STRATEGIES FOR MANAGING COMPLEXITY

IN KENYA POWER LIMITED

BY

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DECLARATION

This research project is my original work and has not been submitted for examination to any other University.

Signed ……………………………………… Date ………………………..

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This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

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ABSTRACT

Complexity is one of the modern challenges facing organizations and regarded as one of the leading causes of organizational collapse worldwide. It is driven mainly by technological changes and globalization but more interesting is the fact that it is made worse by organizations themselves especially from the approaches they adopt to deal with it. It is even more surprising that managers and other business leaders seem to be vaguely aware of its existence and those that know of its existence do not know how best to deal with it and usually resort to wishing it away or using models that give simplistic solutions that cannot be applied in a turbulent and complex operating environment. Complexity is therefore a unique problem since it is difficult to understand and manage. However the solution lies with strategy which is like a rudder that can guide companies in the seas of complexity that they exist in. Complexity brings forth chaos and confusion, Strategy on the other hand provides vision and direction. The study begins with a discussion on the concept of complexity with emphasis on its drivers and also looks at the setting of the study which is Kenya Power and Lighting Company. The study highlights the problem of complexity which is a blind spot in most business leaders in that they do not know it exists, and those that know do not know the right strategies to apply to manage it. This research therefore aims at identifying strategies for making organizations simpler and more effective in the wake of a complex operating environment. And to arrive at this, it starts by demystifying the concept of complexity, understanding the drivers to complexity, establishing the different kinds of complexity and finally developing strategies for managing the various kinds of complexity.

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LIST OF ABBREVIATIONS AND ACRONYMS

CEO	-	Chief Executive Officer
DCS	-	Design & Construction System
EAP&L	-	East African Power and Lighting Company
EAPP	-	East African Power Pool
GDC	-	Geothermal Development Company
ICS	-	Integrated Customer Service System
IPP's	-	Independent Power Producers
KenGen	-	Kenya Electricity Generating Company
KETRACO	-	Kenya Electricity Transmission Company
KNEB	-	Kenya Nuclear Electricity Board
KPLC	-	Kenya Power and Lighting Company
IMS	-	Incident Management System
MW	-	Megawatts
REA	-	Rural Electrification Authority
SAP	-	System Application Programme
SHE	-	Safety, Health and Environment

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

This research focuses on strategies for managing complexity in Kenya power and was born out of the desire for making organizations simpler and more effective. Almost all firms are struggling with complexity today because the environment they operate in is increasingly complex and uncertain due to the fact that it is dynamic, hostile, diverse, technologically complex and competitive (Dooley, 2002). The world as a whole has become more complex over the past decades courtesy of external forces like globalization and technological advancements which have opened up new markets and brought new competitors. More so, there has been a rise in the number of stakeholders and companies must now answer to customers, shareholders, employees, government, and creditors among others which tend to be a delicate balancing act for most of them. Despite much complexity being attributed to external factors, perhaps an equal amount is internally generated by companies themselves (Ashkenas, 2007). This is caused by the way they structure their organizations, design products and services, construct business processes, and manage people. Jagersma (2008) argues that complexity is a by-product of managers' daily decisions - decisions which are influenced by many factors rooted in a company's internal and external environment.

The interplay of these forces has been seen over the years in the energy sector. Technological advancements have been on the rise. Most recently has been the introduction of smart metering which allows customers to be reading their own meters.

Others include development of underground cabling for electricity and generation of wind power. Globalization has widened the spectrum for the energy sector and as a result, there has been a lot of interaction with the rest of the world especially on matters petroleum production and collaboration of various countries in generation and distribution of power like the case of East African Power Pool (EAPP). Most recently, there has been the push by the current government for the energy sector to generate 5,000 megawatts of power by 2017 which will be a possible hotspot for complexity in the sector. Internal forces of complexity have also been at play in the sector mainly through restructuring exercises like the split of Kenya Electricity Generating Company (KenGen). 1997 from KPLC, introduction of new players into the industry like Rural Electrification Authority (REA) in 2007, Kenya Electricity Transmission Company (KETRACO) in 2008, Geothermal Development Company (GDC) in 2008 and the Kenya Nuclear Electricity Board in 2010. The new government however has proposed new changes in the sector which will include merging of these entities. Such changes that come with changes in regimes highlight the problem of complexity in the industry and the companies in question.

The biggest challenge for leading business thinkers has always been deciding which strategies to apply in the different scenarios that complexity presents. According to Schwandt (2009), determining what kind of response is appropriate when organizations are faced with growing environmental complexity is one of the central questions in practice and science. For years there has been a general consensus among scholars that organizations develop strategies to enable them adapt to their environment. Meaning, if a business wishes to succeed it must adjust to the complexity of its external business environment. It is therefore essential to understand complexity and its intrinsic characteristics as a prerequisite for sound strategy development to mitigate the challenges it brings forth.

1.1.1 The concept of Complexity

The term "complexity" is derived from the Latin term “complexus” which means interweaved, networked and connected. It originated from the field of natural sciences (Robertson, 2004). The theoretical framework of complexity revolves around systems theory, chaos theory and complexity theory that have all tried to explain the concept of complexity. According to Basu (2012), business complexity is the condition of having several interdependent and interconnected stakeholders, information technology systems and organizational structures. All these have a stake in management decisions and hence making it a tasking affair to meet the needs of all. However there are various other complexities depending with the context. These include: detail and dynamic complexity (Senge, 1990); institutional and individual complexity (Birkinshaw & Heywood 2010); external and Internal Complexity (Dooley 2002).

Complexity comes with various implications which affect organizations in various scopes ranging from decision making to operational efficiency, financial health as well as the survival of the organization. As can be seen, the challenges complexity presents are complex and intertwined between internal and external effects. Complexity however is not entirely bad for companies—it brings opportunities as well as challenges. The problem is the way companies attempt to respond to it. A lot has been done to help companies navigate complexity. Various analytical tools have been developed to help arrest the situation. Strategic planning was introduce to help firms “expect the unexpected” Environmental analyses were developed to help scan the environment and try to manage the dynamics that it presents. However, despite all this, the challenges keep coming and they get more and more complex.

1.1.2 The concept of Strategy

Strategy generally involves setting goals, determining actions to achieve the goals, and mobilizing resources to execute the actions. Mintzberg (1987) defined strategy using the 5P’s; plan, ploy, pattern, position and perspective which highlighted the different definitions of strategy. McKeown (2011) argued that "strategy is about shaping the future" and is the human attempt to get to "desirable ends with available means". Therefore a strategy describes how the ends (goals) will be achieved by the means (resources).

Doolay (2002), Schwandt (2009), Sargut and McGrath (2011), Straub (2013) Hansen (2012) and Ashkenas (2007, 2010) all had a general consensus that strategy is the key to managing complexity. Strategy provides a rational framework that enables companies anticipate, plan for, and adopt strategies that respond to complexity. Hansen (2012) supports this further by arguing that strategy is the antidote to complexity, killer of today's best companies. Satell (2014) highlights that strategy is not just about competitive advantage. He argues that what has changed is that competitive advantage is no longer the sum of all efficiencies, but the sum of all connections. Strategy, therefore, must be focused on deepening and widening networks of information, talent, partners, and consumers. These networks however are the sources of complexity.

According to Satell (2014) legendary strategists have long been compared to master chess players, who know the positions and capabilities of each piece on the board and are capable of thinking several moves ahead. He argues that strategy is no longer a game of chess because the board is no longer set out in orderly lines. Industries have become boundless. Competitive threats and transformative opportunities can come from anywhere. Strategy, therefore, is no longer a punctuated series of moves, but a process of deepening and widening connections. Martin (2013) proposes that there is need to break free of the obsession with planning because strategy is not planning — it is the making of an integrated set of choices that collectively position the firm in its industry so as to create sustainable advantage relative to competition and deliver superior financial returns.

1.1.3 The Energy Sector in Kenya

The Kenyan Energy sector comprises both private, public and government participation. The key players include Kenya Power and Lighting Company (KPLC) which deals with distribution of power in the country and Kenya Electricity Generating Company (KenGen) which handles generation of electricity mainly from hydro and geothermal sources as well as thermal and wind energy. Other players include Rural Electrification Authority (REA) that was incorporated in 2006 to manage rural electrification, Kenya Transmission Company (KETRACO) that was incorporated in 2008 to develop high voltage electricity transmission infrastructure and build electricity transmission lines and associated substations. Geothermal Development Company Limited (GDC) is also another stakeholder in the energy sector engaged in fast tracking the development of geothermal resources in Kenya. The Kenya Nuclear Electricity Board (KNEB) is mandated to consult, inform and engage key stakeholders in the development of nuclear energy in the country. The sector further comprises of the Kenya Pipeline Company which is mandated to provide reliable, safe and cost effective means of transporting petroleum products from Mombasa to the hinterland and lastly Independent Power Producers (IPP's) which are involved with supplying more power to the grid mainly from generators.

Energy is one of the enablers for Kenya Vision 2030. The supply of adequate energy for household and industrial needs has however in the past faced major challenges which include high infrastructure development costs, long lead-time required to implement energy projects, over reliance on hydropower, high cost of energy, inability to deliver adequate energy to meet national needs, and low investments in the sector, among others. In the medium term, the sector plans to inject 1815MW which will be attained through commissioning of additional geothermal power plants (404.2MW), Hydro Plants (78MW), Coal fired plants (360 MW), Medium Speed Diesel Plants (342 MW) and 430.4 MW of wind plants. The sector will also enhance energy efficiency and conservation as well as expand and extend the national grid. The current government of Kenya is working on restructuring the energy sector to enhance efficiency in generation and distribution of power. The target has been set at generating 5,000 MW by 2017.

1.1.4 Kenya Power

Kenya Power is one of the largest organizations in Kenya with a presence in all the major towns in the country. It owns and operates most of the electricity transmission and distribution system in the country and sells electricity to over 2.6 million customers (Kenya Power, 2013). Incorporated in 1922 under the name East African Power and Lighting Company (EAP&L), the company has grown over the years and given rise to most of the other companies in the sector. These include Kenya Electricity Generating Company (KenGen) in 1998, Rural Electrification Authority (REA) in 2007, Kenya Electricity Transmission Company (KETRACO) 2008 and Kenya Nuclear Electricity Board (KNEB) in 2010.

Kenya power has a complex hierarchical structure made up of 12 Divisions headed by chief managers namely Distribution, Commercial Services, HR and Administration, Finance, Regional Operations, Energy Transmission, Logistics and Supply Chain, Information Technology and Telecommunications and Company Secretary Divisions. It also has a further 5 departments that operate like divisions since their managers report directly to the CEO just like the Chief Managers heading the Divisions. These departments include; Security, Corporate Strategy, Communications, Internal Audit, Safety, Health and Environment (SHE) departments.

The Company's key mandate is to plan for sufficient electricity generation and transmission capacity to meet demand; building and maintaining the power distribution and transmission network and retailing of electricity to its customers. Kenya Power with the support of the government continues to invest in enhancing efficiency of the transmission and distribution network through re-conducting of lines, installation of capacitors, and construction of additional feeders and substations. In addition other non-technical improvements are being pursued and these include introduction of electronic meters, improvement of meter reading accuracy, fraud control and resolution of billing anomalies.

1.2 Research Problem

Complexity highlights a serious blind spot in managers today. Reynolds (2013) argues that most CEO's are well aware of the profit killers in their business: price wars, staff bloat, manufacturing cost blow outs and inefficient sales processes. But few address a more subtle but often more dangerous profit attacker – complexity. Denning (2012) wrote that "half a century ago, the life expectancy of a firm in the Fortune 500 was around 75 years. Now it's less than 15 years and declining even further" and executives readily admit that the obstacle preventing their growth is not a shortage of opportunities. The hurdle is complexity, which has been at times referred to as "the silent killer of organizations" (Hansen, 2012). Jargesma (2008) refers to complexity as a hidden cost. Yet despite complexity being widely acknowledged as one of the biggest barriers to success, it is apparent that business leaders are not doing enough about this problem. Instead of developing coherent strategies to remove complexity costs and simplify their businesses, many leaders are treating complexity as an uncontrollable and inevitable cost. To some extent, this is not their fault because it is harder to predict what will happen, since complex systems interact in unexpected ways. It's harder to make sense of things, because the degree of complexity may lie beyond our cognitive limits.

Kenya Power is characteristically a complex organization due to its structure which is hierarchical in nature comprising of 12 divisions, over 30 departments and an even higher number of sections. The size of the company also adds to this situation; with its staff base of over 10,000 out of which 174 are at the executive level. It goes without saying that big companies are complex and it is also obvious that their complexity is a double-edged sword. On one hand, they are complex to enable them do difficult things. On the other hand, companies often find themselves struggling to avoid the negative side-effects of their complex structures (Birkinshaw, 2013). Kenya Power has shown signs of the challenges brought about by complexity ranging from periodic changes from centralization of some functions to decentralization and back to centralization, structural changes over the years with departments being overhauled, moved, done away with then brought back again, role ambiguity where some departments seem to have conflicting roles with others and reporting structure problems among others. These problems tend to arise from strategies managers deploy to counter complexity but in the process create more complexity and when they try to reduce the complexity they created, they create other kinds of complexity. The result is a vicious cycle of complexity.

Complexity is a common challenge facing managers today, yet systematic measurement and empirical testing of this phenomenon is lacking especially in the Kenyan perspective as can be seen by the limited number of research on this field locally. However, there have been a number of studies on complexity from other foreign researchers e.g. Schwandt (2009); Senge, (1990); Holmdahal (2005). This research therefore aims at giving an insight on the concept of complexity management. What is complexity? What are the types of complexity in organizations? What are the drivers for complexity? What strategies can managers employ to manage complexity?

1.3 Research Objectives

The objectives of this study are:

i) To identify sources of complexity in the organization

ii) To establish strategies that managers in Kenya Power utilize to manage complexity.

1.4 Value of the Study

The study is geared at helping managers in Kenya Power create strategies that match the unique conditions they face in their operating environment, to get to the degree of simplicity that is appropriate for their situations so as to make the organization simpler and more effective in the wake of a complex operating environment. The findings will also help them to find out, the drivers and the types of complexity that affect organizations and this will be critical for successful strategy implementation in Kenya Power.

The findings of this study will also be of particular value to a number of players in the various sectors in Kenya notably for academicians and other researchers wishing to carry out further research, it will contribute to the existing literature in the field of complexity management. The study will be a source of reference material for future researchers on other related topics and will also help other academicians who undertake the same topic in their studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Complexity is one of the leading causes of organizational collapse yet managers seem vaguely aware of it and to make matters worse, internal complexity is a creation of managers themselves. As much as the turbulent operating environment creates enough complexity for organizations, managers tend to add to this complexity by their own actions. Ashkenas (2010) argues that Complexity does not happen all on its own. Some of it does, but managers add to it significantly. The accretion is not intentional, not conscious, and not malicious.

This chapter will therefore focus on creating an in depth understanding of complexity starting with the origin and development of complexity theory. Thereafter, focus will shift to the various types of complexity. From these types of complexities, we will be able to determine the drivers behind them. Finally, this study will aim to establish the various strategies for dealing with complexity.

2.2 Organizational complexity

The term "complexity" is a frequently used, abstract and multidimensional term. Schwandt (2009) argues that due to the interdisciplinary investigation of the phenomenon, there is neither a universally accepted definition nor any prevalent opinion about what constitutes complexity. Doolay (2002) defined organizational complexity as the amount of differentiation that exists within different elements constituting the organization. Basu (2012) echoes the same and further suggests that organizations work with a network of stakeholders who include employees, customers, partners, suppliers, regulators, investors, government, media and competitors. All these have a stake in management decisions hence making it a tasking affair to meet all their needs. Larger companies therefore have more stakeholders and this means that they are inherently more complex because decisions involve more stakeholders.

Complexity variables interact and produce unexpected results. Zolli (2012) adds that complexity is a clear and present danger to both firms and the global financial system: it makes both much harder to manage, govern, audit, regulate and support effectively in times of crisis. However, despite the adverse effect of complexity in organizations, many leaders are still treating it as an uncontrollable and inevitable cost (Business Excellence, 2011). Not all complexity is bad for business, but executives don't always know what kind their company has. They should understand what creates complexity for most employees, remove what doesn't add value, and channel the rest to employees who can handle it effectively (Birkinshaw & Heywood, 2010).

2.3 Strategic management

There have been many definitions of strategy from various authorities like Chandler (1962), Porter (1980) and Mintzberg (1996), which still transcend the field of strategy. Some of the most recent definitions of strategy were made by Kvint (2009) who describes it as "a system of finding, formulating, and developing a doctrine that will ensure long-term success if followed faithfully," and more recently, McKeown (2011) who argued that "strategy is about shaping the future" and is the human attempt to get to "desirable ends with available means."

Strategy provides a framework for managing complexity. Complexity creates confusion and disorder and therefore it requires strategy to identify the kind of complexity a company is dealing with and develop appropriate strategies to deal with them. The aim or purpose of strategy is to improve our ability to shape and adapt to unfolding circumstances, so that we can survive on our own terms (Boyd, 2004). The biggest challenge however even for leading business thinkers is deciding which strategies to apply in the different scenarios that complexity presents. Schwandt (2009) further echoes this by arguing that the core dilemma of complexity arises when organizations have to decide whether to respond to growing business environmental complexity by increasing organizational complexity for being successful, or by responding with simplicity.

2.4 Theoretical foundation of complexity

The origins of complexity theory can be traced back to the field of natural sciences. Its application in the business world and social sciences however followed this much later in 1990's. According to Schwandt (2009), complexity science has its historical roots in theories such as cybernetics, catastrophe theory, system theory and many others. His study touched on the key theories that formed the foundation of complexity theory and these are chaos theory and system theory.

Chaos theory is concerned with systems in which the recursive application of nonlinear deterministic functions can give rise to apparent random behavior and subtle patterns. Scientists have described chaos as a complex, unpredictable and orderly disorder in which patterns of behavior unfold in irregular but recognizable forms. The focus of chaos is the web of feedback loops present in every system. In some systems, the feedback loops are linear. In others, they are nonlinear. Businesses, because they are made up of people and are highly complex, are nonlinear feedback systems. It's the perfect way for organizations to run in today's nonlinear world of lightning-fast technology, increased globalization and competition (Vergel, 2010).

Systems theory developed by Laslow and Krippner (1998) described a system as a complex of interacting components together with the relationships among them that permit the identification of a boundary-maintaining entity or process. Systems theory is an interdisciplinary study of systems in general, with the goal of elucidating principles that can be applied to all types of systems at all nesting levels in all fields of research.

According to Kauffman's (1993) network theory, enzymes in living organisms form a dynamic network, which governs their activity. Kauffman was fascinated by the concept of self-organization in soups of simple proteins and enzymes from which life might emerge. All these prior theories gave rise to Complexity Theory which is the study of complex, nonlinear, dynamic systems with feed-back effects. The theory was originally developed in the context of physical and biological sciences and was later applied in context of organizations.

2.5 Drivers of complexity

There are thousands of potential sources of complexity within organizations, so it is impossible to tackle complexity without knowing which types of complexity you should focus on (Business Excellence, 2011). Complexity can originate from external drivers like regulation, competition, economic turbulence and other factors outside the business. Internal factors can also be at play and they include the everyday behaviors of employees and managers, business processes, goals and decisions the board makes in terms of where to focus and how to win in a particular market, how the business is structured, talent management, decision-making, number, design and the structure of the products and services portfolio. Gottfredson and Aspinall (2005) argues further that complexity infects a company's entire value chain and they identified the most common culprits for its spread which included bad economic data, overoptimistic sales expectations, and entrenched managerial assumptions.

External drivers to complexity arise out of the external environment that companies operate in. According to Hansen (2012), it includes shifting trade barriers and technological advances that have provided customers with an abundance of choice – making them hard to please and less willing to accept compromises. Second, there is the growth in the number of stakeholders. Complexity has been found to be internally generated where leaders have made their organizations more complicated. With so many interests to be served, the obvious solution is to devise structures, procedures, and rules to ensure that no issues are left untended. Morieux (2014) argues that in their attempt to respond to the increasingly complex performance requirements they face, company leaders have created an organizational labyrinth that makes it more and more difficult to improve productivity and to pursue innovation.

Ashkenas (2010) observed that there are four sources of complexity in organizations; structural mitosis, product and service proliferation, process evolution and managerial behavior, all of which are generated by managers themselves. Structural mitosis occurs because organizations keep changing especially with changes of managerial regimes. Product and Service Proliferation comes about when companies naturally add to their product and service portfolio so as to get ahead of their competition and delight their customers but each new product or service comes with new challenges. Process evolution arises due to the changes in organizational processes over time. Managerial behavior where managers unwittingly create it, often through well-intended decisions.

2.6 Types of Complexity

Different scholars have categorized complexity in different ways depending with the objectives of their studies. Since complexity is multi-disciplinary and does not have a conventional definition, the types of complexities vary depending with the context. For purposes of this research, the focus shall be on the types of business complexity and not complexity as a whole.

Dooley (2002) defined organizational complexity in term of external and internal environment. He differentiated both the internal environment and external environment in the sense that internal environment consists of the processes and technologies that constitute the core operations of the organization. Processes specify the shape of the flow of information. The external environment which is uncertain includes customers and markets, suppliers and competitors, and institutions. He also asserted that due to the organizational complexity and environmental uncertainty, organizational members faced with overwhelming or complex decisions, omit, tolerate errors, queue, filter, abstract, use multiple channels, escape, and chunk in order to deal effectively with the complexity.

Senge (1990) discussed the distinction between two types of complexity, detail and dynamic complexity. He suggested that the reason sophisticated tools of forecasting and business analysis, as well as elegant strategic plans usually fail to produce dramatic breakthroughs in managing a business is because they are all designed to handle the sort of complexity in which there are many variables: detail complexity. Dynamic complexity on the other hand arises in situations where cause and effect are subtle and where the effects over time of interventions are not obvious. Conventional forecasting, planning and analysis methods are not equipped to deal with dynamic complexity.

Birkinshaw and Heywood (2010) looked at complexity in terms of institutional and individual complexity**.** They argued that many leaders when probed cite the institutional manifestations of complexity they personally experience: the number of countries the company operates in, for instance, or the number of brands or people they manage. By contrast, relatively few executives consider the forms of individual complexity that the vast majority of their employees face, for example poor processes, confusing role definitions, or unclear accountabilities.

2.7 Strategies for Managing Complexity

Many companies have expressed serious concerns about their capability to successfully manage complexity and have striven to simplify their business, retrenching to a stable portfolio of core products and processes (Jagersma, 2008). He further adds that others have attempted to manage complexity through systems, structures, procedures, complex organization, and group decision making. Only a few have come to grips with the strategic challenge. Leaders arrive at strategy in different ways. Most often it is the result of a deliberate process; however, the rapid pace of innovation, high degree of uncertainty, and barrage of threats in today's market demand a more emergent approach (Hansen, 2012). As implied in the definition of complexity, managing it requires a way of thinking, acting and organizing that transcends the typical control mentality (Schwandt 2009). This therefore means that strategies for managing complexity should be simple and aimed at simplifying the complexity - simple, but not simplistic.

Complexity is a unique problem facing companies and from the literature reviewed, one key trend has been that it can be managed by simple but unique strategies. Not generic. Leaders therefore need to create tailored simplification strategies that match the unique conditions they face, to get to the degree of simplicity that is appropriate for their situations. Strategy cannot be planning to do something. Strategy is a set of choices aimed at positioning the organization for obtaining superior results on the long term. It therefore requires to be formulated, implemented and evaluated. From the various literature sources, some of the best strategies for managing complexity include the following;

Ashkenas (2007) highlights the importance of simplifying organizations structure, products, processes, and behaviors so that leaders could make it easier for their people to get results and delight customers. For instance simplification of the organizational structure can be realized through breaking free of bureaucratic gridlock by abandoning outdated management thinking and practices (Hansen, 2012). According to Jagersma (2008), excessive complexity typically grows over many years and fossilizes into structures, cultures, systems, and personnel that are not easily altered but over time the impact on the way the company does its business can be profound. He further adds that Coping with complexity requires continuous efforts to identify and eliminate complications that add no value. Management has to analyze the company and its environment to flush out the hidden linkages between costs, activities, and the decisions that generated them. Ideally, this complexity analysis should be extended to include major suppliers and important customers.

According to Ashkenas (2010) there are some qualities managers need to tackle complexity effectively. One of these key qualities is referred to as "ambidextrous" capabilities which is the ability to tolerate ambiguity and actively manage complexity. Whenever companies tackle complexity, they will ultimately find some individuals who seem less troubled by it than others. Although some people can deal with complexity innately, others can be developed through targeted training to nurture their "ambidextrous" capabilities. Such skills will enable them create and use networks within organizations to build relationships and help overcome poor processes, bridge organizational silos, or manage whatever value-creating pockets of complexity their companies decide to maintain. Organizations aren't uniformly complex, and most employees don't experience complexity the way executives do. To better manage complexity, senior leaders must recognize how employees at all levels see it, and then learn what's driving it (Birkinshaw & Heywood, 2010). Ashkenas (2010) suggests that in the long run, managers would confront the reality that much of the complexity in their organizations was self-generated and would begin to view "simplicity-mindedness" as a competence or skill that they should develop over the course of their careers.

Knowing the source of complexity is a vital prerequisite for developing the right strategy. According to Ashkenas (2010), companies can apply more powerful forecasting tools using computer models. These include computer based regression and correlation analyses that can give a clearer picture of the future. He also argues that companies should drop forecasting tools that do not provide accurate predictions. Such are those analytical tools whose assumptions don’t hold for complex systems. Managers must also learn to limit or even eliminate the need for accurate predictions. In an unpredictable world, sometimes the best investments are those that minimize the importance of predictions. Senge (1990) supports this argument by stating that conventional forecasting, planning and analysis methods are not equipped to deal with dynamic complexity.

Complexity cannot be entirely eliminated from organizations; however it can be reduced to manageable levels. Since not all complexity is bad for the organization, companies can focus on the dysfunctional complexity. They can boost organizational effectiveness through a combination of removing complexity that doesn’t add value and channeling what’s left to employees who can either handle it naturally or be trained to cope with it (Birkinshaw & Heywood, 2010). According to Jagersma, (2008), complexity can be reduced by discontinuing products or processes whose complexity costs are higher than the profit contribution they generate.

Jagersma (2008) brings up the concept of reconfiguration which he argues that it may provide a means to seize the opportunities of complexity. According to him, to manage increased complexity through reconfiguration requires managing assets more flexibly, developing new information systems, building people with adaptable skills, and decentralizing decision-making. He further proposes that business complexity reconfiguration process should be started by top management with the selection of a cross-functional team consisting of key managers from across the company, who are encouraged to break traditional territorial thinking to make integrated business decisions.

The team analyzes the company and its environment to flush out the hidden linkages between costs, activities, and the decisions that generated them.

According to Levy (2013), organizations can be tuned to be more innovative and adaptive rather than expend large amounts of resources on forecasting for unpredictable futures. Continuous innovation can help a company keep up with the trends brought about by their operating environment while new products, processes, technology can be adopted to help the company keep afloat in the sea of complexity. Gottfredson and Aspinall (2005) however warn that as more products are added, the costs of the resulting complexity begin to outweigh the revenues, and profits start falling and from that point on, every new offering thin margin further. They therefore advised that companies that strike the proper balance between innovation and complexity create more efficient operations and more profitable relationships with customers.

Triangulation means attacking a problem from various angles using different methodologies, making different assumptions, collecting different data, or looking at the same data in different ways (Ashkenas, 2010). He further emphasizes that one of the best ways to understand a complex system is to do precisely that—understand it. This means that a lot of time and effort should be devoted to understanding complexity. The company should carry out numerous researches on this issue so as to thoroughly understand it. Triangulation therefore can involve applying a combination of the strategies discussed above so us to come up with different angles for managing the problem. Since complexity is a complex problem, there is need to approach it with multiple strategies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Complexity is qualitative in nature because its features cannot be quantified and therefore the methodology for this research is qualitative. Qualitative research implies an emphasis on the qualities of entities, processes and meanings that are not experimentally examined or measured in terms of quantity, amount, intensity, or frequency.

This chapter outlines the research design of the study which is a case study approach. This therefore means that the methodology of this study is limited to research design, data collection and data analysis. The data was collected through primary and secondary methods. Qualitative content analysis was used to analyze the data collected.

3.2 Research design

The research was conducted through a case study method. This was appropriate for this nature of study since it is a study of a single unit and will therefore facilitate intensive study and analysis of scenario. The context of the study is Kenya Power and it served as an ideal case study because it is characterized by most of the features of a hot-spot for complexity which includes a large staff base, complex organizational structure, high number of departments and branches among other drivers of complexity.

This approach provided a more realistic response than a purely statistical survey. It also supported deeper and more detailed investigation and answers to “how” and “why” questions. Focus on a single entity further enhanced a thorough assessment of the problem in question. Complexity being a relatively new area of research, it was be prudent to maximize investigations on one entity before exploring the whole industry at large.

3.3 Data collection

Primary and secondary data was used in this study. Primary data was collected through interview technique. Interview guides were used to guide the interviewer in asking relevant, thought-provoking questions. The mode of questions was mainly open ended which allowed for detailed answers from the respondents. These questions were designed to address the research objective, research questions and provide relevant answers. This was challenging however because some of the interviewees had no idea of the existence of complexity and the researcher was forced to clarify a lot of issues to them in the course of interviews. Most of the respondents were also uncomfortable with the researcher recording the conversation and this also seemed to distract them and limited their openness.

The interviewees included six senior management staff that included Chief Engineer Networks management, Deputy manager regional Operations and Coordination, Chief Human Resource Officer Training and Development, Deputy Manager Training School, Chief Integrity and Ethics Officer and Senior Systems Administrator. The interviews were conducted in the month of between end of August and beginning of September 2014. This was however challenging because the company was undergoing restructuring of the executive management structure and most of the managers were busy with job interviews.

Secondary data was also obtained from various source documents like the organizational strategic structure, financial reports, the company website and intranet which have wealth of information on the company. This helped to support the primary data collected through interviews.

3.4 Data Analysis

The analysis of findings was of qualitative form. This approach allowed detailed analysis of the data. Considering the kind of data intended as per the interview guide, qualitative content analysis was ideal for analyzing the data collected. Qualitative content analysis is often used to analyze interview transcripts in order to reveal or model people's information related behaviors and thoughts. Content analysis is a method of analyzing written, verbal or visual communication messages. It is a technique for making inferences by systematically and objectively identifying specified characteristics of message and using the same to relate to trends.

Content was analyzed in two levels, basic and higher level. At the basic level, analysis was in the form of a descriptive account of what was said. This involved merely quoting what the interviewees said. At the higher level or latent level, analysis involved a more interpretive discussion of what was said by the respondents and inferences were made from some of their statements.

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discusses the findings of the study based on the analysis and interpretation of primary and secondary data collected through interviews carried out in Kenya Power. Data was collected from six interviewees working in different capacities through use of interview guides as the instrument of research.

The findings of the study are presented into two sections according to the objectives namely; to identify the sources of complexity in organizations and to establish strategies that managers in Kenya Power utilize to manage complexity. This chapter will further involve an in-depth discussion of the findings to provide more insight on the feedback from the interviewees.

4.2 Background of the interviewees

The interviewees included six senior management staff that included Chief Engineer Networks management, Deputy manager regional Operations and Coordination, Chief Human Resource Officer Training and Development, Deputy Manager Training School, Chief Integrity and Ethics Officer and Senior System Administrator. The interviews were conducted in the month of August 2014.

The interviewees were drawn from various departments which included networks management division, human resource management division, finance division, company secretary division and Information and Communication Technology division. The interviewees were directly involved in making key decisions in the Kenya Power and thus were better placed and aware of the complexities the company faces. An inquiry was made on the number of years the interviewees had worked in the company which was found to be ranging between eight to twenty years. This clearly implies information collected was from employees who have massive experience and familiarity with complexity and strategies for managing it.

4.3 Sources of complexity in Kenya Power

This study sought to find out the hot spots of complexity in Kenya Power as a prerequisite to identifying strategies for managing it. The interviewees clearly brought out that many forms and sources of complexity facing the organization. According to them complexity arises from different spheres of the organization and the fact that Kenya Power is a large organization, complexity can arise from any small issue and develop into one unmanageable situation.

When you talk about sources of complexity in Kenya Power, the first thing that comes to mind is the size and structure of the company as seen by the responses from the interviewees. According to one interviewee, "the size of the company is very large and its structure is very hierarchical and complex with a very long chain of command". The complex nature of the structure makes it very difficult to manage operations in the company due to its associated challenges like lack of proper communication and dissemination of information on new developments or changes in the organization. Complexity can make access to information and support difficult and usually the size of the organization tends to be proportionate with the level of complexity.

The age of the company was also identified as a source of complexity by the interviewees. At the age of 92 having been incorporated in 1922, the company has been around for decades and undergone a lot of changes with the changing times. One of the interviewees was stated that "different regimes have managed the company since 1922 and each had different ideologies which in the long run become conflicting. Over time, the company kept growing and at some point, it was split so as to manage the complexity brought about by its size". The most popular was in 1997 when the functions of generation were split from transmission and distribution. The Kenya Power Company, which had been under the management of KPLC since 1954, become a separate entity responsible for public-funded power generation projects and later was rebranded to KenGen. The current government now is making plans of merging some of these companies in the energy sector. These changes of breaking up the company to make smaller companies and later merging of the same companies highlight the problem of complexity.

According to the interviewees, complexity develops over time courtesy of management practices and most common is the practice where standards in the organization are not followed to the latter. This is common place especially in government institutions whereby leaders have made their organizations more complicated. With so many interests to be served, the obvious solution is to devise structures, procedures, rules and the rest to ensure that all the stakeholders are catered for. As one of the interviewees put it, "often these stakeholders tend to have very conflicting needs which puts the company in a state of disarray as it tries to meet these needs". Decisions made sometimes are influenced by external forces hence forcing management not to adhere to set standards in the organization. When such double standards are applied of a long period, it causes a lot of confusion to management. To make matters worse, when a new regime comes in, they tend to try and counter the existing complexity with complicatedness and this exacerbates rather than solves the problem. This complicatedness destroys the company's ability to get anything done.

Technology is the key to many problems facing organizations but can be a double edged sword as highlighted by some of the interviewees in the sense that it can be a source complexity. The interviewees argued that in Kenya Power, technology has been very beneficial in bringing efficiency but has been equally problematic as seen from the challenges it has brought. First and foremost, Kenya Power has a wealth of information systems ranging from ICS, DCS, SAP, ITRON, IMS, to mention but a few. "Some of these systems work independently hence for one to serve a customer, one needs to interact with almost all these system to sort out a single problem, this instead of making customer service easier make it even harder and complex", stated one of the interviewees.

According to one of the interviewees, "when the corporate strategy is not properly communicated to staff, the effects are usually in the form of a difference in mindset between managers and the employees. It creates a situation where a manager is a hundred meters ahead of the employees. So it becomes very difficult to move the team in the same pace. This in turn results in different members of the team or different departments moving in different directions at any given time and the result is chaos". Kenya Power has identified communication as a serious challenge and has gone to the extent of appointed a task force to manage issues of communication. This clearly highlights how the issue of communication can result in serious complexities. For a large company like

Kenya Power, challenges in communication further arise in the form of rumors and negative grapevine. New ideas, policies or have been strongly opposed time again due to this making it hard to get things done in the company. This is a manifestation of complexity at work.

4.4 Managing Complexity in Kenya Power

The interviewees observed that complexity is a serious challenge facing organizations Kenya power being no exception. They identified various strategies for managing this problem though the consensus was that there is no clear cut strategy for managing complexity. In fact, complexity in itself is not identified as a threat in the company SWOT analysis. However, the company has been seen to have strategies that are aimed at managing different kinds or sources of complexity.

The key to managing complexity as proposed by most of the respondents lies in simplicity. This means simplifying processes, procedures, structures, products, decision chains among other aspects of the organization. As one respondent put it, “it’s all about going back to the basics” Simplification however is easier said than done. One key success factor for simplification is constant and continuous communication about changes taking place in the organization in terms of the structure, process, procedures and products. This therefore means demystification of some of the ever growing mysteries of the organization like for instance the recruitment process. Left to itself, complexity accumulates over time as changes take place in the organization. Continuous simplification can help avoid this accumulation.

According to one of the respondents, "clarity of vision, mission, strategy and roles of each member of the organization is critical in managing complexity". A lot of complexity arises due to role ambiguity whereby employees don't know exactly what they are supposed to be doing to contribute to the corporate objective. It is therefore important that the corporate objectives and strategy is cascaded down to each and every employee in the organization. By so doing, everyone will know exactly what they need to be doing and this will eliminate clashing of roles which tends to create complexity. This therefore calls for leaders to clearly articulate the direction where the organization is going.

Organizational restructuring was also proposed as a strategy for managing complexity in Kenya Power. The interviewees argued that a lot of complexity emanates from organizational structures. These structures tend to create ambiguity and role conflict as mentioned above. "Regardless of the size of the organization, managers should always ensure that the structure is as flat as possible", stated one of the interviewees. Where the structure has become hierarchical, which tends to happen over time, restructuring can be done to ensure the structure is simpler and flatter without sacrificing the level of control.

According to the interviewees, managing complexity can also be realized through innovation and especially that of a technological nature. Technology can help simplify any aspect of the organization. One of the interviewees however advised that "technology in itself can be complex and should be handled carefully". Innovation can help achieve simplification and hence it's associated benefits as discussed above.

Ambidexterity as a strategy for managing complexity was also highlighted by the respondents. According to one of them, "some personality traits tend to thrive in complexity. There are always staff who somehow can work around the ambiguity that complexity presents to them and somehow deliver results where other employees are struggling". Placement of staff after recruitment should therefore factor these important characteristic. For instance, customer service can be a complex affair but you will always find some individuals are very good at it and can talk their way out of any situation or can charm the most annoyed customer. These are the people who should be put in contact with customers. Apart from looking at educational back ground and years of service, such exceptional qualities should not be left out when doing recruitment and placement.

One of the interviewees brought up a unique but very interesting approach to managing complexity and that is having customer focus as the central focus in the organization. According to him, "a customer oriented organization is never complex. They always find a way to make things easy for their customers". They always strive to make their products simpler yet of more value to the customer. Complexity tends to bring obstacles in the way of organization, but when the focus is in the customer, nothing that comes along the way can divert the attention of the company.

According to most of the interviewees, hiring the right skills can greatly help manage complexity. Hiring wrong skills tends to start of a chain of events that result into a lot of complexity from wrong placement, inability to train the staff, challenges in career management and progression as well as compensation. Complexity of a human nature is one of the hardest to manage and is very costly in the organization. A case in point is the issue of productivity in the organization that was rated at 12% in a recent survey. You will find that this can be traced back to the hiring. One of the respondents stated that, "when you hire staff with perceived lesser skills than their peers and pay them equally or higher, the result can be catastrophic; discontent among the majority of the staff and at the end of the day, they will resort to giving minimum input in their work because they feel like their efforts are not being recognized anyway". Processes like recruitment and promotions should be as transparent as possible and those who emerge winners in such processes should be above board and can be justified to avoid discontent from those who are not successful.

Complexity has been found to arise from complicated policies and procedures, however according to the interviewees, sometimes the procedures might be simple and very well crafted, but management does not apply them consistently and this results in double standards which can be a great source of complexity. The interviewees recommended that policies and procedures should be followed to the latter because "inconsistencies in their application creates complexity" as stated by one of the interviewees.

4.5 Discussion of findings

The study found that complexity is a problem facing Kenya Power and it can be seen in various spheres of the organization. The findings of the study draw comparisons with theoretical foundation of the study especially chaos theory where recursive application of nonlinear deterministic functions can give rise to apparent random behavior and subtle patterns. Chaos is a complex, unpredictable and orderly disorder in which patterns of behavior unfold in irregular but recognizable forms. Similarly, it can be seen that there are instances in organizations where variables have interacted resulting in unexpected results and unintended consequences. These variables are the sources of complexity and include the organization structure, management practices, technology, policies and procedures as well as inconsistencies in following the said policies and procedures. Well-intended responses to new business challenges like globalization, emerging technologies, and regulations have made companies increasingly ungovernable and underperforming.

According to the interviewees, the key source of complexity in Kenya Power was the size and structure of the organization. With over 10,400 staff, 10 divisions, and an even higher number of departments and sections, the company in itself is a complexity. Most of the other complexities can be seen to arise from this because with size, every decision, policy, mistake tends to be magnified and brings unexpected results and unintended consequences to the organization. Literature similarly found that complexity is the cumulative by-product of organizational changes, big and small, that over the years weave complications into the ways that work is done. In most large organizations like Kenya Power, structural shifts are happening all over, all the time. They range from subtle changes in reporting relationships to job moves accommodating personal preferences. The steady accumulation of structural changes drives up complexity over time, in ways that sometimes go unrecognized.

The age of the company was also a key source of complexity because having been incorporated in 1922, slot of changes, technology, management regimes among other aspects have been with the company. Complexity as discussed in literature typically grows over many years and fossilizes into structures, cultures, systems, and personnel that are not easily altered but over time the impact on the way the company does its business can be profound.

According to the interviewees it was evident that complexity can be found in many spheres of the organization ranging from the technology it uses to management practices, policies, procedures, service charters among others. This therefore means that when identifying complexity in the organization, there is need for using a holistic approach that cuts across the organization. Identifying the nature and source of complexities facing organization is an important prerequisite for managing it.

Having acknowledged that complexity is a serious challenge facing Kenya power the interviewees proposed various strategies for managing this problem. They however argued that was that there is no clear cut strategy for managing complexity. Managing complexity in itself is complex but this is mainly due to the fact that managers tend to not know the nature of problem they facing them and therefore not know how to adequately handle it. In most occasions, they are seen to be treating the symptoms rather than the disease as a whole. From the literature reviewed, it was observed that leaders arrive at strategy in different ways however; the rapid pace of innovation, high degree of uncertainty, and barrage of threats in today's market demand a more emergent approach Managing complexity therefore requires a way of thinking that transcends the typical control mentality.

The key strategy for managing complexity as per the interviewees was simplification. According to them, most of the complexity arises from complicatedness in various aspects of the organization like policies, procedures, service charters, management practices and technology to mention but a few. Simplification basically means simplifying all these by removing unnecessary steps and components or people involved from value chains. Simplicity however was observed to be not as easy as it sounds. The interviewees therefore recommended that companies should strive for simplicity but not simplistic solutions. Despite complexity being a complex problem, it does not require an equally complex and elaborate solution but rather a simple one. Literature reviewed shows a consensus since it suggests that coping with complexity requires continuous efforts to identify and eliminate complications that add no value. This can be realized by simplifying organizations structure, products, processes, and behaviors so that leaders could make it easier for their people to get results and delight customers.

Other than simplification, the interviewees proposed other strategies for managing complexity ranging from innovation, organizational restructuring, ambidexterity, as well as proper policy formulation. These strategies can be applied independently or collectively depending with the nature of complexity in question. From the literature sources, it can be noted that strategy is not merely be planning to do something; it is a set of choices aimed at positioning the organization for obtaining superior results on the long term. Complexity being a unique problem facing companies can be managed by simple but unique strategies. Not generic.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The objective of the study is to establish strategies that managers in Kenya Power utilize to manage complexity. This chapter discusses these findings and draw summary discussions, conclusions, limitations of the study, suggestions for further research, recommendations and contributions to theory development.

The summary will entail a brief highlight of the findings in relation to the objectives of the study. Conclusions are drawn from a variety of responses from the interviewees, document and literature review. This will be finally summed up by recommendations to theory development, policy and practice.

5.2 Summary of Findings

The purpose of the study was to identify sources of complexity in Kenya Power and establish strategies that managers in Kenya Power utilize to manage it. The findings cut across the sources of complexity in Kenya power and strategies for managing the said complexity.

From the interviews and literature reviewed, one key observation was that complexity is a reality in Kenya Power and is affecting the various spheres of the organization. Other than emanating from external forces like technology and globalization, an equally high amount of complexity is internally generated by managers themselves in the way they handle policies, procedures and service charters as well as the structuring of the organization.

Understanding the pockets of complexity in the organization is an important prerequisite in identifying and establishing strategies for managing this challenging situation facing organizations. From the sources of complexity discussed, various strategies employed by managers in Kenya power were established and these revolved around simplification, organizational restructuring, innovation, ambidexterity, as well as proper policy formulation.

5.3 Conclusion

Complexity is a serious problem facing organizations, Kenya Power being no exception. It is one of the leading causes of organizational collapse in modern times, erodes profits, and slows down business efficiency alongside a myriad of other challenges it presents to organizations. Complexity has been found to arise out of external forces like technological advancements and globalization but an equal amount is also caused by internal factors which include age, size and structure of organizations, management practices, technology and poor communication. Identifying these pockets of complexity is an important prerequisite in establishing strategies for managing it.

Managing complexity is a complex affair, but the key is knowing what problem you are dealing with. That calls for understanding complexity and its intrinsic characteristics. Then one can proceed to establishing strategies to manage it. From the literature reviewed and responses from interviewees, some of the key strategies for managing complexity include simplification, clarifying company strategy, hiring the right skills, organizational restructuring, innovation, ambidexterity and sound policy formulation.

5.4 Recommendations for Policy and Practice

This research study contributes to policy and practice by adding knowledge on how companies can manage complexity despite being perceived by many as an impossible feat and a complex affair. This study brings out a new way of thinking that complexity can be effectively managed if understood.

This study highlights various strategies for managing complexity in organizations which can be instrumental in helping organization manage this unique problem facing them. The position of many managers has always been that complexity is an unavoidable cost facing organizations hence they do little or nothing about it. This study on the contrary will help managers develop policies and strategies for managing complexity and hence help make organizations easier to manage in the wake of a context operating environment.

5.5 Limitations of the Study

This study encountered several limitations some of which are inherent in using interview guide for data collection purposes. The data obtained from the interviewees may suffer from personal biases and may not represent the opinion of the study organization. Depending on personal factors like feelings, emotions, attitude towards change, the interviewees gave personal opinions which might not reflect the company's views and may have withheld some information which is important for the study.

Kenya Power Ltd has a wide branch network, therefore it was difficult to collect data from other staff in the branches located in other regions. Data was obtained from staff at Head office only, thereby leaving out staff in branches without giving their opinions. The data obtained also focused mainly on staff of Kenya Power Ltd hence customers and other stakeholders were not incorporated in the research to give their views.

Time constraint was also a limitation and it resulted in a situation where some interviewees were not willing to give the researcher enough time to probe further for in-depth information. Most of them postponed the interview discussion due to busy work schedule and frequent meetings and seminars to attend.

5.6 Suggestions for Further Research

This study being a case study focused on Kenya Power Ltd and therefore further research could be conducted in other organizations since they have different cultures, structures, management styles, values and resource capabilities. The study was conducted on a local firm and it would be necessary to study strategies for managing complexity in other local institutions and multinational firms to find out if there are any similarities or differences

This study looked at complexity broadly since research in this field is still limited especially in the Kenyan perspective. It is important to address specific kinds of complexity affecting organizations like for instance structural complexity or control complexity in isolation to allow for an in depth assessment of the phenomena.

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APPENDIX I - INTERVIEW GUIDE

SECTION 1: BACKGROUND INFORMATION

Please provide us with some information about yourself:

Name (Optional)	
Designation	
Division	
Years of service	

SECTION 2: INTERVIEW QUESTIONS

1) How would you define complexity in your own words?

2) As leaders rise through the hierarchy of an organization, they operate in increasingly complex environments. Has this been the case for you?

3) Do you think Kenya Power is well equipped to handle complexity (Technically and Human Resource-wise?)

4) Complexity has been seen to arise out of the external environment courtesy of forces external to the organization. What are some of the forces you feel make things complex in Kenya Power? Do you believe complexity of an external nature can be controlled?

5) Despite much complexity being attributed to external factors, almost an equal amount is internally generated by companies themselves. Do you agree with this statement?

6) Complexity is said to be a by-product of managers' daily decisions - decisions which are influenced by many factors rooted in a company's internal and external environment. What are some of the decisions you feel create complexity?

7) In your opinion, what is the most problematic aspect/concept of complexity?

8) A strategic leader's job is to analyze the environment and to create and manage the fit between the organization and the environment. What tools do you normally use to scan the environment and how often do you do so?

9) Do you agree that some individuals within the company seem less troubled by ambiguity, uncertainty, complex roles, and unclear accountabilities; and are able to get their work done regardless.

-If yes, what do you think they do differently?

10) Do you think there are aspects of the company that need to be simplified? (Processes, decision chains, structures etc.)

-If yes, what examples can you give?

11) Complexity has been found to not be entirely bad for companies—it brings opportunities as well as challenges. The problem is the way companies attempt to respond to it. What responses would you recommend to complexity?

12) What are some of the strategies Kenya Power and organizations in general can apply to manage complexity?

APPENDIX II- INTRODUCTION LETTER

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 8/8/2014

TO WHOM IT MAY CONCERN

The bearer of this letter MICHAEL ISANDA

Registration No. D61/78813/2012

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
08 AUG 2014
P.O. Box 30197 - 00100, NAIROBI

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

APPENDIX III- RESEARCH APPROVAL BY KENYA POWER

Kenya Power

The Kenya Power & Lighting Co. Ltd.
Central Office - P.O. Box 30099 Nairobi, Kenya.
Telephone - 254-20-3201000 - Telegrams 'ELECTRIC'
Fax No. 254-20-3514485
STIMA PLAZA, KOLOBOT ROAD

Our Ref: KP1/5BA/42D/MWM/ls

Your Ref:

27th August 2014

TO WHOM IT MAY CONCERN

RESEARCH APPROVAL – MICHAEL ISANDA

Reference is made to the subject matter mentioned above.

Kindly allow the above student at University of Nairobi to carry out a research project in the Company on ***"Strategies for Managing Complexity in Kenya Power".***

This authority notwithstanding, discretion must be exercised in the use of company information including business strategies and policy documents.

The Research Project should also not disrupt normal working hours and Company's flow of work.

A soft copy of the final Research Project saved in a Compact Disc should be forwarded to the Human Resource Development Department.

Yours faithfully,
For: **KENYA POWER & LIGHTING CO. LTD.**

MERCY MUCHIRA (MRS.)
FOR: HUMAN RESOURCE DEVELOPMENT MANAGER