented and controlled individual behavior and harnessed it to the objectives of the company as a whole.

According to Karyotakis and Moustakis (2016), organizational boundaries contain four subcategories of formalization, centralization, technology routines and connectedness. Formalization refers to the extent to which formal rules, standard policies and procedures define decisions and working relationships. Centralization results when there is an effort of achieving organizational control, use of technology in centralization is what is called technological routine. Connectedness is related to the decision-making process which is connected with channels of communication in the organization. Karyotakis and Moustakis (2016) further elucidate on the need for flexibility in work procedures as it leads to an increase in creativity, communication openness, knowledge mining, and creation. Oliver (1993) identified three basic characteristics of organizational boundaries as permeability, stability, and veridicality.

A study by Fellows and Liu (2012), that sought to explore boundary management on engineering construction projects concluded that, team boundary management is a significant contributor to team performance outcomes, including team efficiency, innovation and goal achievement.

Miller, Fern, and Cardinal (2007) asserts that several studies have established a positive relationship between organizational boundaries and entrepreneurship. According to
Lakhani, Lifshitz – Assaf, and Tushman (2013) boundaries of the firm are established to maximize the control of critical contingencies.

Networking across organizational boundaries creates value and it is a powerful strategy for engaging in corporate entrepreneurship activities (Austin, Stevenson, & Wei-Skillern, 2006). Knowledge transfer between employees in an organization boosts creativity and innovative activity (Aalbers, Dolfsma, & Koppius, 2013). Aalbers et al further asserted that Connectedness or closeness centrality and inter-unit ties are the main contributors of knowledge transfer in an organization.

Intrapreneurship tends to flourish more in the organization that exhibits broader span of control than in bureaucratic organizations, according to Demirci (2013) in study carried out on ceramic industry centralization and formalization of organizational structures have to impact on the entrepreneurial behaviors of employees. Lekmat and Chelliah (2014) in a study of Thai companies found a positive relationship between organizational boundaries and intrapreneurship orientation.

Chen and Cangahuala (2010), established that fluidity of organizational boundaries contributed most to innovation among the Taiwanese managers working in technology companies. Similar study in Dutch organizations obtained similar results (Veenker, Peter Der Sijde, During, & Nijhof, 2008).

Bower (1993), examined the tenure of Jack Welch at GE, he attributes Welch’s success as the CEO, to increased boundary fluidity that was Welch created. “Our dream for the 1990s,” Welch wrote in GE’s 1990 annual report, “is a boundaryless company…where we knock down the walls that separate us from each other on the inside and from our key constituencies on the outside.” Welch advocated for a “boundaryless organization,” and to build it, he introduced what became known as the GE Work-Out process, this involved a series of structured and facilitated forums, bringing people together across different levels, functions, and geographies to solve problems and shorten decision-making time.

According to Burgers and Jansen (2008), the creation of organizational ambidexterity provides a number of benefits for autonomous units, ambidexterity entails s creation of units that are differentiated and integrated at the same time. Integrated into that there are
cross-functional interfaces to facilitate knowledge transfer between differentiated units. There are pragmatic boundaries between the autonomous units although these boundaries facilitate exploration within units, it makes reciprocal knowledge and resource transfer across these boundaries more challenging.

Hierarchical rigidity prohibits prompt reactions to changes in the business environment and the realization of new ideas, while prescribed rules and strict compliance slow down entrepreneurial ideas and innovativeness (Delić, Alibegović, & Mešanović, 2016). According to Hashimoto and Nassif (2014), implementation of innovative proposals is quicker in flat structures because operational and top management levels are close to each other. It is easier to select, appraise, and execute ideas in a supportive structure (Guth & Ginsberg, 1990). Mokua and Ngugi (2013) did a case study on Equity Bank in Kenya, the study advice on organizational structure re-engineering and use of rewards in stimulating corporate entrepreneurship

2.7 Chapter summary
This chapter provided a review of previous literature on organizational antecedents to intrapreneurship orientation. The contextual definition of the variables was given, these were then followed by a discussion of previous literature on the relationship between the antecedents and intrapreneurship orientation. Chapter three will delve into the mechanism of the study, the chapter will discuss the details of research methodology giving details about measures and tools for data collection and evaluation.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This chapter gives a detailed account of how the study was carried out. The chapter describes the research design, the target population, the sample, and sampling procedure, research instruments, data collection, and data analysis procedures that the research employed.

3.2 Research Design
Saunders, Lewis and Thornhill (2015), define research philosophy as the development of research background, research knowledge and its nature. Based on Saunders categorization, this is research takes a positivism philosophy. The research adopts a positivisc approach because data was collected and analyzed objectively. The central theme of positivism research is that social phenomena can be explained by observing cause and effect which explains the use dependent and independent variables in the research. In order to decern and explain the relationship between the antecedents of intrapreneurship (independent variables) and the intrapreneurship orientation construct (dependent variable), the study applied an explanatory cross- sectional descriptive research design. According to Saunders, Lewis and Thornhill (2015), studies that establish causal relationships between variables are termed explanatory.

3.3 Population and Sampling Design
3.3.1 Population
According to Saunders, Lewis and Thornhill (2015), a population is set of cases from which a sample is taken. For this study, pharmaceutical sales representatives (PSRs) working for all companies in Kenya were considered. Data were obtained from Pharmacy and Poisons Board Kenya (PPB). PPB regulates standards of all medical products in Kenya, PPB also issues practicing licenses to all practitioners in the Pharma industry in Kenya. Pharmaceutical sales representatives are among the practitioners that are registered with PPB. According to data obtained from PPB, there are one thousand and ninety-one registered PSRs working for sixty-three pharmaceutical companies in Kenya
3.3.2 Sampling Design
This section elucidates on a detailed description of sampling frame, sampling technique and the actual sample size.

3.3.2.1 Sampling Frame
Sampling frame contains the name of all items of the universe (Saunders, Lewis, & Thornhill, 2015). There are 1091 PSRs in Kenya, according to PPB less than 10% of the PSRs are stationed outside Nairobi. The study considered all the PSRs including the ones stationed outside Nairobi. Table 3.1 shows the number of registered PSRs for each pharmaceutical company.
### Table 3.1: Sampling Frame

<table>
<thead>
<tr>
<th>Company</th>
<th>No of PSRS</th>
<th>Company</th>
<th>No of PSRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharma Specialities Ltd</td>
<td>130</td>
<td>Ion Kenya Limited</td>
<td>6</td>
</tr>
<tr>
<td>Sai Pharmaceuticals Ltd</td>
<td>117</td>
<td>Sandoz Gmbh</td>
<td>6</td>
</tr>
<tr>
<td>Phillips Pharmaceuticals Ltd</td>
<td>86</td>
<td>Sunpar Pharmaceuticals Ltd</td>
<td>6</td>
</tr>
<tr>
<td>Glaxosmithkline Pharmaceutical Kenya Ltd</td>
<td>82</td>
<td>Wessex Pharmaceuticals Ltd</td>
<td>6</td>
</tr>
<tr>
<td>Surgipharm Ltd</td>
<td>50</td>
<td>Laborex Kenya Ltd-mombasa Road</td>
<td>5</td>
</tr>
<tr>
<td>Medisel Kenya Ltd</td>
<td>46</td>
<td>Novartis Pharma Services Inc</td>
<td>5</td>
</tr>
<tr>
<td>Glenmark Pharmaceuticals (k) Ltd</td>
<td>42</td>
<td>Signature Healthcare Ltd</td>
<td>5</td>
</tr>
<tr>
<td>Synermed Pharmaceuticals (k) Ltd</td>
<td>38</td>
<td>Statim Pharmaceuticals Ltd</td>
<td>5</td>
</tr>
<tr>
<td>Harleys Ltd-nairobi</td>
<td>36</td>
<td>Surgipharm Ltd - Mombasa</td>
<td>4</td>
</tr>
<tr>
<td>Cosmos Limited</td>
<td>34</td>
<td>Surgipharm Ltd (kings Business Park)</td>
<td>4</td>
</tr>
<tr>
<td>Astrazeneca Pharmaceuticals Limited</td>
<td>30</td>
<td>Dafra Pharma Ltd</td>
<td>3</td>
</tr>
<tr>
<td>Goodman Agencies Ltd</td>
<td>26</td>
<td>Harleys Ltd-mombasa</td>
<td>3</td>
</tr>
<tr>
<td>Europa Healthcare Ltd</td>
<td>25</td>
<td>Pharmaceutical Manufacturing Co</td>
<td>3</td>
</tr>
<tr>
<td>Sanofi Aventis Kenya Ltd</td>
<td>25</td>
<td>Ray Pharmaceuticals Ltd</td>
<td>3</td>
</tr>
<tr>
<td>Surgilinks Ltd</td>
<td>23</td>
<td>Sai Pharmaceutical Ltd</td>
<td>3</td>
</tr>
<tr>
<td>Lords Healthcare Ltd</td>
<td>21</td>
<td>Universal Corporation Ltd</td>
<td>3</td>
</tr>
<tr>
<td>Bayer East Africa Ltd</td>
<td>18</td>
<td>Galaxy Pharmaceutical Limited</td>
<td>2</td>
</tr>
<tr>
<td>Pfizer Laboratories Ltd</td>
<td>16</td>
<td>Globe Pharmacy Ltd</td>
<td>2</td>
</tr>
<tr>
<td>Pharmacor Ltd</td>
<td>16</td>
<td>Macnaughton Ltd</td>
<td>2</td>
</tr>
<tr>
<td>Syner-medica (k) Ltd</td>
<td>16</td>
<td>Roche Kenya Limited</td>
<td>2</td>
</tr>
<tr>
<td>Sun Pharma East Africa Ltd</td>
<td>15</td>
<td>Bimeda Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Dawa Ltd</td>
<td>14</td>
<td>Imperial Health Sciences Kenya Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Adcock Ingram E.a. Ltd</td>
<td>13</td>
<td>Isis Pharmaceutical Ltd-westlands</td>
<td>1</td>
</tr>
<tr>
<td>Regal Pharmaceuticals Ltd</td>
<td>13</td>
<td>Johnson &amp; Johnson Middle East Fz Llc</td>
<td>1</td>
</tr>
<tr>
<td>Biodeal Laboratories Ltd</td>
<td>12</td>
<td>Laborex Kenya Ltd- Koinange St.</td>
<td>1</td>
</tr>
<tr>
<td>Accord Healthcare (k) Ltd</td>
<td>11</td>
<td>Lifeken Limited</td>
<td>1</td>
</tr>
<tr>
<td>Glaxosmithkline Ltd</td>
<td>9</td>
<td>Madawa Pharmaceuticals Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Novo Nordisk Kenya Limited</td>
<td>9</td>
<td>Phillips Healthcare Services Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Pan Pharmaceuticals Ltd</td>
<td>9</td>
<td>Serenus Biotherapeutics Kenya</td>
<td>1</td>
</tr>
<tr>
<td>Highchem Marketing Ltd</td>
<td>7</td>
<td>Simba Pharmaceuticals Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Population Services Kenya</td>
<td>7</td>
<td>Tata Africa Holdings (k) Ltd</td>
<td>1</td>
</tr>
<tr>
<td>Elys Chemical Industries Ltd - Enterprise</td>
<td>6</td>
<td>TOTAL NUMBER</td>
<td>1091</td>
</tr>
</tbody>
</table>

Source: Pharmacy and Poisons Board Kenya (2017)
3.3.2.2 Sampling Technique
This study employed a stratified random technique, According to Saunders, Lewis and Thornhill (2015), Stratified sampling is a probability sampling technique wherein the researcher divides the entire population into different categories or strata, and the final sample is randomly selected proportionately.

In this study, companies were categorized according to the number of PSRs under their employment. The lowest category had companies that employed 1 to 10 PSRs and the highest category had companies that employed 121 to 130 PSRs. Samples were drawn proportionately in each category, the lowest category (1 to 10 PSRs) contributed one sampling unit per company whereas the highest category (121 to 130) contributed 13 sampling units per company.

3.3.3.3 Sample Size
The required sample size depends on a number of issues including power, alpha level, number of predictors and expected effect size (Tabachnick & Fidell, 2013). Tabachnick and Fidell (2013) further suggests formulas for determining sample size as \( n > 50 + 8m \) for testing multiple correlations and \( n > 104 + m \) for testing individual predictors.

Where
\[
\begin{align*}
n &= \text{Minimum sample size} \\
m &= \text{Number of independent variables},
\end{align*}
\]

An alpha level of 0.5 and a beta level 0.2 is assumed in the formula (Tabachnick & Fidell, 2013). An interest in testing both overall and individual correlation will warrant choosing a figure that is higher when both formulas are applied.

The five elements of the CEAI constitute the independent variables. As such applying Tabachnick and Fidell (2013) formula 104 + 5 we obtained a sample size of 109 participants as the minimum sample size required for this study.
### Table 3.2: Sampling Size Distribution

<table>
<thead>
<tr>
<th>Categories by number of PSRs</th>
<th>No of Companies in the category</th>
<th>Sampling Unit/s per company</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10</td>
<td>37</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>11 to 20</td>
<td>10</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>21 to 30</td>
<td>6</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>31 to 40</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>41 to 50</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>51 to 60</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>61 to 70</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>71 to 80</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>81 to 90</td>
<td>2</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>91 to 100</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>101 to 110</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>111 to 120</td>
<td>1</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>121 to 130</td>
<td>1</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>63</strong></td>
<td><strong>145</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 3.4 Data Collection Methods

Despite the existence of various methods of data collection, a structured questionnaire was found to be most appropriate for this research. A questionnaire is a data collection instrument consisting of a series of questions and other prompts for the purpose of gathering information (Saunders, Lewis, & Thornhill, 2015). There are three basic types of questionnaires; closed ended, open-ended or a combination of both (Dawson, 2002). Closed-ended type questionnaire is used in quantitative research whereas open-ended type questionnaires are used in qualitative research (Dawson, 2002).

The design of the questionnaire was premised on the objectives of the study hence it encapsulated the two scales as previously discussed. Section one of the questionnaire is an adaptation of Kuratko, Hornsby and Covin (2014) Corporate Entrepreneurship Assessment Instrument (CEAI), while section two is an adaption of Bolton and Lane (2012) intrapreneurship orientation scale. To ensure comparability of results and to avoid time and resource wastage on scale development procedures it becomes imperative to utilize already existing scales (Keller, 2015).
3.4.1 Corporate Entrepreneurship Assessment Instrument
The Corporate Entrepreneurship Assessment Instrument (CEAI) is an instrument that attempts to measure the effectiveness of the key internal organizational factors, or climate, that influence Intrapreneurship (Kuratko, Hornsby, & Covin, 2014). The CEAI considers the five influential dimensions as explained by Hornsby J., Kuratko, Holt and Wales (2013), these are management support, work discretion, rewards and reinforcement, time availability and organizational boundaries. The structural and convergent validity of the CEAI has been checked in several previous studies (Armesh, Wei, & Marthandan, 2014; Chigamba, Rungani, & Mudenda, 2014; Delić, Alibegović, & Mešanović, 2016).

3.4.2 Assessing Intrapreneurial Orientation
The instrument that was used in assessing individual PSRs Intrapreneurial orientation is an adaptation of Bolton & Lane (2012). The instrument considers three dimensions of entrepreneurial orientation innovativeness, risk taking, and pro-activeness. Intrapreneurship orientation is taken as a unidimensional construct that considers the sum aggregate of the mentioned dimensions.

3.5 Research Procedure
According Kothari & Garg (2014) data collection is the precise, systematic gathering of information relevant to the research sub-problems, using methods such as interviews, focus group discussion, participant observations, narratives, questionnaires, and case histories. Data was gathered by distributing hard copies of the questionnaires to respondents who had been identified as part of the study population.

Pilot distribution of questionnaires was initially done to 10 respondents to establish the accuracy and appropriateness of the research design and instrumentation. Adjustments was done on the framing of the questions touching mainly on the semantics after piloting. The questionnaires were then distributed to all the respondents, the respondents were given ample time to fill. Research assistants with previous experience on data collection techniques were engaged to administer and follow up on the questionnaires. They were then trained on the overall outlook of the, this was important to ensure quality. High response rate outcome was archived in two fold first, the research assistants waited as the questionnaires were filled by the respondents, second, in instances where waiting was
impractical respondents were reminded on phone to fill the questionnaire before they were collected. Out of the 200 questionnaires that were administered 175 questionnaires were received back and subjected to further analysis.

### 3.6 Data Analysis Methods

Correlation analysis was performed to assess the relationship between the internal environment for intrapreneurship and intrapreneurial orientation. Variables that exhibited significant relationship were then subjected to regression analysis.

The aim of regression is to predict a single variable from one or more independent variables. Regression analysis helps in generating equation that describes the relationship between one or more predictor variables and the predicted variable. Multiple regression with many predictor variables is an extension of linear regression with two predictor variables (Tabachnick & Fidell, 2013). The Prediction Y is accomplished by the formulae

\[ Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \cdots + \beta_pX_p \]

Where:

- \( Y \) = Dependent variable
- \( a \) = Constant or intercept
- \( X \) = Independent variables
- \( \beta \) = Coefficient of independent variables

The \( \beta \) coefficient for an independent variable is the measure of how much the dependent variable will change in relation to the relevant independent variable. The description above is accurate provided that the relationships between variables are statistically significant.

In addition an overall regression analysis was applied to test the simultaneous effect of the predictor variables together on the dependent variable (intrapreneurial orientation).

Statistical Package for the Social Sciences (SPSS) was used as a statistical tool to analyze the data collected.

### 3.7 Chapter Summary

This chapter has presented the research methodology that was adopted to conduct this study. Research design, population, and sampling design, data collection methods, research procedures and data analysis methods have been presented. Chapter four will present the results findings of this study.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results and findings of this study, the results are premised on the objectives as articulated in chapter one. The following items are discussed demographic characteristics of the population, descriptive statistics, reliability and consistency tests of the instrument and lastly inferential statistics.

The questionnaires were sent out to a total sampling frame of 200 respondents. All the 200 questionnaires were attempted, 25 questionnaires were excluded due to unsatisfactory completion. Therefore, only 175 questionnaires were eligible for further data analysis, this represents 87.5 Percent.

4.2 Demographic Information

In this section, the study presents the general information of the respondents. The general information captured includes issues such gender, education level, number of years worked in the organization.

4.2.1 Gender Distribution of the Respondents.

The purpose of this question was to find out the gender distribution of the various respondents in the Kenya pharmaceutical industry. The results of the findings are presented in the Figure 4.1 below. The results showed that 53.7% of the respondents were female and 46.3% of respondents were male.

Figure 4.1: Gender Distribution of the Respondents.
4.2.2 Level Education of the Respondents.
The minimum requirement set by PPB Kenya for employment as a PSR in Kenya is a diploma in any Pharmacology based science. Categories of professionals currently working as PSRs include diploma and degree holders in the following fields; clinical medicine, biological sciences, pharmaceutical sciences, and laboratory technology. The purpose of this question was to establish the level of education attainment by Kenyan PSRs (Pharmacy and Poisons Board, Kenya, 2017). Results of the findings are presented in Figure 4.2. 70% of the PSRs are undergraduate degree holders, 15% have diplomas, and 13% have postgraduate qualifications.

Figure 4.2: Level of Education for PSRs in Kenya.

4.2.3 Number of Years Worked at Present Organization
This question sought to examine the number of years PSRs had worked at their current organizations. Results of the findings are presented in table 4.3. 72% of the PSRs have worked with their current employers for less than 5 years, only 3% have worked with their current employers for more than 15 years.
4.3 The Influence of Management Support on Intrapreneurship Orientation.

The first objective of the research project was to determine the influence of management support on intrapreneurial orientation. From the data collection instrument (CEAI), questions 1 to 19 (see Appendix III) was used to interrogate the influence. The maximum score was 5 (strongly agree) and the minimum was 1 (strongly disagree), an aggregate of the scores for mentioned questions was obtained to find a measure of management support.

4.3.1 Descriptive Statistics Management Support

Table 4.1: Descriptive Statistics; Management Support

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Support</td>
<td>175</td>
<td>3.16</td>
<td>1.16</td>
<td>4.32</td>
<td>3.3551</td>
<td>.57550</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>175</td>
<td>3.16</td>
<td>1.16</td>
<td>4.32</td>
<td>3.3551</td>
<td>.57550</td>
</tr>
</tbody>
</table>
4.3.2 Results of Correlation Analysis Management Support as an antecedent to Intrapreneurship Orientation.

Table 4.2 Pearson Correlation; Management Support and Intrapreneurship Orientation

<table>
<thead>
<tr>
<th></th>
<th>Management Support</th>
<th>Intrapreneurship Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1.00</td>
<td>0.428**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.428**</td>
<td>1.00</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>175.00</td>
<td>175.00</td>
</tr>
</tbody>
</table>

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

A Pearson product-moment correlation was run to determine the relationship between management support and intrapreneurship orientation. There was a positive correlation between the two variables, which was statistically significant (r = .428, n = 175, p = .001). This necessitated further regression analysis.
4.3.3 Results of Regression Analysis Management Support as an antecedent to Intrapreneurship Orientation.

**Table 4.3: Linear Regression Management Support and Entrepreneurships orientation. Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.428&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.183</td>
<td>.179</td>
<td>.58684</td>
</tr>
</tbody>
</table>

*Predictors: (Constant), Management Support*

R-square is a statistical measure of how close the data are to the fitted regression linear also known as the coefficient of determination (Saunders, Lewis, & Thornhill, 2015). From the model summary we note that 18.3% of the variance in intrapreneurship orientation can be predicted from management support variable.

**Table 4.4: Anova Table: Management Support and Entrepreneurships orientation. ANOVA<sup>a</sup>**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>13.369</td>
<td>1</td>
<td>13.369</td>
<td>38.819</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>59.578</td>
<td>173</td>
<td>.344</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>72.946</td>
<td>174</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Predictors: (Constant), Management Support*

From the Anova table 4.4 a significant value of .0000 was obtained this is less than the 0.05 alpha value hence the model is significant.
Table 4.5: Regression Coefficient; Management Support and Intrapreneurial orientation

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.188</td>
<td>.263</td>
<td>8.316</td>
</tr>
<tr>
<td></td>
<td>Management Support</td>
<td>.482</td>
<td>.077</td>
<td>.428</td>
</tr>
</tbody>
</table>

From table 4.5, an equation and scatter plot connoting the relationship between management support and intrapreneurship orientation was derived as shown below.

**Intrapreneurship Orientation = 2.19 + 0.48 Management Support**

*Figure 4.5: Scatter Plot; Management Support and Intrapreneurship Orientation. Source Author*
4.4 The Influence of Work Discretion on Intrapreneurship Orientation.

The second objective of the research project was to determine the influence work discretion on intrapreneurial orientation. From the data collection instrument (CEAI), questions, 20 to 29 (see Appendix III) was used to interrogate the influence. The maximum score was 5 (strongly agree) and the minimum was 1 (strongly disagree), an aggregate of the scores for mentioned questions was obtained to find a measure of work discretion.

4.4.1 Descriptive Statistics Work Discretion

*Table 4.6: Descriptive Statistics; Work Discretion.*

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Discretion</td>
<td>175</td>
<td>3.10</td>
<td>1.50</td>
<td>4.60</td>
<td>3.2874</td>
<td>.64718</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 4.6: Histogram Work Discretion*
4.4.2 Results of Correlation Analysis Work Discretion as an antecedent to Intrapreneurship Orientation.

Table 4.7: Pearson Correlation; work discretion and Intrapreneurship Orientation.

<table>
<thead>
<tr>
<th>Work Discretion</th>
<th>Work Discretion Pearson Correlation</th>
<th>Intrapreneurship Orientation Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.165*</td>
<td>0.165*</td>
</tr>
<tr>
<td>N</td>
<td>175</td>
<td>175</td>
</tr>
</tbody>
</table>

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

A Pearson product-moment correlation was run to determine the relationship between work discretion and intrapreneurship orientation. There was a moderate positive correlation between the two variables, which was statistically significant (r = .165, n = 175, p = .005). This necessitated further regression analysis.

4.4.3 Results of Regression Analysis Work Discretion as an antecedent to Intrapreneurship Orientation.

Table 4.8: Linear Regression model of Work Discretion and Intrapreneurship orientation.

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Work Discretion</td>
</tr>
</tbody>
</table>

The R square value is .027 from the model summary, we note that 2.7% of the variance in Intrapreneurship orientation can be predicted from work discretion variable
Table 4.9: Anova Table Work Discretion and Intrapreneurship orientation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>1.985</td>
<td>1</td>
<td>1.985</td>
<td>4.840</td>
<td>.029b</td>
</tr>
<tr>
<td>Residual</td>
<td>70.961</td>
<td>173</td>
<td>.410</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72.946</td>
<td>174</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intrapreneurship Orientation  
b. Predictors: (Constant), Work Discretion

From the Anova table a significant value of 0.029 was obtained this is less than the 0.05 alpha value hence the model is significant.

Table 4.10: Regression Coefficient: Work Discretion and Intrapreneurial orientation.

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Work Discretion</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intrapreneurship Orientation

From table 4.10 an equation and scatter plot connoting the relationship between work discretion and intrapreneurship orientation was derived as shown below

**Intrapreneurship Orientation = 3.261 + 0.165 Work discretion**
4.5 The Influence of Rewards and Reinforcements on Intrapreneurship Orientation.

The third objective of the research project was to determine the influence rewards and reinforcements on intrapreneurial orientation. From the data collection instrument (CEAI), questions, 30 to 35 (see appendix) was used to interrogate the influence. The maximum score was 5 (strongly agree) and the minimum was 1 (strongly disagree), an aggregate of the scores for mentioned questions was obtained to find a measure of rewards/reinforcements.

4.5.1 Descriptive Statistics Rewards/Reinforcement

Table 4.11: Descriptive statistics Rewards/Reinforcements

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rewards</td>
<td>175</td>
<td>3.50</td>
<td>1.50</td>
<td>5.00</td>
<td>3.571</td>
<td>.79891</td>
</tr>
<tr>
<td>Reinforcements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.5.2 Results of Correlation Analysis Rewards and Reinforcements as an antecedent to Intrapreneurship Orientation.

Table 4.12: Pearson Correlation; rewards/reinforcements and Intrapreneurship Orientation.

<table>
<thead>
<tr>
<th></th>
<th>Rewards Reinforcement</th>
<th>Intrapreneurship Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rewards Reinforcements</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.435**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>175</td>
</tr>
<tr>
<td>Intrapreneurship</td>
<td>Pearson Correlation</td>
<td>.435**</td>
</tr>
<tr>
<td>Orientation</td>
<td>Sig. (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>175</td>
</tr>
</tbody>
</table>

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

A Pearson product-moment correlation was run to determine the influence of Rewards and Reinforcements on intrapreneurship orientation. There was a positive correlation between the two variables, which was statistically significant ($r = .435$, $n = 175$, $p = .001$). This necessitated further regression analysis.
4.5.3 Results of Regression Analysis Rewards and Reinforcements as an antecedent to Intrapreneurship Orientation.

*Table 4.13: Linear Regression model for Rewards and Reinforcements and Entrepreneurship orientation.*

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.435&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.189</td>
<td>.185</td>
<td>.58467</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), Rewards Reinforcements

The R square value is 0.189 from the model summary, we note that 18.9% of the variance in intrapreneurship orientation can be predicted from Rewards/reinforcements variable.

*Table 4.14: Anova Table; Rewards / Reinforcements and Intrapreneurship orientation, ANOVA<sup>a</sup>*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.809</td>
<td>1</td>
<td>13.809</td>
<td>40.395</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>173</td>
<td>.342</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>174</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Intrapreneurship Orientation
<sup>b</sup> Predictors: (Constant), Rewards Reinforcements

From the Anova table, a significant value of 0.000 was obtained this is less than the 0.05 alpha value hence the model is significant.
### Table 4.15: Regression Coefficient; Rewards/Reinforcements and Intrapreneurial orientation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.545</td>
<td>.203</td>
<td></td>
<td>12.534</td>
</tr>
<tr>
<td>Rewards Reinforcements</td>
<td>.353</td>
<td>.055</td>
<td>.435</td>
<td>6.356</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intrapreneurship Orientation

From table 4.15, an equation and scatter plot connoting the relationship between rewards/reinforcements and intrapreneurship orientation was derived as shown below

The equation: \( \text{Intrapreneurship Orientation} = 2.54 + 0.35 \times \text{Rewards/Reinforcements} \)

#### Figure 4.9: Scatter Plot; Rewards/Reinforcements and Intrapreneurship Orientation.

4.6 The Influence of Time Availability on Intrapreneurship Orientation.

The fourth objective of the research project was to determine the influence time availability on intrapreneurial orientation. From the data collection instrument, (CEAI), questions, 36 to 41 (see Appendix III) was used to interrogate this influence. The maximum score was 5
(strongly agree) and the minimum was 1 (strongly disagree), an aggregate of the scores for mentioned questions was obtained to find a measure of time availability.

4.6.1 Descriptive Statistics Time Availability

**Table 4.16: Descriptive Statistics Rewards/Reinforcement**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Availability</td>
<td>175</td>
<td>2.53</td>
<td>1.67</td>
<td>4.20</td>
<td>3.0078</td>
<td>.49105</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.10: Histogram Time Availability**

4.6.2 Results of Correlation Analysis Time Availability as an antecedent to Intrapreneurship Orientation.
**Table 4.17: Pearson Correlation; Time Availability and Intrapreneurship Orientation.**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Time Availability</th>
<th>Intrapreneurship Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Availability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.054</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.476</td>
</tr>
<tr>
<td>N</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td><strong>Intrapreneurship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.054</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.476</td>
</tr>
<tr>
<td>N</td>
<td>175</td>
<td>175</td>
</tr>
</tbody>
</table>

A Pearson product-moment correlation was run to determine the influence of Time Availability on intrapreneurship orientation. There was a slight positive correlation between the two variables, which was insignificant ($r = .054$, $n = 175$, $p = .005$). This necessitated further no regression analysis.

4.7 The Influence of Organizational Boundaries on Intrapreneurship Orientation.

The fifth and final objective of the research project was to determine the influence organizational boundaries on intrapreneurial orientation. From the data collection instrument (CEAI), questions, 42 to 48 (see appendix) was used to interrogate the influence. The maximum score was 5 (strongly agree) and the minimum was 1 (strongly disagree), an aggregate of the scores for mentioned questions was obtained to find a measure of organizational boundaries.
### 4.7.1 Descriptive Statistics Organizational Boundaries

*Table 4.18: Descriptive Statistics Organizational Boundaries*

#### Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Boundaries</td>
<td>175</td>
<td>2.57</td>
<td>1.43</td>
<td>4.00</td>
<td>2.555</td>
<td>.54441</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 4.11: Histogram Organizational Boundaries*
4.7.2 Results of Correlation Analysis Organizational Boundaries as an antecedent to Intrapreneurship Orientation.

Table 4.19: Correlation Analysis; Organizational Boundaries and Intrapreneurship Orientation.

<table>
<thead>
<tr>
<th>Organizational Boundaries</th>
<th>Intrapreneurship Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>175</td>
</tr>
</tbody>
</table>

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

A Pearson product-moment correlation was run to determine the influence of Organizational boundaries on intrapreneurship orientation. There was a negative correlation between the two variables, which was statistically significant (r = .471, n = 175, p = .001). This necessitated further regression analysis.

4.7.3 Results of Regression Analysis Organizational Boundaries as an antecedent to Intrapreneurship Orientation.

Table 4.20: Linear Regression model for Organizational Boundaries and Intrapreneurship orientation.

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

The R square value is 0.222 from the model summary, we note that 22.2 % of the variance in intrapreneurship orientation can be predicted from organizational boundaries variable.
Table 4.21: Anova Table; Organizational Boundaries and Intrapreneurship orientation.

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>16.195</td>
<td>1</td>
<td>16.195</td>
<td>49.369</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>56.751</td>
<td>173</td>
<td>.328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72.946</td>
<td>174</td>
<td>.328</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intrapreneurship Orientation

From the Anova table, a significant value of 0.000 was obtained this is less than the 0.05 alpha value hence the model is significant

Table 4.22: Regression Coefficient; Organizational Boundaries and Intrapreneurship orientation

| Coefficientsa |
|---------------|----------------|----------------|-------------|--------|------|
| Model         | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
|               | B              | Std. Error | Beta     |       |      |
| 1 (Constant)  | 5.236          | .208      |          | 25.129 | .000 |
| Organizational Boundaries | -.560         | .080      | -.471    | -7.026 | .000 |

a. Dependent Variable: Intrapreneurship Orientation

From table 4.22, an equation and scatter plot connoting the relationship between organizational boundaries and intrapreneurship orientation was derived as shown below

Intrapreneurship Orientation = 5.24 + 0.56 Organizational Boundaries
4.8 Multiple Regression all the Independent variables

The R square value is 0.331 from the model summary, we note that 33.1% of the variance in intrapreneurship orientation can be predicted from the five independent variables.
Table 4.24: Anova Table Multiple IVs and Intrapreneurship orientation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>24.158</td>
<td>5</td>
<td>4.832</td>
<td>16.736</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>48.789</td>
<td>169</td>
<td>.289</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72.946</td>
<td>174</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intrapreneurship Orientation

b. Predictors: (Constant), Organizational Boundaries, Time Availability, Work Discretion, Rewards Reinforcements, Management Support

From the Anova table a significant value of 0.000 was obtained this is less than the 0.05 alpha value hence the model incorporating all the independent variables is significant.

Table 4.25: Regression Coefficients Multiple IVs and Intrapreneurial orientation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.127</td>
<td>.500</td>
<td></td>
<td>6.252</td>
</tr>
<tr>
<td>Management Support</td>
<td>.246</td>
<td>.087</td>
<td>.219</td>
<td>2.817</td>
</tr>
<tr>
<td>Work Discretion</td>
<td>-.046</td>
<td>.070</td>
<td>-.046</td>
<td>-.658</td>
</tr>
<tr>
<td>Rewards Reinforcements</td>
<td>.185</td>
<td>.062</td>
<td>.229</td>
<td>2.996</td>
</tr>
<tr>
<td>Time Availability</td>
<td>.085</td>
<td>.088</td>
<td>.065</td>
<td>.974</td>
</tr>
<tr>
<td>Organizational Boundaries</td>
<td>-.359</td>
<td>.085</td>
<td>-.301</td>
<td>-4.238</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intrapreneurship Orientation
Multiple Independent variables Model Equation:

\[
\text{Intrapreneurship Orientation} = 3.127 + 0.246 \text{ (Management Support)} - 0.046 \text{ (Work Discretion)} + 0.185 \text{ (Rewards/Reinforcements)} + 0.085 \text{ (Time Availability)} - 0.359 \text{ (Organizational Boundaries)}
\]

4.7 Chapter Summary

This chapter has presented the results and findings of the study. The focus was on correlation and regression analysis between dependent and independent. Having established the findings. In the next chapter we will discuss the findings, give recommendations, and finally conclude.
CHAPTER FIVE

5.0 DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings and results based on the objectives of the study. Studies that contract on corroborate A comparison with are compare to previous research as the literature review as presented in chapter two.

5.2 Summary

The study adopted a bottom-up approach and focused on factors within the organizational control that can stimulate intrapreneurship among employees. Going through literature exploration, organizational factors as identified by Kuratko, Hornsby, and Covin (2014) were visibly domineering. These include management support, work discretion, rewards/reinforcements, time availability and organizational boundaries. The study embraced the factors as independent variables, intrapreneurship orientation was considered as the dependent variable. Therefore the main objective was to establish the effect of each of the organizational factors on the individual intrapreneurial orientation of the employee.

The population of the study consisted of 1091 pharmaceutical sales representatives employed by 63 pharmaceutical companies in Kenya. A stratified sample of 175 sampling units was obtained. The data collection instrument for the study was a self-administered structured questionnaire developed from previous scales that measured the constructs under investigation. Further, this study used statistical methods of correlation and regression to establish the relationship between the dependent and independent variables. Statistical Package for Social Scientist (SPSS) version 24 was used in data analysis.

The first objective was to examine the influence of management support on intrapreneurship orientation of the PSRs, the results corroborated many other previous studies that have found a strong positive relationships between the two variables. The second result established a positive relationship between work discretion and intrapreneurial orientation.

The third results found that rewards and reinforcements had a significant effect on intrapreneurial orientation of PSRs in Kenya. Time availability still remains an elusive
conceptualization in Kenyan organization, as per the fourth objective, the study established that time availability had absolutely no significant effect on PSRs intrapreneurial behavior.

The fifth and last objective was to ascertain the influence of organizational boundaries on intrapreneurship orientation among PSRs in Kenya, unlike the results in all the other objectives, the study established a negative significant relationship between the two variables. This is in contravention of previous studies as we shall discuss in the next section.

5.3 Discussions
The internal environment antecedents to intrapreneurship were motivated by Kuratko et al. (1993) assertion: “in establishing the drive to innovate inside today’s corporations, one approach is to concentrate on developing a climate conducive to corporate entrepreneurs”. Based on Kuratko, Hornsby and Covin (2014) study, the antecedents to intrapreneurship were identified as management support, work discretion, rewards/reinforcements, time availability and organizational boundaries. The discussion will now delve into summary finding on the relationship on each of the variable to intrapreneurship orientation.

5.3.2 Influence of Management Support on Intrapreneurship Orientation
The first objective of the study was to examine the influence of management support on intrapreneurship orientation, the bivariate correlation between management support and intrapreneurship orientation yielded a positive correlation which is significant. Further linear regression of the two constructs proved that management support had a significant effect on intrapreneurship orientation. The positive relationship between management support and intrapreneurship orientation confirms Kuratko, Hornsby, and Covin (2014) theoretical assertion about the influence of management support on intrapreneurship orientation.

The results corroborate a multitude of previous research on the same constructs. Adonisi and Wyk (2012) in as study of South African firms established that management support had a strong relationship with market orientation, flexibility, and job satisfaction among employees. In a study of 477 Slovenian firms Antonic and Hisrich (2004) found a strong
relationship between organizational support and corporate entrepreneurship with a high coefficient of relationship.

This study also supports the model proposed by Bloodgood, Hornsby, Burkemper, and Sarooghi (2015) where by management support is seen as an integral part of system corporate entrepreneurship. In a study carried out in Brazil, Hashimoto and Nassif (2014) interrogated 15 executives from different businesses and they were able to establish the significant role of management support in corporate entrepreneurship. According to Lekmat and Chelliah (2014), management support is the most significant predictor of entrepreneurial behavior, this is in line with this study. The assertion by a study on Tata mills that attributes the success of the intrapreneurial culture in the organization to management support is confirmed by this study (Tripathy, 2006).

Managers take decisions on information about implementation, make the information relevant to them, and provide them the tools necessary to promote consistent implementation. For example, an implementation effort aimed at getting providers to conduct medication reconciliation is effective if all targeted providers follow the specified process during applicable clinical encounters.

It is important to note that within an organizational framework, organizational intricacies can sometimes stem from the attitude towards intrapreneurship and thereby the culture adopted or practiced. Companies with a robust entrepreneurial orientation usually enjoy distinctive competencies and innovative viewpoints; they also have a managerial vision and intrapreneurial organizational culture that aims to achieve the company's objectives through operations.

It becomes evident that managers possess a significant influence over the level of intrapreneurship displayed by their organizations. This influence can be conveyed by means of support for internal intrapreneurial ideas. The Kenyan PSR is growing noticeably more frustrated with his or her manager. The PSRs want their leaders to have their backs and listen to their problems and provide clarity of purpose and company expectations, and to forge a path for the future. They rely most of the time on the immediate supervisors for guidance in the murky field of drug marketing. Competition is overwhelming and therefore
it becomes imperative for the management to support the PSRs ideas as envisioned in the study.

5.3.3 Influence of Work Discretion on Intrapreneurship Orientation

The second objective was to examine the influence of work discretion on intrapreneurship orientation, the study established a positive relationship between work discretion and intrapreneurship among the PSRs in Kenya. The foundational basis for job autonomy, work independence, or work discretion in organizational studies indicates various organizational benefits to the construct. This study confirmed this empirical factual reality among the Kenyan PSRs

According to Caza (2012), an individual's latitude of action is a fundamental element of work, with extensive individual and organizational consequences. This study established a positive relationship between work discretion and intrapreneurship orientation thus corroborating Caza’s (2012 findings.

In an attempt to disentangle the extant gaps among creativity theories while emphasizing the importance of individual-context fit to creativity in work settings, Chang and Chen (2013) re-emphasized the importance of work discretion in organizations, this study is in agreement with this suggestion.

The findings are similar to works of previous scholars in the subject (Adonisi & Wyk, 2012; Ahuja, Chudoba, Kacmar, Mcknight, & George, 2007; Akram, Ali, & Hassaan, 2013; Banumathi & Samudhararajakumar, 2015). The level of is however low compared to that of Armesh, Wei and Marthandan (2014), in a study of Iranian manufacturing companies using the same constructs they found a significant relationship between work independence and entrepreneurship with \( B=0.269, p<0.05 \) and 26% prediction.

Drawing on multiple-source survey data of 179 workers in a Dutch research and consultancy organization, De Jong & Wennekers (2008) established a positive relationship between job autonomy and entrepreneurial behavior this is like the findings of this study despite the geographical and cultural differences between the respondents.
On the contrary to the positive relationship studies so far articulated, this study offers different results compared to a study in Germany on public sector employees by Diefenbach and Meynhardt (2012). They observed an insignificant contribution of work related variables to employee's intrapreneurial behavior. Lekmat and Chelliah (2014) also observed an insignificant relationship between work discretion and intrapreneurship orientation in Thai manufacturing industries.

This result confirm that some latitude to discretion extended to an employee over his or her job engender a sense of responsibility and greater job satisfaction in the employee hence leading increased levels of employee intrapreneurship. Work discretion lets the employee find and develop the way of performing tasks, giving the employee the feeling of having control on how the work is being done. Accordingly, the employees have better work results as they are more involved in what they are doing. Moreover, to help the employee become creative and innovative, he or she needs enough space for that.

Innovative behavior is based on trialing with different alternatives in order to find a new, more accurate solution. Work discretion allows the employees to find new ideas and develop them by implementing them in their own ways. In sum, pursuit of organizational autonomy, pursuit of opportunities, and willingness to face challenges are necessary factors in organizational entrepreneurship.

5.3.3 Influence of Rewards and Reinforcements on Intrapreneurship Orientation

The third objective was to examine the influence of reward/reinforcements on intrapreneurship orientation, the study established a strong influence of rewards and reinforcements to intrapreneurship orientation, the aggregate mean value for rewards, and reinforcement was high. The strength and motivation that governs human behavior is controlled by needs, the ancient Greeks talked about instincts and hedonism. It was Plato’s believe that reasoning was in the head courage in the chest and appetite in the abdomen. Reward management is one of the ways used by organizations for attracting and retaining suitable employees as well as facilitating them to improve their performance (Njanja, Maina, Kibet, & Njagi, 2013).
The Corporate Entrepreneurship Assessment Instrument (CEAI) designed by Kuratko, Hornsby, and Covin (2014), which was employed in the study regards rewards as reinforcements as a strong antecedent to intrapreneurship, this assertion was confirmed in the study. The findings are quite consistent with other previous findings. The probable inference from the findings is that, in order to increase individual’s entrepreneurial inclination, that involves innovation, risk-taking and proactivity, organizations should offer decent and timely rewards.

In earlier study by Hornsby, Kuratko and Zahra, (2002) regarded rewards and reinforcement are imperative for any organization that expects an entrepreneurial attitude from employees. The study confirmed the common anecdotal assertion about the effect of rewards and reinforcements on employees’ intrapreneurial orientation.

The finding is in tandem with that of Hornsby, Kuratko, and Zahra (2002) study. But in contrast to that of Alprakan, Bulut, Gunday, Ulusoy, and Kilic (2010) study, Alprakan et al study found that reward system and free time had no influence on employee’s entrepreneurial behavior. Management scholars advocate for an effective reward system that propel entrepreneurial activity, the reward system must consider goals, feedback, stress individual responsibility, and results-based incentives (Gohari, Ahmadloo, Boroujeni, & Hosseinipour, 2013; Villiers-Scheepers, 2011).

In general the research supports previous literature suggestions that creative ways of behaving are not likely to surface, even when they are deemed viable, unless personal rewards are perceived as more desirable than old familiar behavioral patterns. Most of the previous empirical research that was reviewed found a positive relationship between rewards/reinforcements and intrapreneurship orientation, the finding in this study enhances this position. Therefore rewards/reinforcements are a necessary invigorator in cultivating intrapreneurship culture in pharmaceutical companies in Kenya.

Rewarding intrapreneurial activities could be achieved by any of following three ways, first would be funding employee education and allowing them to attend entrepreneurial events. The second is to provide supple job descriptions and lastly is offering tangible financial. By nature and definition entrepreneurial undertakings, have unknown outcomes. Organizations should set realistic timelines and reliable performance measures for
entrepreneurial initiatives. Design employee reward systems that accommodate failure, tolerate ambiguity, and keep the focus on long-term outcomes.

5.3.4 Influence of Time Availability on Intrapreneurship Orientation

The fourth objective was to examine the influence of availability of time on intrapreneurship orientation; Availability of time refers to analyzing workloads and ensuring that individual employees or teams in an organization have the passable free time needed to pursue innovation and solve long term challenges (Kuratko, Hornsby, & Covin, 2014). Results from the study show an insignificant contribution of the time availability variable to intrapreneurship orientation. The notion of time has increased in relevance since the advent of capitalism. Time management has become an important factor for organizational distinctiveness and competitive success. A myriad of concepts have been coined in reference to time management, a close inspection of these time concepts shows that they mirror the norms and values of western industrialization, therefore the time concept still remains an elusive conceptualization to African civilization.

The correlation between time availability and intrapreneurship orientation was not significant, further regression analysis was not be undertaken on the variable owing to the insignificant relationship. The insignificant relationship between the time availability and intrapreneurship orientation in this study confirms Hughes and Mustafa (2016) earlier observation in regard to Kenya employees; they observed that in an emerging economic setting like Kenya, slack time for entrepreneurial may be meaningless, Kenyan employees tend to focus on immediate tasks with known outcomes because of cultural preferences.

The finding on time availability is in contradiction of the theoretical basis on which the antecedents were selected, according to Kuratko, Hornsby and Covin (2014), s time availability among managers is a vital resource for generating entrepreneurial initiatives. This study also contradicts the finding of a study on leather industries in Ethiopia that found a high correlation between time and innovation (Kassa, & Raju, 2014).

The findings of this research also contradicts several other studies that have confirmed the usefulness of the time availability as a precursor to organizational entrepreneurship, these include; (Covin & Miles, 1999; Lerner, Zahra, & Kohavi, 2007; Nohria & Gulati, 1996; Oerlemans & Pretorius, 2008).
Time is an abstract and hard issue to comprehend but it is something that every employee understands its significance. As realized in this study, the time concept is overlooked and the fundamental basics have been forgotten. Time is the most important resource for organizations.

5.3.5 Influence of Organizational Boundaries on Intrapreneurship Orientation

The fifth and last objective of the study was to examine the influence of organizational boundaries to intrapreneurship orientation. Kuratko, Hornsby, and Covin (2014) describe organizational boundaries as the extent to which one perceives there are flexible organizational boundaries are useful in promoting entrepreneurial activity because they enhance the flow of information between the external environment and the organization, as well as between departments/divisions within the organization. Contrary to the theoretical description, the study found a negative relationship between organizational boundaries and intrapreneurship orientation. According to Lamont and Molnár (2012), Organizational boundaries represent a major strategic variable.

Jack Welch the then CEO of GE, 25 years ago championed the concept of boundaryless organization. Welch was convinced that the speed of globalization and technological innovation in the 21st century required organizations to work in different ways, including diminutive decision cycles, more employee engagement, and stronger departmental collaborations (Bower, 1993). In building “boundaryless organization”, Welch initiated what became known as the GE Work-Out process; a series of structured and facilitated forums, bringing people together across levels, functions, and geographies to solve problems and make decisions in real time. Despite this conceptualization by Welch, the current study found that a collaboration between different functions would have a negative influence on PSRs intrapreneurship behavior.

Lakhani, Lifshitz – Assaf, and Tushman (2013) interrogated the relationship between a firm’s boundaries, its organizational design and its ability innovate the study established a positive relationship between the variables. The finding of this research is contradictory to Lakhani’s et al position.
According to Miller, Fern and Cardinal (2007) several studies reveal that flexible organizational boundaries facilitate innovation and entrepreneurial processes. Chen and Cangahuala (2010) established that fluidity of organizational boundaries had the highest influence on innovation compared to other organizational characteristics. Veenker, Peter Der Sijde, During and Nijhof (2008), study, focused on the relationship between the organizational characteristics and corporate entrepreneurship in Dutch organization, the study established a positive relationship between organizational boundaries and corporate entrepreneurship.

Cross departmental communication among PSRs and other departments may be limited thereby contributing to the negative relationship for this variable to intrapreneurship orientation. The only other similar finding is from Burgers and Jansen (2008) study, they observed a strong a negative effect of cross-functional mechanisms on corporate entrepreneurship. The PSRs in Kenya tend to relay all market information to their immediate supervisors thereby negating the need for interdepartmental discourse at their level.

Acknowledging the fact that organizational life is a composite of many influences. Among these are its many divisions, sections, departments, professions and groups. The presence of these constituent parts of an organization directs attention to the points at which they connect to each other. It is our suggestion that the notion of boundary may be extended to explore their sensate surfaces that contain primitive, pre-verbal, pre-symbolic, and pre-subjective characteristics.

5.4 Conclusions
The 21st business environment is replete with a wide range of challenges, the creation of a productive, innovative and customer focused workplace being paramount. Organizations both in private and public sector have realized that intrapreneurship at every corner of their operation is required and on a continuous basis. The ginormous challenge of management scholars is to pinpoint an organizational architecture and climate that predisposes it to intrapreneurial attitude.
This study sought to discern and correlate organizational antecedents to intrapreneurship orientation. The findings of this study demonstrate that organizational climate has strong direct effect on intrapreneurship orientation of the employees. Organizations should strive to augment on variables of management support, rewards reinforcements, and work discretion since these have a direct positive correlation with employee’s intrapreneurship orientation

5.4.1 Conclusion on Management Support as Antecedent of Intrapreneurship.
Management support has significant influence on organizational outcomes. The top management team directs the organization, making their actions of significance importance. Therefore intrapreneurship is a definite antecedent of management support as this study was able to confirm. Strategic focus on intrapreneurship needs to be drafted, understood, embraced, and encouraged by management within the organization through appropriate role modelling, risk taking and sponsorship of ideas raised from within the organization.

5.4.2 Conclusion on Work Discretion as Antecedent of Intrapreneurship
Among other variables the study potted that the role of work discretion is an important aspect in employees’ intrapreneurship. The requisite freedom related with their work will enhance organizational intrapreneurship. The participation of employees in decision-making and problem solving related with their job may help to improve their work commitment. The management of any organization should design the work in such a manner that employees can have scope for work discretion.

5.4.3 Conclusion on Rewards / Reinforcements as Antecedent of Intrapreneurship
Rewards and Reinforcements resonances the importance of incentive systems and appreciation for employees. As this factor requires a certain degree of employee answerability in terms of target achievement and gains earned from developing innovations. It’s important for management to come up with reward schemes that with take care of both intrinsic and extrinsic motivation without a compromise on profitability of the organization.
5.4.4 Conclusion on Time Availability as Antecedent of Intrapreneurship

According to Hisrich and Antoncic (2003), time cannot be stored, hired, rented, or bought, and yet it is critical during all the stages of organizational growth. Time should be perceived as a resource to be used for innovative purposes. Kenyan organizations should ensure that workload allows time for innovation, avoids deadlines, and facilitates being able to work in a team while focusing on long-term organizational goals. To the Kenyan PSRs the concept of time is still blurred and not well understood, it’s the requirement of management to train employees on time management aspects.

5.4.5 Conclusion on Organizational Boundaries as an Antecedent of Intrapreneurship

The ultimate objective of organization design is to create a unified and integrated system that consistently produces results greater than the sum of its individual parts. Compared to three decades ago, communications technologies have dramatically improved, and employees have instantaneous access to massive amounts of information. Welch’s “boundaryless organization” concept has ostensibly became the de facto reality for most companies.

However, the negative result in the relationship between organizational boundaries and intrapreneurship may be attributed to the cultural organizational realities in Kenya (Hughes & Mustafa, 2016). Employees are obliged to directly report all ideas to their immediate supervisors. Top management may be right in breaking down the boundaries that make organizations rigid and unresponsive, but they are wrong if they think that doing so eliminates the need for boundaries altogether. Indeed, once traditional boundaries of hierarchy, function, and geography disappear, a new set of boundaries becomes relevant. It’s upon the management to find a balance on the kind of boundary fluidity that may be relevant in promoting intrapreneurship behavior amongst the employees.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Recommendation for Management Support

In day to day lingo the term management support has been used so gratuitously to the point it has become meaningless. The research identified management support as a predecessor for intrapreneurial initiatives among employees. However, the systematic identification,
implementation, and control of intrapreneurial initiatives were not examined. It’s inherent upon management to initiate mechanisms to monitor and evaluate intrapreneurial projects so as the "support" is not blind.

5.5.1.2 Recommendation for Work Discretion
It is evident from the results of the survey, that work discretion and independence are not just key job satisfaction characteristics for staff but also improve organizations intrapreneurial culture among employees. Organizations should seek to improve on allowing employees some latitude of decision making without going in hustles of approvals. Organizations should be develop organizational and management skills to support programmes which improve levels of work discretion for employees. As such, pharmaceutical companies should invest in training and development, which enhance autonomy and independence, ensuring staff are properly trained and developed to take on higher responsibility and raising staff levels of technical capacity.

5.5.1.3 Recommendation for Rewards and Reinforcements
Management scholars and practitioners have explored the concept of rewards in regards to stimulating intrapreneurship in organizations. This research reemphasize the broad description of reward and reinforcement as an antecedent to intrapreneurship. Since the reward system defines the terms of mutual exchange connection between a firm and its employees, it is a definite statement of the firm’s values and beliefs. However, most compensation and reward systems are not premeditated in promoting intrapreneurship among employees and, therefore, a firm’s reward system may unintended effects. It is important to identify the types of rewards, incentives, and reinforcement procedures which would be most suitable for stimulating intrapreneurial behavior

5.5.1.4 Recommendation for Time Availability.
Understanding the values and assumptions a culture places the time concept is essential to creating policies that enhance intrapreneurship within organizations. Lewis Mumford an American sociologist, once observed how ‘each culture believes that every other space and time is an approximation to or perversion of the real space and time in which it lives.’ The truth, however, is there is no precise way to think about time. There are different ways of discerning the time variable, each with their merits and demerits, and are all contingent to
particular situations. Kenyan organizations should strive to digest the time variable while benchmarking against the global majors so that the paragons of time construct may be inculcated amongst employees.

5.5.1.5 Recommendation for Organizational Boundaries

Managing the conflicting findings relating to the contribution of organizational boundaries to intrapreneurship lie in the building of organizational ambidexterity; ambidexterity refers to the synchronous endeavor of adaptable fluidity and efficient stability by designing organizational subunits intended to be efficient and innovative. Kenya pharmaceutical organizations are facing an increasing challenge in how they organize and manage within their systems and structures. Owing to the study unit of analysis that encompassed the “foot soldiers”, the relay of market information is delivered to immediate supervisors necessitating no requirement for organizational boundary overlap at their level. Similar undertaking on the immediate supervisors would yield contrary results, of significance is organizational ability to capture client expectations.

It's critical to identify strategies that allow large firms to be entrepreneurial. Not all entrepreneurial efforts may yield immediate benefits. But creating an entrepreneurial environment helps companies create products and services that have significant social value, lead to business growth and wealth creation, and are sources of competitive advantage.
REFERENCES


APPENDICES

Appendix I: Kenya Pharmaceutical Sales, Historical Data and Forecasts

<table>
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<tr>
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<td>Pharmaceutical sales, USDbn</td>
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<td>0.83</td>
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<td>0.98</td>
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<td>Pharmaceutical sales, % of GDP</td>
<td>2015</td>
<td>1.18</td>
<td>1.19</td>
<td>1.21</td>
<td>1.22</td>
<td>1.22</td>
<td>1.22</td>
<td>1.21</td>
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<tr>
<td>Pharmaceutical sales, % of health expenditure</td>
<td>2015</td>
<td>21.5</td>
<td>22.2</td>
<td>22.9</td>
<td>23.7</td>
<td>24.5</td>
<td>25.3</td>
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<tr>
<td>Health spending, USDbn</td>
<td>2015</td>
<td>3.47</td>
<td>3.72</td>
<td>3.99</td>
<td>4.13</td>
<td>4.31</td>
<td>4.54</td>
<td>4.75</td>
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</table>

(BMI Research, 2017)
Appendix II: Communication with Pharmacy and Poisons Board.

July 26, 2017
To Head Pharmacy Practice
Pharmacy and Poisons Board
Nairobi

Dear Sir,

RE: LIST OF REGISTERED MEDICAL REPRESENTATIVES IN KENYA

I am a student at United States International University (USIU). I am undertaking a study on Antecedents of Intrapreneurship in Kenya Pharmaceutical Industry. The study proposes registered medical representatives as interviewees, in this regards I kindly request for the current list of all registered medical representatives and companies the working for.

Thanks in advance

<>

Flumphreys Arunga
+254 777 775 570
biarunga@gmail.com
19 July 2017

To whom it may concern

Dear Sir/Madam,

RESEARCH PROJECT BY HUMPHREYS ARUNGA - STUDENT ID: 635786

The bearer of this letter is a student at United States International University-Africa pursuing Master’s Degree in Business Administration (MBA).

As part of the program, he is required to undertake a research project on “Organizational Antecedents to Entrepreneurship”, which requires him to collect data and information from various relevant institutions.

Kindly assist by enabling him access data, information and contacts to respondents who can complete his questionnaires. I assure you that the information provided will be treated with the utmost confidentiality.

Should you have any queries regarding the student’s research please feel free to contact me on email: uwel@usiu-africa or phone +254 736116414

Yours sincerely,

[Signature]

Prof. George Achieng
Dean, Chandaria School of Business
Dear Mr. Arunga,

We are in receipt of your letter dated 26th July, 2017 and that of Prof George Achoki, Dean, Chandaria School of Business, USIU (dated 19th July, 2017) requesting the current data of licensed pharmaceutical representatives in Kenya for a study titled "Antecedents of Intrepreneurship in the Kenyan Pharmaceutical Industry."

After careful evaluation of your request, permission has been granted that you be provided with the data requested condition that;

1. This is a private data belonging to Pharmacy and Poisons Board that cannot be shared with any other party without written permission from the Board.
2. The data has been provided solely for a study on "Antecedents of Intrepreneurship in the Kenyan Pharmaceutical Industry" as per your request.
3. The data provided is as generated from the online system on the 28th July, 2017 at 1420hrs and particulars can be added or removed depending on the state of their regulatory compliance.

Regards

Dr. Kariuki GACHOKI, B.pharm, Msc (UK)
Head, Pharmacy Practice Division,
Pharmacy and Poisons Board,
Ministry of Health,
P.O. Box 27663-00506, Nairobi, Kenya
Cell: +254-722-341514
Skype: kariuki.gachoki
Appendix III: Introduction Letter to Respondents

Instructions and Disclosure
Thank you for participating in this survey.
The survey consists of three sections and should take no more than ten minutes of your time. Using the scale which follows please indicate how much you agree or disagree with each of the statements by ticking (✓) in the appropriate box. Kindly note that there are no right or wrong answers to these questions so please be as honest and thoughtful as possible in your responses.
Your participation is voluntary and you can withdraw at any time without penalty. All data will be kept confidential. By completing the survey, you indicate that you voluntarily participate in this research.

Humphreys Arunga
USIU
Appendix IV: Questionnaire

SECTION ONE: Demographic Information

1. What is your Gender?

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<td>Male</td>
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<td>Female</td>
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2. What is your highest level of education?

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<tbody>
<tr>
<td>Diploma</td>
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<tr>
<td>Undergraduate Degree</td>
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<td>Postgraduate Degree</td>
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<td>Other (Specify)</td>
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3. Work experience at the present Organization (Years)

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<td>Less than 3 years</td>
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<td>3 to 5 years</td>
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<td>6 to 10 years</td>
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<td>11 to 15 years</td>
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<td>More than 16 years</td>
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SECTION TWO: ORGANIZATIONAL ANTECEDENTS

Management support

1. My organization is quick to use improved work methods.

2. My organization is quick to use improved work methods that are developed by workers.

3. In my organization, developing one’s own ideas is encouraged for the improvement of the corporation.
Upper management is aware and very receptive to my ideas and suggestions.

A promotion usually follows from the development of new and innovative ideas.

Those employees who come up with innovative ideas on their own often receive management encouragement.

The "doers on projects" are allowed to make decisions without going through elaborate justification.

Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.

Many top managers have been known for their experience with the innovation process.

Money is often available to get new project ideas off the ground.

Individuals with successful innovative projects receive additional rewards and compensation beyond the standard reward system for their effort.

There are several options within the organization for individuals to get financial support for their ideas or projects.

Individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.

The term "opportunity risk taker" is considered a positive attribute for people in my work area.

This organization supports many small and experimental projects, realizing that some will undoubtedly fail.

An employee with a good idea is often given free time to develop that idea.

There is considerable desire among people in the organization for generating new ideas without regard for crossing department or functional boundaries.

People are encouraged to talk to employees in other departments of this organization about ideas for new projects.

**Work discretion**

I feel that I am my own boss and do not have to double check all of my decisions with someone else.

Harsh criticism and punishment result from mistakes made on the job.
This organization provides the chance to be creative and try my own methods of doing the job.

This organization provides the freedom to use my own judgement.

This organization provides the chance to do something that makes use of my abilities

I have the freedom to decide what I do on my job.

It is basically my own responsibility to decide how my job gets done.

I seldom have to follow the same work methods or steps for doing my major tasks from day to day.

**Rewards/Reinforcement**

My manager helps me get my work done by removing obstacles and roadblocks.

The rewards I receive are dependent upon my innovation on the job.

My supervisor will increase my job responsibilities if I am performing well in my job.

My supervisor will give me special recognition if my work performance is especially good.

My manager would tell his/her boss if my work was outstanding.

There is a lot of challenge in my job.

**Time availability**

During the past three months, my workload kept me from spending time on developing new Ideas.

I always seem to have plenty of time to get everything done.

I have just the right amount of time and workload to do everything well.

My job is structured so that I have very little time to think about wider organizational problems.

I feel that I am always working with time constraints on my job.

My co-workers and I always find time for long-term problem solving.

**Organizational boundaries**

In the past three months, I have always followed standard operating procedures or practices to do my major tasks.

There are many written rules and procedures that exist for doing my major tasks.
On my job I have no doubt of what is expected of me.
There is little uncertainty in my job.
During the past year, my immediate supervisor discussed my work performance with me frequently.
My job description clearly specifies the standards of performance on which my job is evaluated.
I clearly know what level of work performance is expected from me in terms of amount, quality, and timelines of output.

SECTION THREE: INTRAPRENEURIAL ORIENTATION

Risk Taking

1. I like to take bold action by venturing into the unknown
2. I am willing to invest a lot of time and/or money on something that might yield a high return
3. I tend to act “boldly” in situations where risk is involved

Innovativeness

4. I often like to try new and unusual activities that are not typical but not necessarily risky
5. In general, I prefer a strong emphasis in work on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before
6. I prefer to try my own unique way when learning new things rather than doing it like everyone else does
7. I favor experimentation and original approaches to problem solving rather than using methods others generally use for solving their problem

Proactiveness

8. I usually act in anticipation of future problems, needs or changes
9. I tend to plan ahead on projects
10. I prefer to “step-up” and get things going on at work rather than sit and wait for someone else to do it