RELATIONSHIP BETWEEN LEARNING ORGANISATION DIMENSIONS AND PERFORMANCE OF LOCAL PHARMACEUTICAL MANUFACTURING FIRMS IN KENYA

BY

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DECLARATION

This project is my original work and has not been submitted for a degree in any other university.

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This management research project has been submitted for examination with my approval as the University supervisor

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DEDICATION

This project is dedicated to: my father, Charles Francis Nyingi; my mother, Virginia Wangari; my dear wife, Mary; and my children, Wangari and Nyingi Jr. I cherish your unwavering support and encouragement.

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ABSTRACT

In order to cope with the unprecedented changes that are constantly emerging in today's environment, firms have been compelled to embrace and integrate learning as a core strategic activity. Indeed, learning has sort of becoming the fundamental competitive advantage and distinctive factor. Despite this recognition, there exists little evidence in Kenya on the effect of learning organization dimensions and attributes on organizational performance. The Kenyan local manufacturing pharmaceutical firms have been facing serious challenges of under capacity, price undercutting and lack of innovation. Competition from large international manufacturing companies domiciled in the West and Asia has made the survival of the local companies difficult in terms of economies of scale and profitability. It is in this context that the researcher sought to establish the relationship between learning organization dimensions and performance. The research objective was to establish the extent of such attributes and determine the said relationship. This study was a descriptive census survey of 20 local pharmaceutical manufacturing firms in Kenya. Opinions of senior management of these firms on their own perspectives of the extent to which their firms have adopted attributes of Learning Organisations and assessment of performance were collected. A self administered questionnaire based on the Dimensions of the Learning Organization Questionnaire (DLOQ) developed by Watkins and Marsick(1996) was utilized to solicit information on Learning Organization. Indicators of organizational performance were gleaned from the Balance Score Card model Kaplan and Norton (1996).

The findings indicated that there local pharmaceutical manufacturing companies have moderately embraced the dimensions of Learning Organizations and that there exists a strong positive relationship between Learning Organization and performance and between each of the Learning Organization dimensions and each scale of organizational performance. Limitations of the study included the fact that only a questionnaire was used for data collection and that only senior management was targeted. Targeting all cadres and applying different methodologies like case study may provide varying insights on the Learning Organization dimensions and relationship with various constructs. As such further research, preferably case studies will assist in providing detailed insights on learning organizations.

Keywords: Learning Organization Dimensions, Organizational performance, Local Pharmaceutical Manufacturing firms, Kenya

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The last decade has witnessed a significant change in both society and organizations. These changes have been propelled by many factors including technological advancement, globalization, increased awareness, and environmental demands. It is such changes that have put pressure on managers of organizations to seek for means to adapt in order to thrive and continue delivering their value propositions.

Organizations which cannot learn and adapt will be faced with extinction, hostile takeover among others. The complexity and volatility of today's business cannot be addressed effectively by piecemeal analytical approaches like individual learning. The organization that will truly excel in the future will be those that discover how to tap people's commitment and capacity to learn at all levels in the organization (Senge, 2006). Edmorison and Moingein (1998) suggest that to remain viable in an environment characterized by uncertainty and change, organizations and individuals alike depend upon ability to learn.

According to Senge (2006) companies can rid themselves of the learning disabilities that threaten their productivity and success by adopting the strategies of learning organizations. In learning organizations, openness, reflection, deeper conversations, personal mastery and shared vision uniquely energize changes, and understanding the systemic causes of problems is crucial. Senge postulates that learning organizations are possible because we are intrinsically born with learning capabilities; no one teaches a child how to walk, speak, run, etc. Learning increases information sharing, communications, understanding and the quality of decisions made in the organizations (Senge, 2006; Pedler, *et al*, 1991).

Managers face the challenge of making effort needed to learn some of the new skills and techniques, and put in processes that engage their workforce in programmes of continuous capability development. Learning should therefore be integrated into doing as part and parcel of everyday work. Getting the best out of everybody to meet the challenges ahead (Farago & Skyrme, 1995).

1.1.1 Learning Organization

Nevis and DiBella (1998) highlighted the difference between normative and developmental perspectives towards a learning organization. The essence of a normative perspective is that a learning organization will be enhanced by realization of a set of planned interventions which together represents the learning organization. The development perspective treats the learning organization as a particular phase reached in an organization's life or evolution as a result of menu-driven provision of training courses and the resulting environment where learning is more self-managed, continuous and broad based. They propose a third position, which they call capability perspective. By this, they mean that within all organizations, there are intrinsic learning capabilities but that how these are manifested will vary from institution to institution through distinctive styles or patterns of learning.

Organization learning is seen as a response to an increasingly unpredictable and dynamic business environment. Its essence is the organizations ability to use mental capacity of all its members to create the kind of presence that will improve its own. (Dixon, 1994). Argyris (1994) argues that organizational learning happens when two conditions are fulfilled: first, when an organization achieves what it intended and second, when a mismatch between intentions and outcomes is identified and corrected.

Nevertheless, organizations do not perform the actions that produce the learning; it is individual members of the organization who behave in ways that lead to it and organizations can only create conditions to facilitate such learning. For learning to occur, organizations must align themselves with the environment so as to remain competitive and innovative. This may involve learning, unlearning or relearning. Learning organizations will treat competitions more as means of learning than hostile force (Senge, 2006; Pedler,*et al,* 1991; Walton, 1999).

According to Argyris and Schon (1978), organization learning occurs when members of the organization act as learning agents of the organization by detecting and correcting errors in an organization's theory in use and embedding the results of their enquiry in private images and shared maps organization. It appears the concept of leaning organization is clear enough to be put into practice; to others, it is fuzzy and amorphous and needs critical attention. The learning organization is best thought of as a journey, not a destination (West, 1994), a philosophy, not a program (Solomon, 1994). The learning organization has a lot to offer to the reform and restructuring of organizations but building one is clearly an enormous task. However, one can begin with the attitude that learning is a sustainable resource, not a limited commodity and work on developing the mindset of a culture of learning. It must be recognized that the visioning process is ongoing, not a onetime event (Bennet&O'Brien, 1994).

Leaning organization may also be viewed as a model of strategic change in which everyone is engaged in identifying and solving problems so that the organization is continuously changing, experimenting and improving, thus increasing its capacity to grow and achieve its purpose (Rowden, 2001).

This conforms to the views of Farago and Skyrme (1995) that learning organizations are those that have in place systems, mechanisms and processes, that are used to continually enhance their capabilities and those who work with it or for it, to achieve sustainable objectives - for themselves and the communities in which they participate.

Learning organization therefore go through a 'transformation' as opposed to the traditional organization that evolves through 'organizational development'. This transformation process makes the organization develop itself rather than be changed by external intervention. The development of a Learning Organization involves the assumption that learning is of value, happens at all times, is a continuous process and can be shared (West, 1994).

Various models of learning organizations have been developed based on the theoretical roots and perspectives held by different authors. Huber (1991) identifies four constructs as integrally linked to organizational learning: knowledge acquisition, information distribution, information interpretation, and organizational memory. He clarifies that learning need not be conscious or intentional. Further, learning does not always increase the learner's effectiveness, or even potential effectiveness. Moreover, learning need not result in observable changes in behavior. Taking a behavioral perspective, Huber (1991) notes that an entity learns when through its processing of information, the range of its potential behaviors is changed.

Senge (1990) views the learning organization as one where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. He articulates this vision in The Fifth Discipline where he defines the essential characteristics of a learning organization, namely the five disciplines.

Firstly, Team learning is a tool for raising the collective IQ of an organization above that of anyone in it. This discipline includes dialogue and talking and thinking together. Senge says team learning is vital because teams, not individuals, are the fundamental learning unit in an organization. Unless the team can learn, the organization cannot learn. Second, shared vision binds people around a sense of destiny. A genuine shared vision tends to cause people to do things because they want to, not because they have to. Third, mental models are deeply ingrained assumptions and generalizations that influence how we see the world and how we take action. In organizations such mental models control what people think can or cannot be done. Changes rarely take place unless people change their shared mental models. Fourth, personal mastery is a discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively. Fifth, systems-thinking is a framework for seeing interrelationships and patterns rather than things and snapshots. It does away with boundaries that we invent and find ourselves trapped inside. Applied in organizations it cuts down on complexity and stops people from saying "there's nothing I can do about it, it's the system".

Pedler, et al's model (1991) prescribes a list of eleven dimensions- Learning approach to strategy, participative decision making, informating, formative accounts and control, internal exchange, reward flexibility, enabling structures, boundary workers as environmental scanners, intercompany working , learning climate and self development opportunities for all. They have divided these into five broad themes.

Watkins and Marsick (1993,1996) have given seven practices towards becoming a learning organization- create continuous learning opportunities, promote dialogue and inquiry, promote collaboration and team learning, empower people towards a collective vision, establish systems to capture and share learning, connect the organization to its environment and provide strategic leadership for learning.

There is a difference between Organizational Learning and Learning Organization. Argyris (1978) defines Organizational Learning as the process of "detection and correction of errors" while Senge (1990) defines Learning Organization as "a group of people continually enhancing their capacity to create what they want to create". He further remarks that "the rate at which organizations learn may become the only sustainable source of competitive advantage". Ang and Dulaimi (2009) contrast Organizational Learning and Learning Organization in terms of process versus structure.

Learning organizations therefore identify the key characteristics of their environments and thus are able to plan ahead and maximize opportunities. The attempts to identify interactions between the firms' sub systems that facilitate or inhibit the management of change and are better able to cope with environmental and other changes because they can accommodate unpredictability. They are not encumbered with rigid plans and procedures.

1.1.2 Organization Performance

According to Kennerley and Neely (2002), organization performance is key and should be managed so that a dynamic and relevant set of performance measures can be maintained, reflecting an organization's changing requirements.

In this case, organizations should have a clear understanding of the factors, both internal and external to the organization, that facilitate and inhibit the introduction of new measures, the modification of existing measures and deletion of obsolete measures.

A review of literature on organizational performance reveals that there is no single universally accepted measure that can be applied in assessing the overall organizational performance. This is buoyed by the fact that by the early 1980s, there was a growing realization that, given the increased complexity of organizations and the markets in which they competed, it was no longer appropriate to use financial measures as the sole criteria for assessing success

There are numerous performance measurement models that have been advanced over the last two decades by various scholars. These models have focused on themes such as growth, productivity, innovation, profitability, productivity, efficiency, effectiveness, as well as adaptability. There appears to be consensus that assessment of organization performance should be undertaken cognizant of the organizational goals (Robbins & Coulter 2005; Daft, 2004). Additionally, there is recognition that the interests of various stakeholders should be taken into account as opposed to the traditional focus on shareholders (Freeman, 1994; Atkinson et al, 1997; Weerakon, 1996).

Indeed, Kottler (2000) suggests that four dimensions are essential in the determination of corporate performance. These are stakeholders, internal process, resources and organizational management. This is in tandem with Robbins (1998) model of organizational effectiveness that focuses on four dimensions: profit maximization, organizational ability to acquire inputs and transform them successfully into outputs, maintaining stability and balance, and identifying and satisfying customers' needs.

Perhaps the most popularized model of measuring organizational performance is Kaplan & Norton (1992, 1993, 1996)'s Balanced Scorecard – BSC that emphasizes four interdependent dimensions: financial performance, customer service, internal processes and people/ innovation/growth. Nevertheless, there are other frameworks that have been used such as Kennerley and Neely (2000)'s performance prism and Lynch and Cross (1991)'s SMART pyramid. The overall objective of these multidimensional frameworks is to help organizations define a set of measures that reflects their objectives and assesses their performance appropriately.

1.1.3 Learning organization and organization performance

Recent research appears to lend credence to the notion that organization learning is a mechanism to improve organization performance. According to Appelbaum and Reichart (1997), it is only by individual learning and applying learning that organization learns and enhances performance. Individual learning and organizational learning are distinguished by Hodgkinson (2000) who defines organization learning as "coming together of individuals to enable them support and encourage each other's learning which will be in the long run be of benefit to the organization" and individual learning as "an activity that is experienced by all individuals within an organization" (Hodgkinson,2000). These authors have made recognition of the fact that context, both as a catalyst and impediment influences the transfer of learning.

Despite the attempts to understand the relationship between learning organization and various organizational outcomes, evidence is still scanty. There is little empirical evidence in literature that shows how the characteristics of learning organization affect organizational outcomes (Jashapara, 2003).

This resonates well with Yeo (2002) assertion that empirical research demonstrating the relationship between a learning organization and organization performance is limited.

Incredibly, authors have taken the challenge hands on and are addressing this issue of lack of evidence. For instance; Ellinger, Ellinger, Yang and Howton (2002), Jashapara (2003), and Wandera (2008) found positive relationships between learning organization characteristics and organization performance.

1.1.4 The Kenyan Pharmaceutical Industry

The pharmaceutical Industry can broadly be divided into Human and Veterinary arms. For the purpose of this study, the focus is mainly on the former; the later can be the subject of another study. The Human Pharmaceutical industry can further be divided into the Over the Counter Only and Prescription Only Medicines categories depending on products and the rules governing their manufacture, marketing, channels of distribution, access and usage (The Pharmacy and Poisons Act, 1989). The Kenyan pharmaceutical industry can also be segmented into subsidiaries of multinational and local drug manufacturers, agents, distributors and retailers; generic and brand pharmaceutical firms. Generics are imitations of the branded products whose patents have expired (Berkow, 1997) and they compete with the original brand only on price, unlike with branded generics that mount a further challenge on efficacy, packaging and branding.

The market for pharmaceutical products in Kenya is estimated at KShs 8 billion per annum. The government, through the Kenya Medical Supplies Agency (KEMSA) is the largest purchaser of drugs manufactured both locally and imported, in the country. It buys about 30% of the drugs in the Kenyan market through an open tender system and distributes them to government medical institutions. There are about 700 registered wholesale and 1,300 retail dealers in Kenya, manned by registered pharmacists and pharmaceutical technologists.

These pharmacies are accorded a 25% mark up on retail drugs. Anti infective products (chiefly antibiotics, antimalarials, sulfonamides), analgesics, antipyretics, bronchial relaxants and cytotoxins account for the bulk of government and private sector purchases of medicines in the Country (Economic Survey 2006 by Central Bureau of Statistics and Ministry of Planning)

The Kenyan Medical Directory (2009) has listed 137 firms involved in the importation, manufacture, marketing and distribution of pharmaceutical products. The Human arm of the pharmaceutical industry employs directly an estimated 60,000 people, provides medical information, medicines and diagnostics to enable healthcare providers better manage and treat diseases. Image Dynamics (2005), an authoritative pharmaceutical raw materials and finished products import data provider put the size of the Kenyan Pharmaceutical Industry at KSh. 10 Billion in 2005.

The Kenyan Pharmaceutical industry has numerous opportunities that can be exploited and they include: expanded health care provision with the introduction of National Social Health Insurance Fund, promotion of high technology industries – science parks; special economic zones (clusters), Integration of Special technology and innovations in the production process through research and development networks, expanded regional markets – East, Central, Western and Northern Africa, supportive infrastructure with Nairobi as a health service hub, opportunities in sub-contracting and outsourcing (networking with major global industry players), Public private partnership (PPP) opportunities in sector development as well as increased health sector funding.

On the other hand there are challenges with respect to weak entrepreneurship culture in pharmaceutical profession – not business oriented, under-developed R&D systems, knowledge networks and weak strategic alliances, weak innovation capacity – education systems, under-developed health bio-technology sub-sectors, unfavorable investment climate and declining enrollment levels in pharmacy discipline at tertiary levels. These challenges do require organizations in the pharmaceutical sector to embrace learning so as match their capacities to respond to them.

1.1.5 Local pharmaceutical manufacturing firms in Kenya

According to the web-site of the Kenya Association of Manufacturers, there are 20 member companies described as Pharmaceutical and Medical Equipment Manufacturers. Further, the Kenya's Pharmaceutical Industry report (2005) prepared by the Export Processing Zones Authority lists the 20 pharmaceutical manufacturing companies in Kenya. Notably, a number of companies manufacture drugs elsewhere, mostly in India, and have ethical drugs registered with the Pharmacy and Poisons Board (PPB) which they distribute throughout Kenya and East Africa (Stopler, 2009). These companies are members of the Kenya Manufacturers Association (KMA) and for the purposes of this study have been regarded as Kenyan pharmaceutical manufacturer.

These companies manufacture a wide range of products from analgesics, antiallergics and respiratory agents, antibiotics, antimalarials to syringes. The main characteristics of the local pharmaceutical manufacturing industry are akin to those of the global pharmaceutical industry and include: increased globalization, changing structure of competition and increased competitiveness, lack of new products despite increased investments in Research and Development activities, fast consolidation and concentration, quick development of generic markets.

1.2 Statement of the Problem

Organisation learning takes place where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together (Senge, 1990). Learning is a complex process of acquiring knowledge, understanding, skills and values in order to be able to adapt to the environment in which we live (Cole, 1997).

Previous researchers focused on the individual's contribution to the learning process as well as influence of learning organisation on job satisfaction. Amulyoto (2002) studied the processes of organisation learning among donor agencies in Nairobi. The findings indicate that the donor agencies have structures, strategies and processes that enhance and maximise organisation learning. Additionally, they had methods, mechanisms for involving people in key decision making processes; that all employees were provided with feedback on financial outcomes of their actions; and finally that employees met regularly with agencies to share ideas.

Kirimi (2006) studied organisational learning concentrating on private recruitment agencies. The study established that such agencies have learning mechanisms in place for constant acquisition of knowledge both internally and externally and for information distribution. Employees are able to interpret information given and that the organisations have capacity to store vital information thus enhancing their organisation memory. Kangethe (2007) undertook a study on the influence of learning organisation on job satisfaction specifically focussing on the organisations for disabled persons. The study established that majority of the organisations for disabled persons have embraced the practices of learning organisation to a moderate extent and this has influenced job satisfaction of employees in these organisations.

Positive relationship between organisation learning and job satisfaction had also been empirically proven in researches carried out by Kelly et al (2007) and Chang and Lee (2007). Additionally, Kihara (2007) carried out a study on the learning organisation concept with specific focus on the nongovernmental organisations in Nairobi. The study established that majority of the nongovernmental organisations (NGOs) carried organisational learning and that there were not many challenges as far as organisational learning is concerned. Organisational learning was also deemed to be a very important aspect due to dynamics in growth in these organisations. More recently, Wandera (2008) examined the relationship between organisation learning and performance amongst insurance and reinsurance companies in Kenya and found that there was a positive relationship. The study established that insurance and reinsurance companies in Kenya greatly depend on chief executive to take responsibility for driving change through organisation learning and that organisational financial performance is leveraged by organisational learning.

Most of these studies while yielding some perspectives about aspects associated with learning in organizations have tended to reveal insights about strategies adopted by organisations rather than insights relating to influence of learning organisation on organisation outcome. This study therefore is an attempt to fill the gap in existing literature on relationship between leaning organisation and organisation performance particularly in the local pharmaceutical manufacturing industry in Kenya. This study attempted to answer the following questions: To what extent local pharmaceutical manufacturing firms in Kenya are considered Learning Organisations? How well these local pharmaceutical manufacturing firms in Kenya are performing? And what is the nature of the relationship between Learning Organisation dimensions and organisational performance?

1.3 Objectives

The objectives of this Study were:

Firstly, to identify the learning organisation dimensions adopted by the local pharmaceutical manufacturing companies in Kenya, and;

Secondly, to establish the relationship between learning organisation dimensions and selected aspects of performance of local pharmaceutical manufacturing companies in Kenya.

1.4 Value of the Study

The study no doubt is of value to the following:

Firstly to managers of organisations, who will gain insights on the operation of learning organisation and can resultantly put necessary mechanisms to enhance these operations. They will also understand the influence of learning organisation dimensions like continuous learning, enquiry and dialogue, teamwork and collaboration, leadership and empowerment, systems to capture learning, empowering people and connecting organisation on financial and knowledge performance of pharmaceutical firms. As a result they will be able to design appropriate strategies to enhance such performance.

Secondly, other stakeholders in the pharmaceutical industry will also draw useful lessons on how their peers have handled these challenges for current and future application. This is view of the fact that knowledge has become the main source of sustainable competitive advantage.

Thirdly, researchers and scholars will gain from the study as it will form a basis for further research to refine and perhaps extend the present one. It will also contribute to available

empirical evidence on relationship between dimensions of learning organisation and organisational outcomes. In addition to identifying relationships between the various learning organisation dimensions internal reliability. Acknowledging that research dealing with the relationship between the Learning Organization and performance is scarce (Thomas and Allen, 2006, Johnson, 2002; Jashapara, 2003).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter details a review of literature on what learning organizations are, distinguishes organization learning from learning organization, explores various models of building a learning organization, and relationship between learning organization and organization performance. The chapter concludes with the development of a conceptual model for this study.

2.2 Definition of Learning Organization

There are various definitions that scholars and authors have used on learning organization. Perhaps the most popular one is that by Peter Senge. Senge (1990) defined the Learning Organization as one where people continually expand their capacity to create results they truly desire; new and expansive patterns of thinking are nurtured; collective aspirations are set free; people are continually learning to learn together. Following Senge's publication of his book the Fifth Discipline (1990), the concept of learning organization has attracted a lot attention from scholars of various fields including management, philosophy, sociology and anthropology.

Farago and Skyrme (1995) defined Learning organizations as "those that have in place systems, mechanisms and processes, that are used to continually enhance their capabilities and those who work with it or for it, to achieve sustainable objectives for themselves and communities in which they participate." Overmeer (1997) suggests that the learning organization is a particular organizational environment facilitating individual learning, which in turn is harnessed by the organization and encourages the continuous development of new behaviors and practices.

Learning Organization is basically an organization that goes through 'organizational transformation'. In contrast to the traditional organization that evolves through 'organizational development', this transformation process makes the organization develop itself rather than be changed by external intervention. The development of a Learning Organization involves the assumption that learning is of value, happens at all times, is a continuous process and can be shared (West, 1994).

Drew and Smith (1995) in Dealtry and Teatre (1998) viewed the learning organization as a social system whose members have learned conscious, communal processes for continually generating, retaining and leveraging individual and collective learning leading to improved performance of the organizational system. There are other definitions that have been espoused by different authors. Dixon (1994) posits that essence of organizational learning is the organization's ability to use the amazing mental capacity of all its members to create the kind of processes that will improve its own. This definition seems to borrow heavily from the one of Pedler, Burgoyne & Boydell (1991) of a learning organization being a learning company that facilitates the learning of all its members and continually transforms itself.

Simon and Rugchart (2003) define a learning organization as one that is continually enhancing its ability to get the results it truly wants. They opine that organizational learning facilitates knowledge management by first aligning common vision and therefore reducing competitiveness, allowing for greater demand for the shared knowledge. They argue that organizational learning does not replace knowledge management tools, but can provide a substantial accelerator to the knowledge management effort.

There have been numerous attempts to define and elaborate the learning organization concept; however, there is apparent little agreement on what a learning organization is and the concept of learning organization as well as how to create it has proved elusive (Kerka, 1995; Garvin, 2000; Thomas & Allen, 2006).

2.3 Organization Learning and Learning Organization

Gorelick (2005) argues that organizational learning and the learning organization can and should co-exist. However, fundamentally to be effective as a learning organization there is a need for a deep learning cycle and recognition that it will take time. Indeed, for a long time the terms have been used interchangeably and caused the attendant confusion (Ortenblad, 2001).

Despite the use of the terms interchangeably, there have been attempts to distinguish the two terms by various scholars (DiBella, 1995; Easterby-Smith & Araujo, 1999; Marsick & Watkins, 1994; Yang, Watkins, & Marsick, 2004. Ortenblad (2001) and Tsang (1997) argue that organization learning was mainly pioneered by academicians while learning organization developed as a domain of practitioners as well as a domain concerned with how to change the behavior of the organization and bring it closer to a desired state. Additionally, Tsang (1997) views organization learning as a process or set of activities, whereas the learning organization is seen as a form of organization (Tsang, 1997). Lastly, a distinction has also been advanced in terms of who learns. In organizational learning, the focus is on individual learners, whereas in the learning organization, it is on learners at the individual, group, and organizational levels. In organizational learning, knowledge is viewed as residing in individuals, while it is viewed as residing in individuals and in the organizational memory in learning organizations (Ortenbald, 2001; Garvin, 1993; Senge, 1990).

These arguments are in consonance with those of authors that learning organization has an action orientation and is geared towards using specific diagnostic and evaluative methodological tools which can help to identify, promote and evaluate the quality of learning processes inside organizations (Nonaka, 1991; Ulrich *et al.*, 1993) as well as those who view organization learning as a means and learning organizations as ends (Huysman, 1999; Armstrong & Foley, 2003).

2.4 Building a learning organization

The sections that follow explore the various views of developing a learning organization.

2.4.1 Systems thinking

Senge (1990) asserts that there are five disciplines that guide learning organizations and emphasizes that the fifth discipline (systems thinking) is the most crucial one as it provides the glue that makes all the disciplines stick together. Personal Mastery refers to learning to expand our personal capacity to create the results we most desire, and creating an organizational environment which encourages all its members to develop themselves toward the goals and purposes they choose. Mental Models refer to reflecting upon, continually clarifying, and improving our internal pictures of the world, and seeing how they shape our actions and decisions. Shared Vision means building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there.

Team Learning is transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual members' talents. Systems' thinking is a way of thinking about, for describing and understanding, the forces and the interrelationships that shape the behavior of systems. This discipline helps us to see how to change systems more effectively, and to act more in tune with the larger processes of the natural and economic world .

The learning organization exists primarily as a vision in our collective experience and imagination and that the impact of practices, principles and essences are highly influential. Practices are "what you do". Principles are "guiding ideas and insights," and essence is "the state of being those with high levels of mastery in the discipline" (Senge, 1994). According to Senge et al (1994) the learning organization develops within a team, and is part of a "deep learning cycle" where team members develop new skills and abilities, which in turn create new awareness and sensibilities, which it turn creates new attitudes and beliefs. These new attitudes are the things that can change the deep beliefs and assumptions inherent in an organization and product transformation. Within the learning organization a sense of trust and safety are established and the members are willing to reveal uncertainties and make and acknowledge mistakes. This is the cycle that provides a "domain of enduring change" within the organization.

On the other hand, the architecture of a learning organization is considered a "domain of action" and consists of guiding ideas, innovations in infrastructure, and theory, methods and tools. The guiding ideas include the vision, values and purpose of the organization. They have philosophical depth and are seen as ongoing. They include the philosophy of the whole, the community nature of the self and the generative power of language.

The development of tools and methods test these theories and cause them to be shaped and refined, and bring about the cyclical nature of this domain of action. These changes create infrastructure innovations and "enable people to develop capabilities like systems thinking and collaborative inquiry within the context of their jobs" (Senge, 1994).

2.4.2 Cultural change

Kline and Saunders (1998) learning organization model focuses primarily on cultural change. They assert that a Learning Organization begins with an organization of learners, who are then shown how to function in such a way that the organization as a whole can learn. Particularly, this model distinguishes individual learning from organization learning. One of the clear distinctions is that individuals have memories that are crucial for learning that lack in the case of organization. Additionally, while individuals store their learning primarily in their memories, augmented by libraries, notes and other aids to memory, organizations store it primarily in their cultures, with a secondary backup in documentation that is useful only if the culture is committed to making use of it.

Kline and Saunders (1998) identified ten conditions that are necessary to build a learning organization in view of the fact that resistant to change is an ever present challenge. These conditions are: assess the current learning culture to create a benchmark, then have positive expectation that dilemmas can be resolved, support for the learning process itself, willingness to delay closure long enough to arrive at significant Gestalts rather than forced and trivial ones; communication processes that bring people together to consider in a friendly and noncompetitive atmosphere many different perceptions, templates, habits of thought and possible solutions, from which the most useful may then be chosen; a cultural habit that encourages exploring apparently meaningless ambiguities with the expectation that meaning can be found in them—as an

expression of both a personal and organizational commitment to learning over the long haul; the establishment of contexts within which meaning for new possibilities can be found as they emerge; a set of modeling skills, strategies and techniques or mechanisms that allows people more easily to construct meaning out of apparent chaos; a cultural understanding which is shared throughout management of the systemic interactions that will inevitably be present as complex Gestalts are formed, and an intuitive feeling for how complex interactions will be likely to occur.

Kline and Saunders (1998) emphasize the aspects of continuous learning as well as team learning just like Senge does. They suggest that cultural barriers be broken between managers and workers and that integrative learning be adopted. To do this organization should recognize that the most valued asset of the organization is people, and the development of relationships between them if highly important so they can work together well.

2.4.3 Double-loop learning

Argyris and Schon (1974) believe that organizations learn through individuals acting as agents. They define organization learning as the detection and correction of errors. Their key concepts revolve around single- and double-loop learning. Single-loop learning results in the organization continuing in the existing policies while remedying the situation at hand, while double-loop learning examines and modifies norms, policies and objectives as necessary. This model is one of the earliest with regards to other organizational learning literature, and has played a significant contribution in informing subsequent models including that of Senge.

Argyris (2002) highlights the need for managers and employees to look inward. This is achieved by reflecting critically on their own behavior, identifying the ways they often inadvertently contribute to the organization's problems, and then changing how they act. He observed also that individuals in leadership in an organization are not accustomed to failing in that they never

learned to learn from failure, become defensive, screen out criticism, and put the blame on anyone and everyone but themselves. Organizations must learn from mistakes and engage in continuous improvement programs within themselves.

They should always step back and examine what is occurring, and challenging it beginning with the uppermost strata of the organization. Argyris and Schon's model involves governing variables, action strategies, and consequences. The governing values are the individual's theories-in-use, and the action strategies are what keep their behavior within the boundaries created by the theories-in-use.

2.4.4 Performance improvement based on experience

DiBella (1996) views organizational learning as the capacity (or processes) within an organization to maintain or improve performance based on experience. This capacity is build through knowledge acquisition (the development or creation of skills, insights, relationships), knowledge sharing (the dissemination to others of what has been acquired by some), and knowledge utilization (integration of the learning so that it is assimilated, broadly available, and can also be generalized to new situations).

DiBella and Nevis (1998) identified three perspectives of organization learning namely the normative, the developmental and the capability perspectives. The normative perspective presumes learning as a collective activity only takes place under certain conditions or circumstances, and these conditions are facilitated by the leaders. The developmental perspective presumes that the learning organization is a stage in the development of a maturing organization or in parallel, the development phase of the organization determines its learning styles and character. Finally, the capability perspective argues that organizations develop and learn as they mature or by strategic choice, and that all organizations have embedded learning processes.

Indeed, the third perspective was the basis of their learning orientations that encompasses seven areas running on a continuum of opposites. DiBella and Nevis (1998) list the orientations as knowledge source, content process focus, knowledge reserve, dissemination mode, learning scope, value chain focus and learning focus. The orientations are aided by ten facilitating factors that do increase the chances of the organization functioning as a learning organization. The facilitating factors are: scanning imperative, performance gap, concern for measurement, organizational curiosity, climate for openness, continuous education, operational variety, multiple advocates, involved leadership and systems perspective.

Nevis, DiBella et al. (1995) argue that learning as a systems-level phenomenon stays within the organization, even if individuals leave. They further enumerate three factors that are important for organization learning to be successful and constantly enhance its knowledge base as: core competencies that serve as launch pads for new products and services, an attitude that supports continuous improvement in the business's value-added chain, and the ability to fundamentally renew or revitalize.

2.4.5 Behavioral change

Huber (1991) identifies four constructs as integrally linked to organizational learning: knowledge acquisition, information distribution, information interpretation, and organizational memory. He clarifies that learning need not be conscious or intentional. Further, learning does not always increase the learner's effectiveness, or even potential effectiveness. Moreover, learning need not result in observable changes in behavior. Taking a behavioral perspective, Huber (1991) notes that an entity learns when through its processing of information, the range of its potential behaviors is changed.

The four constructs are: firstly, Knowledge acquisition that involves monitoring the environment within and outside the organization, using information systems to interpret, store and retrieve information, carrying out education and training and patent watching (Dodgson, 1993). Secondly, Information distribution that refers to sharing of information. Greater sharing or distribution of information leads to increased organizational learning. For example through face to face meeting, telephone, facsimile, memorandum, email, bulletin boards, computerized conferencing systems, electronic meeting systems, document delivery systems and workflow management systems. Knowledge in the form of tacit knowhow, letters, memos, informal conversations and reports are captured and distributed.

The third one is Information interpretation which involves giving information on one or more commonly understood meanings. Greater learning occurs when more and more commonly understood meanings and interpretations are developed. Finally, Organization memory which refers to the repository where knowledge is stored for future use. It is also called corporate knowledge or corporate genetics. According to Hamel and Prahalad (1994) it is accumulated histories, experiences, norms and stories.

2.4.6 The learning company

Pedler et al (1991) have identified a list of eleven dimensions or features of a learning company which focus more on processes and practices. These they felt could be grouped under the five broad themes of " strategy", "looking in", "structures", "looking out", and "learning opportunities", Torrington (2005). The primary dimensions are as follows:

Firstly, learning approach to strategy: policy and strategy formulation, implementation, evaluation, and improvement are consciously structured as learning processes/experiences by using feedback loops.

Secondly, participative policy making: all key stakeholders of the organization have a chance to contribute to major policy decisions including customers, suppliers and representatives of community and environmental groups. These two dimensions are grouped under the broad theme of "strategy" (Torrington, 2005). Thirdly, Informating: by which information is made as widely available as possible through information technology (IT) in order to inform and empower people- employees, customers and others. They note that such information should be used to understand what is going on in the company and so stimulate learning rather than use reward, punishment or control. People can ask questions and make decisions.

Fourthly, Formative accounts and control where systems of accounting, budgeting and reporting are structured to assist learning and hence delight internal customers. Individuals are made accountable for their own actions. Fifth is internal exchange in which all internal units and departments see themselves as customers and suppliers at each other, engaging in constant dialogue with each other. The requirement is collaboration rather than competition. Sixth is reward flexibility where the assumptions underlying reward systems need to be brought out into open. The question of why some receive more money than others is a debate to be brought out in the open. They recommend that alternatives are discussed and tried out but recognizes that this is the most difficult of the eleven characteristics to put in place. These four dimensions are classified under the broad theme of "looking in" (Torrington, 2005).

The seventh one is enabling structures under which roles are loosely structured in line with the needs of internal customers and suppliers, and in a way that allows for personal growth and experimentation. Internal boundaries can be flexible. For example project groups and transient structures help to break barriers between units, provide mechanisms for spreading new ideas and encourage the idea of change, and remove barriers to communication and learning. This dimension is classified under the broad theme of "structures" (Torrington, 2005). Eighth is boundary workers as environmental scanners: All members (e.g. sales staff) who have contact with external customers, suppliers, clients representatives of the community, neighbors of organization and so on should systematically collect and carry back information that is then correlated and disseminated. Involves bench marking and seeing what rival organizations are doing.

The ninth one is inter-company working: In seeking to please customers, there will be attempts to engage in mutually advantageous learning activities such as training, job exchange, strategic alliances, research and development. They suggest that benchmarking can be used to learn from other companies. These two dimensions are classified under the broad theme of "looking out" (Torrington, 2005).

Tenth is learning climate under which a climate that encourages experimentation- trying out new ideas and new ways of doing things, learning from experience, questioning current ideas, attitudes, and actions, and trying new ideas. There is recognition that mistakes can be done because not all ideas will work. There is focus on continuous improvement and the involvement of customers, suppliers and neighbors is encouraged. A learning climate suggests that feedback from others is continually requested, is made available and is acted upon.

Finally, there are self development opportunities for all: resources and facilities for self development are made available to all members of the organization. Coaching, mentoring, peer support, counseling, feedback and so on must be available to support individuals in their learning. These two dimensions are classified under the broad theme of "learning opportunities" (Torrington, 2005).

2.4.7 Learning culture, processes and tools

Farago and Skyrme (1995) contend that learning organizations are those that have in place systems, mechanisms and processes, that are used to continually enhance their capabilities and those who work with it or for it, to achieve sustainable objectives - for themselves and the communities in which they participate. They list four elements that create learning organizations: learning culture, processes, tools and techniques and skills and motivation.

These elements are: learning culture which means an organizational climate that nurtures learning and has characteristics akin to those of an innovative culture; processes that encourage interaction across boundaries and include: infrastructure, development and management processes, as opposed to business operational processes; tools and techniques or methods that aid individual and group learning, such as creativity and problem solving techniques; and skills and motivation required for learning and adapting (Farago & Skyrme, 1995).

Additionally, Farago and Skyrme (1995) identified certain factors may also inhibit the ability of organizations to progress to becoming learning organizations. Such factors include: operational/fire fighting preoccupation, being too focused on systems and process to exclusion of other factors, reluctance to train (or invest in training), too many hidden personal agendas, too top-down driven, over tight supervision or lack of real empowerment

2.4.8 Learning teams, strategies and systems

In examining the connection between self-directed learning and the learning organization, Cho (2002) argues that today's climate of rapid change puts pressure on organizations to becoming learning organizations in order to meet rapidly emerging challenges. He groups the characteristics of the learning organization into two categories: learning strategies, which are the types of learning, such as individual, team and organizational learning; and systems to capture that learning, which focus on the environment, and are created to support learning strategies. He emphasizes the concepts of self-directed learning, normally seen as an avenue for personal growth, as key to the learning organization model.

From a different lens, Clutterback (2002) comments that academics and managers tend to see the learning team as the critical link between the learning organization and the learning individual. He identifies six basic team types (stable, hit, evolutionary, virtual, development alliances and cabin crew teams) and posits that "job demands focus attention primarily on task achievement. The leaner the team, the less opportunity for learning, particularly away from work since reflective time, which and if it's available, is used to solve today's urgent issues, rather than learning for tomorrows. He questions whether teams in learning to function, do they really benefit from what they gain in the process. This is the key concept that distinguishes the learning organization from the functional team.

2.4.9 Creating continuous learning opportunities

Watkins and Marsick (1996, 1993) for example have identified seven principal dimensions associated with achieving learning organization status. They argue that learning organizations create continuous learning opportunities, promote inquiry and dialogue, encourage collaboration and team learning, establish systems to capture and share learning, empower people towards a collective vision, connect the organization to its environment, and have leaders who model and support learning. The culture element of a learning organization consist of a market orientation and entrepreneurship and is characterized by facilitative leadership, an organic and open structure and a decentralized approach to planning (Slater & Narver, 1995).

Daft (2004) suggested that a learning organization involves five main elements: horizontal organizational structure, information sharing, adaptive culture, collaborative strategy and employee empowerment. This model is quite closely related to that of Robbins and Coulter (2005) that has the following four dimensions of a learning organization: Boundary-less organizational design; information sharing; collaborative leadership; and strong organization culture based on mutual relationship, sense of community, caring, trust.

2.5 Criticisms on learning organization

Ortenblad (2002) in his critique of literature on learning organization categorizes the literature on learning organizations into a functionalistic perspective and an interpretive paradigm and also looks at the criticism of it. He argues that for some of the changes inherent in the learning organization to occur, there is need for major societal changes first, but he sees potential for major changes to occur as the power is disseminated to the employees, and looks at the possibilities of overthrowing the existing system.

Owenby (2002) argues that the "dark side" of the learning organization may arise especially with regards to power play in organizations. He posits that there are four types of networks that are important in these power relations: vertical where staff direct and linearly plan the learning activities of employees, horizontal defined as "an egalitarian, problem focused community of learners attempting to solve problems, external where practices are directed by professional organizations outside the organization, and liberal in which employees direct their own learning. He opines that the popularly projected learning organization can only thrive in the horizontal setting and there exists a big gap between the theory and practice.

2.6 Organization performance

According to Kennerley and Neely (2002), organization performance is key and should be managed so that a dynamic and relevant set of performance measures can be maintained, reflecting an organization's changing requirements. In this case, organizations should have a clear understanding of the factors, both internal and external to the organization, that facilitate and inhibit the introduction of new measures, the modification of existing measures and deletion of obsolete measures.

A review of literature on organizational performance reveals that there is no single universally accepted measure that can be applied in assessing the overall organizational performance. This is buoyed by the fact that by the early 1980s, there was a growing realization that, given the increased complexity of organizations and the markets in which they competed, it was no longer appropriate to use financial measures as the sole criteria for assessing success

There are numerous performance measurement models that have been advanced over the last two decades by various scholars. These models have focused on themes such as growth, productivity, innovation, profitability, productivity, efficiency, effectiveness, as well as adaptability. There appears to be consensus that assessment of organization performance should be undertaken cognizant of the organizational goals (Robbins & Coulter 2005; Daft, 2004). Additionally, there is recognition that the interests of various stakeholders should be taken into account as opposed to the traditional focus on shareholders (Freeman, 1994; Atkinson et al, 1997; Weerakon, 1996).

Indeed, Kottler (2000) suggests that four dimensions are essential in the determination of corporate performance. These are stakeholders, internal process, resources and organizational management. This is in tandem with Robbins (1998) model of organizational effectiveness that focuses on four dimensions: profit maximization, organizational ability to acquire inputs and transform them successfully into outputs, maintaining stability and balance, and identifying and satisfying customers' needs.

Perhaps the most popularized model of measuring organizational performance is Kaplan & Norton (1992, 1993, 1996)'s Balanced Scorecard – BSC that emphasizes four interdependent dimensions: financial performance, customer service, internal processes and people/ innovation/growth. Nevertheless, there are other frameworks that have been used such as Kennerley and Neely (2000)'s performance prism and Lynch and Cross (1991)'s SMART pyramid. The overall objective of these multidimensional frameworks is to help organizations define a set of measures that reflects their objectives and assesses their performance appropriately.

2.7 Learning organization and organizational performance

Recent research appears to lend credence to the notion that organization learning is a mechanism to improve organization performance. According to Appelbaum and Reichart (1997), it is only by individual learning and applying learning that organization learns and enhances performance. Individual learning and organizational learning are distinguished by Hodgkinson (2000) who defines organization learning as "coming together of individuals to enable them support and encourage each other's learning which will be in the long run be of benefit to the organization" and individual learning as "an activity that is experienced by all individuals within an organization" (Hodgkinson,2000). Njuguna (2009) argues through organizational learning a firm can develop hard to imitate knowledge resources and capabilities (human capital as well as organizational capital) that create value which in turn lead to superior performance.

Despite the attempts to understand the relationship between learning organization and various organizational outcomes, evidence is still scanty. There is little empirical evidence in literature that shows how the characteristics of learning organization affect organizational outcomes (Jashapara, 2003). This resonates well with Yeo (2002) assertion that empirical research demonstrating the relationship between a learning organization and organization performance is limited.

Incredibly, authors have taken the challenge hands on and are addressing this issue of lack of evidence. For instance; Ellinger, Ellinger, Yang and Howton (2002) reviewed characteristics of learning organizations and found positive statistical relationships between managers' perceptions of learning-organization characteristics in their workplace and their firms' financial performance. Additionally, Jashapara (2003), and Wandera (2008) found positive relationships between learning organization characteristics and organization performance.

Md.Som and Nam (2009) examined the relationship between various organizational learning attributes and organizational performance in the context of not for profit organizations. This study revealed that among the essential organizational learning attributes, organizational learning practices have a strong positive relationship with their organizational performance. Harrim (2008) examined the relationship between learning organization and organizational performance. His study revealed that there was a positive relationship between each of the six dimensions of the learning organization and learning/growth/innovation scale. These findings were in conformity with those of Ellinger, Ellinger, Yang, and Howton (2002) and Jashapara (2003) who found positive relationships between learning organization characteristics and organizational performance.

Similarly, Wandera (2008) examined the relationship between organisation learning and performance amongst insurance and reinsurance companies in Kenya and found that there was a positive relationship. The study established that insurance and reinsurance companies in Kenya greatly depend on chief executive to take responsibility for driving change through organisation learning and that organisational financial performance is leveraged by organisational learning.

Kangethe (2007) undertook a study on the influence of learning organisation on job satisfaction specifically focussing on the organisations for disabled persons. The study established that majority of the organisations for disabled persons have embraced the practices of learning organisation to a moderate extent and this has influenced job satisfaction of employees in these organisations. Positive relationship between organisation learning and job satisfaction had also been empirically proven in researches carried out by Kelly et al (2007) and Chang and Lee (2007).

According to Kontoghiorghes, Awbrey & Feurig (2005) systemic interventions that address a variety and different combinations of learning organization characteristics will be more likely to be successful than interventions that solely focus on singular or a limited number of dimensions. In their view, the structural, cultural dimensions of an organization have significant effect on performance. The transformation of the organizational structure into an organic one, and in turn changing the organizational culture accordingly, should be the first critical step when building the learning organization. This is in contrast to the approach typically applied when attempting to build a learning organization where, often enough, creating a continuous learning environment and knowledge dissemination is the primary focus of many learning organization interventions. From their study, the following learning organization characteristics were found to be the strongest predictors of rapid change adaptation, quick product or service introduction, and bottom-line organizational performance: open communications and information sharing; risk taking and new idea promotion; and information, facts, time, and resource availability to perform one's job in a professional manner.

2.8 The Conceptual Framework

The framework of this study was based on quantitative survey measures that have been undertaken in the recent past, specifically borrowing from the model on the Dimensions of the Learning Organization Questionnaire (DLOQ) developed by Watkins and Marsick (1996) and tested subsequently through various empirical studies (Asadi, et al 2009; Hishamuddin, 2009; 2008; Harrim, 2008; Kangethe, 2007; McCaffrey, 2004).The framework model used for this study is shown in figure 1. This model integrates the core dimensions of the learning organization and core measures of organization performance based on literature review.

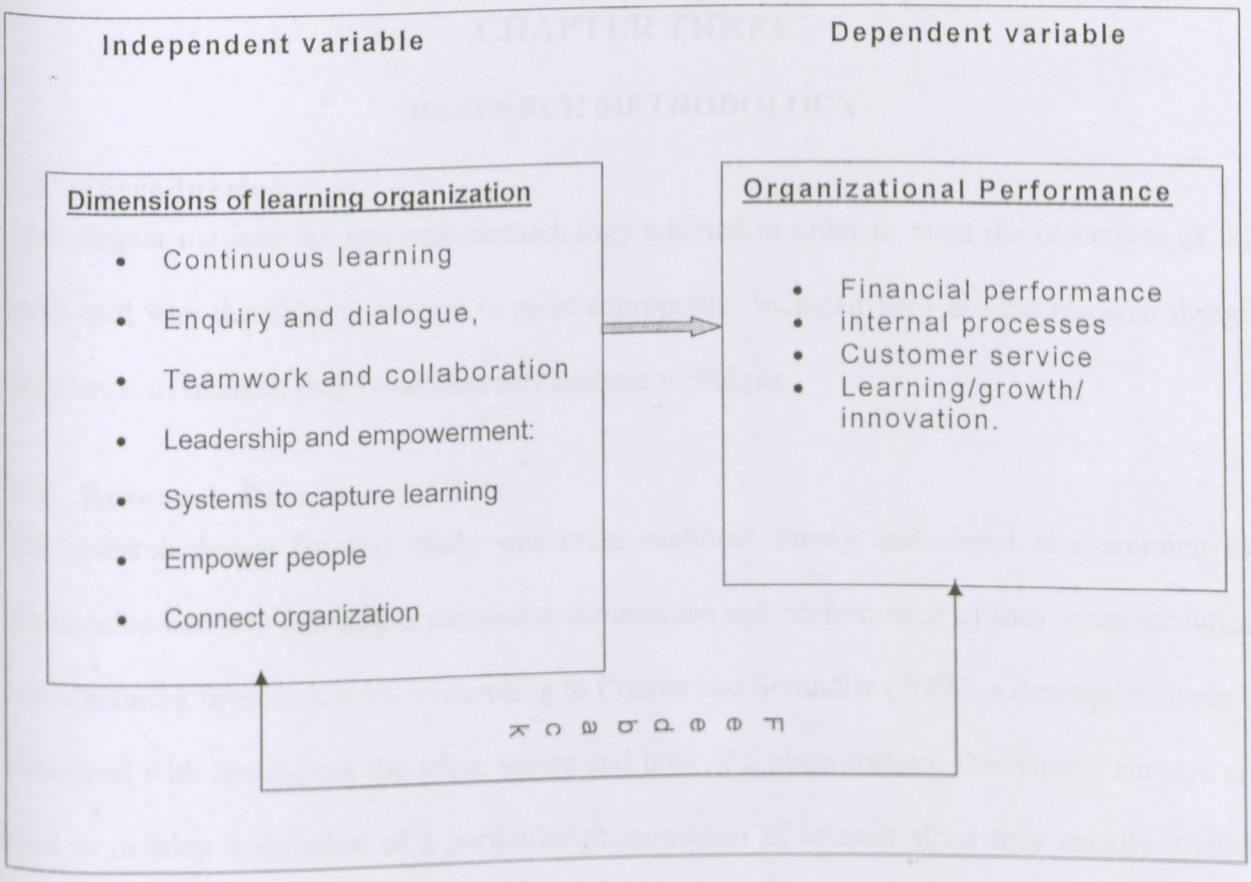

Figure 1: Conceptual Model of the Relation between Learning Organization and Organizational Performance

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology adopted in order to meet the objectives of this study and why the chosen method is most appropriate. Included here are the research design, population of interest, data collection and analysis technique.

3.2 Research Design

The research design for this study was cross sectional survey and aimed at examining the relationship between learning organization dimensions and performance of local pharmaceutical manufacturing firms in Kenya. According to Cooper and Schindler (2006), a descriptive study is concerned with finding out the what, where and how of a phenomenon. Descriptive surveys are used to develop a snapshot of a particular phenomenon of interest since they usually involve large samples.

The focus of descriptive research is the careful mapping of circumstances, situation or set of events to describe what is happening or what happened (Cooper, 2006). Churchill (1991) notes that a descriptive study can be used when the purpose is to: describe the characteristics of certain items, estimate proportions of people who behave in certain ways and make specific predictions. The study was also exploratory in nature because the researcher was not aware of related studies undertaken in Kenya.

3.3 Population of study

According to Mugenda and Mugenda (1999), a population is an entire group of individuals with observable characteristics and a target population is that population to which a researcher wants to generalize the results of the study.

The target population elements for this study are all locally owned pharmaceutical manufacturing firms in Kenya. According to the web-site of the Kenya Association of Manufacturers, there are 20 member companies described as Pharmaceutical and Medical Equipment Manufacturers, these are listed in appendix 2. Further, the Kenya's Pharmaceutical Industry report (2005) prepared by the Export Processing Zones Authority lists the 20 pharmaceutical manufacturing companies in Kenya.

Notably, a number of companies manufacture drugs elsewhere, mostly in India, and have ethical drugs registered with the Pharmacy and Poisons Board (PPB) which they distribute throughout Kenya and East Africa (Stopler, 2009). These companies are members of the Kenya Manufacturers Association (KMA) and for the purposes of this study have been regarded as Kenyan pharmaceutical manufacturer.

3.4 Data collection

A structured self administered questionnaire was utilized as the main data collection instrument. The questionnaire had both open and close-ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The open ended questions provided additional information that may not have been captured in the close-ended questions. This study used the approach of drop and pick questionnaires distributed among staff selected from top level management of the local pharmaceutical manufacturing companies in Kenya.

A total of three questionnaires were distributed to each of the targeted organization and therefore the study targeted a total of 69 respondents. The targeted respondents were top level managers of the pharmaceutical companies (CEOs, general managers or their delegated respondents). This was informed by the fact that they are the key decision-makers in corporate operations, policy setting and programs execution as well as overall organizational evaluation. Additionally, the targeted respondents were deemed to have access to corporate financial information and service standards that are of paramount importance to this study.

3.4.1 Instrument of the study

A questionnaire was used to gather information from respondents and comprised two key sections. The instrument applied was the "Dimensions of The Learning Organization Questionnaire" (DLOQ) (Watkins & Marsick 2003). This tool measures system level learning culture (Watkins & Marsick 2003). Respondents were asked to respond to a series of six point Likert type questions that measured their perceptions of the presence of the seven learning organization's dimensions. The Likert type scales ranged from 1(almost never) to 6 (almost always). Such Questionnaires with Likert type scales have been included successfully in previous studies such as, in Wandera (2008) study of organizational learning in Insurance Industry. The first part of the instrument included (43) statements representing the 7 core dimensions of a LO, as follows: Systems thinking, Shared vision, Teamwork and collaboration, Leadership and empowerment: Statements, Organizational Culture, Learning environment and knowledge transfer. The second part of the questionnaire focused on organizational performance, and included (12) statements covering four performance measures, based on balanced scorecard, as follows: financial performance, internal processes, Customer service, Learning / growth / innovation.

Several reasons informed the selection of this measure (the DLOQ tool). Firstly, this particular instrument has also been used in a number of studies (Asadi,et al 2009; Hishamuddin,2009; Harrim,2008; Kangethe, 2007; McCaffrey,2004; Ellinger, et al 2003; Ellinger et al 2002; Egan, Yang & Bartlett 2004). Secondly, the selected instrument has been rigorously tested and refined (McCaffrey, 2004). The cronbach coefficient alpha reliability estimates for the four dimensions ranged from .80 to .87 and the overall reliability for the scale were acceptable at .96, (Yang 2003) which is well above the Hinkin (1998) recommended alpha of .70 (Yang, Watkins & Marsick 2004). Thirdly the instrument was developed by well known learning organization authors who were informed by many years of theory development and empirical research (Watkins & Marsick 2003).

3.5 Data analysis

Upon receipt of each returned questionnaire, a number was allocated and the questionnaire was checked for missing or incomplete data. The questionnaire data was entered into SPSS that followed the questionnaire sequence. Following this the variables were labeled and then validated to check for data entry accuracy. Any inaccuracies that were found were obvious errors. In all these instances, the questionnaire was retrieved, checked and appropriate adjustments made. The data was then assessed for missing data. Data obtained from the Likert type scale was analyzed as per the identified factor using descriptive statistics. A further analysis was done using inferential statistics. Pearson's correlation coefficient was used to analyze the relationship between the learning organization and organization performance.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter presents the results of the study on the relationship between leaning organization dimensions and performance of local pharmaceutical manufacturing companies in Kenya. The findings are presented in tables, percentages, means and standard deviations have been used to summarize the data. Pearson product moment correlation coefficient is used to test the strength of the relationship between learning organization dimensions and performance.

4.2 Response Rate and respondents profile

The study was designed as a census survey and the respondents were chief executives, general managers, production managers and company pharmacists of 20 local pharmaceutical manufacturing companies in Kenya. 80 questionnaires were distributed and 57 were returned by 14 firms thus achieving a response rate of 71%. Of the 57 respondents, 13 representing 22% were pharmacists in management. Additionally, 26 respondents representing 45% indicated that they had participated in management training or a management development programme. All the responding organizations have staff complement of between 120 and 300 with an average of 184.

4.3 Dimensions of learning organizations

This research sought to identify the extent to which the local pharmaceutical firms exhibit dimensions of learning organizations. Seven core dimensions of a Learning Organization were gleaned from the literature review namely continuous learning, enquiry and dialogue, collaboration and team learning, systems to capture learning, empowering people, connecting organization, and leadership.

Each of these broad dimensions was operationalised into specific statements and the respondents were asked to rate each on a 6-point Likert type scale in terms of the extent to which their organization exhibited the dimension. The scale was given values, ranging from 1 to 6 with 1 representing the lowest presence of the dimension and 6 representing the highest presence of the dimension. The means and standard deviations of each of the dimensions were examined as tabulated below.

Table 1: Extent to which the pharmaceutical firms exhibit dimensions of a Learning Organization (Means and Standard Deviations of Participants' Responses to Variables of Learning organization)

	Description	Mean($\bar{X}$)	SD
	Continuous Learning	**3.96**	**1.29**
1	People openly discuss mistakes in order to learn from them.	3.91	1.23
2	People identify skills they need for future tasks.	3.96	1.10
3	People help each other learn.	4.26	1.65
4	People can get funding and other resources to support their learning.	3.88	1.11
5	People are given time to support learning.	3.93	0.69
6	People view problems in their work as an opportunity to learn.	4.02	1.15
7	People are rewarded for learning.	3.84	1.78
	Enquiry and Dialogue	**4.75**	**2.03**
8	People give open and honest feedback to each other.	4.32	2.02
9	People listen to others' views before speaking.	4.51	1.81
10	People are encouraged to ask 'why' regardless of position.	4.61	1.88
11	Whenever people state their view, they also ask what others think.	4.93	1.19
12	People treat each other with respect.	5.33	1.83
13	People spend time building trust with each other.	4.81	1.64
	Collaboration and team learning	**4.79**	**1.08**

	Description	Mean($\bar{X}$)	SD
14	Teams/groups have the freedom to adapt their goals as needed.	5.07	0.79
15	Teams/groups treat members as equals, regardless of position.	4.40	0.69
16	Teams/groups focus both on the group's task and on how well the group is working.	4.74	0.55
17	Teams/groups revise their thinking as a result of group discussions or information collected.	5.00	1.30
18	Teams/groups are rewarded for their achievement as a team/group.	4.89	0.57
19	Teams/groups are confident that the organization will act on their recommendations.	4.61	1.68
	Systems to capture learning	**3.96**	**1.05**
20	Two-way communication used on a regular basis, such as open meetings.	4.21	0.47
21	People enabled to get needed Information at any time quickly and easily.	4.18	0.41
22	An up-to-date database of employee skills is maintained.	3.53	1.61
23	Systems to measure gaps between current and expected performance are created.	3.79	0.57
24	Lessons learnt made available to all employees.	3.79	0.47
25	The results of the time and resources spent on training are measured.	4.30	1.40
	Empower people	**4.23**	**1.61**
26	People are recognized for taking initiative.	4.25	1.23
27	People are given choices in their work assignments.	4.16	1.18
28	People are invited to contribute to the organization's vision/goals.	4.84	1.58
29	People given control over the resources they need to accomplish their work.	4.26	0.65
30	Employees who take calculated risks are supported.	3.68	0.92
31	Alignment of visions/goals across different levels and work groups is built.	4.21	2.17
	Connect Organization	**4.34**	**1.47**

	Description	Mean($\bar{X}$)	SD
32	Employees are helped to balance work and family.	4.47	1.51
33	People are encouraged to think from a global perspective.	4.37	0.66
34	Everyone is encouraged to bring the consumer's perspective into the decision making process.	4.70	2.00
35	The impact of decisions on employee morale is considered.	4.79	0.47
36	Works together with the outside community to meet mutual needs.	3.84	1.18
37	People are encouraged to get answers from across the organization when solving problems.	3.86	0.64
	Leadership	**4.64**	**1.95**
38	Leaders generally support requests for learning opportunities and training.	4.39	1.08
39	Leaders share up-to-date information about industry trends and organizational directions.	4.28	2.58
40	Leaders empower others to help carry out the organization's vision/goals.	4.63	2.66
41	Leaders mentor and coach those they lead.	4.58	1.59
42	Leaders continually look for opportunities to learn	5.04	1.30
43	Leaders ensure that the organization's actions are consistent with the values.	4.95	1.24

The table above presents the means ($\bar{X}$) and the standard deviations (s) of the responses of the research respondents to the statements of the independent variable (the Learning Organization). This research established that respondents view their firms as moving well towards building Learning Organization, with an overall mean of 4.381. Most of the variables/ statements scored a mean above the mean of the scale (4); only a few statements scored a mean below (4).

Table 2: Extent to which the pharmaceutical firms exhibit dimensions of a Learning Organization (Summary)

	Description	Mean($\bar{X}$)	SD
1	Continuous Learning	3.96	1.29
2	Enquiry and Dialogue	4.75	2.03
3	Collaboration and team learning	4.79	1.08
4	Systems to capture learning	3.96	1.05
5	Empower people	4.23	1.61
6	Connect Organization	4.34	1.47
7	Leadership	4.64	1.95

On Teamwork and collaboration the mean sore was the highest at 4.79, and all variables of teamwork had a mean above (4). Therefore the respondents see their firms as a working collaboratively in teams and interconnected in aiming at achieving results. Further this means that product development projects and programs are not individual-based, but rather team-based structure.

Enquiry and dialogue which are core elements of organization culture had the second highest mean (4.75) though with a significant standard deviation across firms. This meant that the core organizational values, norms and beliefs play a relatively significant role in building Learning Organizations. Leadership and empowerment dimension came third, with a mean of 4.64, which meant that study respondents had a strong feeling that leadership and employee empowerment are an important ingredients in building a Learning Organization. All the variables had a mean above (4). Connect organization came fourth, after leadership and empowerment, with a mean of 4.34, which is still higher than the mean of the scale (3). This meant that respondents had a relatively strong belief that good connection to the external environment contribute to building Learning Organizations.

Systems to capture learning and continuous learning ranked lowest with means of 3.96 each. This meant that the respondents felt strongly perceive their organizations as systems interacting with the external environment, and consisting of interacting and interdependent individuals and units.

For all seven dimensions the mean was between point 3 and point 5 on a six item scale. This therefore suggests that the local pharmaceutical manufacturing companies in Kenya do possess learning organization dimensions characteristics. The seven dimensions can be viewed through the lens of individual, team and organizational level of learning (O'Neill 2003). If this lens was used to view this data, individual level learning, (Continuous Learning and Enquiry and Dialogue) is taking place at each firm albeit with some moderate deviation.

Team level learning (Collaboration and Team Learning) appears to be only slightly different with a small increase in mean and decrease in deviation. The remaining four scales, that represent the organizational level of learning, display similar deviation and include the lowest mean. This data suggests that regardless of the firm size it is possible for local pharmaceutical manufacturing firms to become learning organizations.

Table 3: Means and Standard Derivations of Participants' Responses to Variables of Organizational Performance.

	Description	$\bar{X}$	S
	Financial Performance	**4.241**	**1.042**
44	In my organization, we have achieved greater gains for the same investment.	4.241	1.042
	Internal Processes	**3.992**	**1.221**
45	In my organization, average productivity per employee is greater than last year	4.331	1.072

	Description	$\bar{X}$	S
46	In my organization, the process for delivering services is more efficient than last year.	3.762	1.355
	Customer Service	**4.143**	**1.042**
47	In my organization, response times for customer complaints are better than last year.	4.051	1.437
48	In the past year, the capacity of this organization has increased to meet the needs of our market.	4.357	0.879
49	In my organization, we serve more people for the same Shilling than last year.	4.563	0.723
50	In my organization, consumer satisfaction is greater than last year.	3.875	1.071
	Learning/growth/innovation	**3.652**	**1.053**
51	In my organization, the number of suggestions implemented is greater than last year.	4.272	0.982
52	In my organization, in the past year there has been innovation in the services/products provided.	4.231	1.062
53	In my organization, the percentage of skilled workers compared to the total workforce is greater than last year	2.112	0.462
54	In my organization, the percentage of total spending on technology and information processing is greater than last year.	3.156	1.328
55	In my organization, the number of individuals Learning new skills is greater than last year.	4.285	1.285

The table above shows the means and standard deviations of responses to the statements of the dependent variable (organizational performance). Overall performance of the studied firms was high, as perceived by the research subjects ($\bar{X}$ of 4.00). The scale that scored the highest mean was financial performance with a mean of 4.24 Customer service scale came second, very close to financial performance, with a mean of 4.143. Internal processes scale ranked the third, very close to high, with a mean of 3.99.

The lowest performance assessment by respondents was given to learning/growth with a mean of 3.652, but it is still above the mean of the scale (3).

4.4 Relationship between learning organization and performance

The next stage of analysis examined the data to address the research question : what is the relationship between a learning organization and performance ? Table 4 presents the Pearson correlations for the variables.

Table 3: Pearson Product Moment Correlations Calculations

Independent Variable		Dependent Variable			
		DEPA	DEPB	DEPC	DEPD
IND1	Pearson Correlation	598**	159**	173**	193**
	Sig.(2-tailed)	000	003	001	001
	N	57	57	57	57
IND2	Pearson Correlation	093	283**	330**	310**
	Sig.(2-tailed)	081	000	000	000
	N	57	57	57	57
IND3	Pearson Correlation	649**	931**	907**	917**
	Sig.(2-tailed)	000	000	000	000
	N	57	57	57	57
IND4	Pearson Correlation	643**	954**	926**	926**
	Sig.(2-tailed)	000	000	000	000
	N	57	57	57	57
IND5	Pearson Correlation	821**	839**	842**	812**

Independent Variable		Dependent Variable			
		DEPA	DEPB	DEPC	DEPD
	Sig.(2-tailed)	000	000	000	000
	N	57	57	57	57
IND6	Pearson Correlation	754**	899**	881**	861**
	Sig.(2-tailed)	000	000	000	000
	N	57	57	57	57
IND7	Pearson Correlation	704**	792**	763**	802**
	Sig.(2-tailed)	000	000	000	000
	N	57	57	57	57

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

Table 4: Pearson Correlations Calculations

		IND	DEP
IND	Pearson Correlation	1	959**
	Sig.(2-tailed)	.	000
	N	57	57
DEP	Pearson Correlation	959**	1
	Sig.(2-tailed)	000	.
	N	57	57

** Correlation is Significant at the 0.01 level.

Pearson's Correlation was used to test the relationship between learning organization dimensions and organization performance. From the table above, it was established that there is a relationship between the Learning Organization dimensional characteristics and organizational

performance. Based on Pearson's correlation coefficient, there is a significant positive relationship between the Learning organization and organizational performance, (r = 0.959). The seven core dimensions of the Learning Organization, except shared vision, had significant positive relationship with financial performance of the studied pharmaceutical firms. On the relationship between the Learning Organization and customer service, the researcher established that there was a positive relationship between each of the seven dimensions of the Learning organization and customer service. This is evidenced by the correlation coefficients (r= 0.954, 0.931, 0.899, 0.839) that were found between four of the dimensions of Learning organization and customer service.

The researcher also established that there is relationship between the Learning Organization and internal processes. Correlation coefficients showed a strong positive relationship between four of the dimensions of the Learning Organization and internal processes of local pharmaceutical manufacturing firms, where (r = 0.90) and above. The highest correlation coefficient was found between teamwork/collaboration and internal processes (r = 0.954), followed by the relationship between leadership and empowerment and internal processes (r = 0.931). A relationship was also established between the Learning Organization and growth /innovation. Notably, a positive relationship was found between each of the seven dimensions of the Learning Organization and growth/innovation. Four dimensions of the Learning Organization had significant strong positive relationship with organizational growth / innovation. Only (systems thinking and connect organization) had somewhat weak positive relationship (r = 0.173 and 0.330 respectively).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study's findings suggest that there is a statistically significant relationship between the selected organizational performance variables, and the seven dimensions of the learning organization. As expected all seven dimensions of the learning organization are correlated with each other and as such the results suggest a positive association between learning organization. Most of the variables of the seven dimensions of Learning Organization had a moderately strong positive relationship with all indicators of the four scales of performance. These findings are in consonance with those of (McCaffrey, 2004), and (Wandera, 2008).

The seven dimensions of the Learning Organization, except connect organization, had moderate-strong relationship with financial performance scale. These findings agree with previous researches carried out by (Power and Waddell, 2004) and (Harrim, 2008). Collaboration and team learning dimension had the highest correlation coefficient ($r = 0.821$), followed by learning environment, with $r = 0.754$.

As for the relationship between dimensions of the Learning Organization and customer service, it was found that four scales of the Learning Organization had strong positive relationship with customer service indicators, and the other two scales (systems thinking and shared vision) had weak positive relationship. These findings are fairly consistent with those reported by (Cacioppe, 1998), (Power and Waddell, 2004), and (Yagil, 2002) which emphasized the effect of empowerment on customer satisfaction.

The relationship between dimensions of the Learning Organization and internal processes was not much different from the relationship with customer service. Only systems thinking and shared vision had weak positive relationship, whereas the remaining four dimensions had significant positive relationship. These findings were also consistent with those reported by (Suzik, 1998) and (Bush et al., 1996), and (Kumar and Khairuddin, 2006).

Research findings showed a positive relationship between each of the seven dimensions of the Learning Organization and learning/growth/innovation scale. Five of the dimensions of the Learning Organization had strong positive relationship with learning/growth/ innovation, and the other (2) dimensions-systems thinking and shared vision – had weak positive relationship with learning /growth/innovation. Once again, this is consistent with findings reported by (Shariffudin and Fytton, 2004; Lopez, Peon and Ordas, 2004; De Long and Fahey, 2000; and Hernandez, 2003); which stressed the effect of organizational culture on organizational performance.

5.2 Conclusion

From the findings of this study and the ensuing discussion, it can be concluded that the majority of local pharmaceutical manufacturing firms in Kenya have developed an above moderate level of Learning Organizations, with varying degrees from one core dimension to another. The highest level corresponded to collaboration and team learning dimension, while systems to capture learning got the lowest level. This development of learning organizational attributes has positively influenced their performance.

There are several aspects that definitely do need improvement and these can be gleaned from the few variables that scored below the mode of the scale (4), namely: updating of skills database, sharing lessons learnt with all, supporting calculated risk taking, collaborating with outside communities and tolerating mistakes and discussing them constructively.

The research also revealed that being a learning organization is very important to these firms in helping them improve their performance in terms of customer service, internal processes, innovation and growth as well as financial performance. The research findings indicated rather strong positive relationship between Learning Organization and organization performance at Kenyan local pharmaceutical manufacturing firms. The research offers support for the business case for learning organizations (Ellinger et al.2002). The positive association noted between learning organization concept and firm performance suggests there is a recompense for firms that embrace learning organization practices. Obviously the pharmaceutical industry is under continual pressure to improve performance and this study has demonstrated that incorporating learning organization dimensions into local pharmaceutical firms could be very key mechanism to lever performance.

5.3 Recommendations

Managers and employees should recognize that knowledge has become a vital source of sustainable competitive advantage. They should exert continuous efforts in maintaining and nourishing continuous learning in order to attain steady high performance levels. Special emphasis must be placed on: tolerating mistakes and constructive discussion, encouraging trial and experimentation, innovation, expanding use of team- based structures (cross-functional and cross hierarchical), management must accept criticism, encouraging and nurturing mutual trust.

Additionally, they should create openness, establish constant contacts with various stakeholders, and extend learning and knowledge sharing throughout the whole company.

In order to achieve the above, local pharmaceutical manufacturing firms should regularly undertake organizational analysis to identify specific problems and forces that stand in their way to becoming learning organization. Additionally, they should undertake analysis to understand what factors, other than those in this study promote and enhance learning.

5.4 Suggestions for Further Study

This study has provided useful insights that are worthwhile replicating in other sectors in Kenya so as to build empirical evidence on learning organization and relationship with various constructs. Studies could be carried out in the pharmaceutical sector also looking at the relationship between learning organization dimension and other variables such as innovation, adaptability and information technology adoption. Similarly, other instruments may be used to test the relationships. Definitely, case studies would provide deeper and detailed insights on organizational learning processes of the firms studied.

5.5 Limitations of Study

While the findings of this study have both theoretical and practical implications, the several methodological limitations must be acknowledged. Firstly, the research was carried out in Kenya and focused on local pharmaceutical manufacturing firms only, and therefore, the findings are likely to have limited application to other sectors and countries. Secondly, only one method for data collection (questionnaire) was utilized and people responded on a self-selected basis, therefore the issue of non-response bias is a possibility (Dooley & Lindner 2003).

Moreover, perceptions were gathered from senior management within targeted firms, lower cadre staff may obviously have had different perspectives as suggested by Schein (1996). To overcome this limitation more research using a different technique is needed. Finally, all of the data collected was based on self-reports instead of objective measurers of performance. Like most other survey studies this approach may inflate parameter estimates (Egan, Yang & Bartlett 2004).

Caution should therefore be applied generalizing the results of this study. The research should be seen as a starting point for research in the Learning Organization in the pharmaceutical industry. It is anticipated that this study will rekindle interest and research in the pharmaceutical and other areas. Future research should use multiple research methods for data collection in order to obtain deeper and more reliable data. Finally, research should involve stakeholders, other than employees, in assessing organizational performance, such as customers and owners.

5.6 Implications on policy and practice

On individual learning, the study revealed that all dimensions were present in the local pharmaceutical manufacturing industry, although disparities were noted between firms

Individual learning is vital for sustainability and progress towards becoming a learning organization. People perceive they are given an opportunity to learn and can discuss mistakes with immediate colleagues. This is an important finding for the pharmaceutical industry as, given an environment of significant competition and need for innovation, individual learning is occurring. However the mean score does indicate an opportunity for improvement for this level of learning, so the journey towards a learning organization can only be progressed if this learning is enhanced. Definitely managers need to continue to actively seek out and provide opportunities for individual learning to occur.

Regarding team learning, the study noted that it was occurring and the mean score was even higher than that for individual learning. This too, is an important finding as it is only at the team level that systematic improvements begin. To further leverage on the benefits of team learning managers would need to provide further development opportunities for team skills and communication. Further studies on the team learning disparities and the impact would shed more light on such factors as influence of the particular manager of the team. Such information would be relevant for incorporation in managerial development programs and other training activities.

On the organization level of learning, the results were rather sporadic. These variables are contingent on the more deeply structured learning that is vital for sustaining and improving the current learning environment. Learning and knowledge acquisition can only offer benefits if the knowledge is captured and shared, not only within the pharmaceutical firms, but also with other stakeholders who are relevant. Innovation requires such knowledge. Managers and leaders should therefore consider entrenching systemic learning and retaining such learning. This could start with the design and integration of systems and processes that enable learning and the subsequent retention of knowledge.

Another overarching dimension is that of leadership as evidenced by the study. Interestingly, other previous studies on learning organizations did find strong relationship between on financial performance and leadership (McHague 2003). As such leaders who are committed to learning will not only reap rewards in learning but also organizational performance. Notably, it would be important to carry out further studies to understand deeper how participants perceive their leaders and how this interpretation is aligned to the dimension on team collaboration, facilitation and learning.

Acknowledging that it is leaders who are empowered to address systematic learning organization deficiencies, the results lend credence to the fact that leaders especially those at the top do support learning and can facilitate the design of strategies that will ensure the pharmaceutical firms do progress towards learning organizations.

The findings for this study also have several important implications for human resource development practice. They results do reinforce the notion that systemic interventions that address a variety and different combinations of learning organization characteristics are more likely to be successful in improving performance than interventions that purely focus on one or limited dimensions. However, the results of this study further imply that when it comes to performance, transforming the structural and cultural dimensions of the learning organization approach should be granted the first priority. This is in tandem with creating a continuous learning environment and knowledge dissemination.

The importance of understanding how the concept of the Learning organization can affect the Organization becomes more critical and can be mostly appreciated by management when it is seen as one of the most important sources for creating a sustainable competitive advantage. Leaders and managers need to understand that they have to cope with a rapidly changing business environment and increasing customer needs. In such an environment, learning is probably the most critical core competence that leads to sustainable advantage, since it is not readily imitable and can help organizations respond to changes when they are really needed. Therefore managers should continuously focus on the seven dimensions in building a learning organization. Through development of strategies and policies that in line with those practices and dimensions.

There is also need for managers to comprehensively appreciate the relationship between the concept of Learning Organization and firms performance and identify how human resource practices that promote and sustain learning as noted that learning practices influence performance from various perspectives.

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APPENDICES

Appendix 1: Survey Instrument

Learning in Organizations

Thank you for taking the time to answer this survey. This survey is being conducted in the strictest confidence and no organization or individual will be identified in the final results. Your candid answers will benefit everyone involved or interested in learning in organizations.

Instructions

Please place a tick √ or X in the box that reflects your view and write your answers in the space provided. Please answer every question; there are no right or wrong answers.

PART A. ABOUT YOU

1. Which of the following 5 categories best describes your role?

1.Senior Management		**2.Middle Management**		**3. Supervisory**	
4.Non-management-Pharmacist		**5. Non-management –non Pharmacist**			

2. Have you ever participated in management training or a management development program?

1.YES		**2. NO**	

PART B. ABOUT YOUR DEPARTMENT

	Description	Never	Almost Never	Rarely	Sometimes	Almost Always	Always
1	In my department, people openly discuss mistakes in order to learn from them.	1	2	3	4	5	6
2	In my department, people identify skills they need for future tasks.	1	2	3	4	5	6
3	In my department, people help each other learn.	1	2	3	4	5	6
4	In my department, people can get funding and other resources to support their learning.	1	2	3	4	5	6
5	In my department, people are given time to support learning.	1	2	3	4	5	6
6	In my department, people view problems in their work as an opportunity to learn.	1	2	3	4	5	6
7	In my department, people are rewarded for learning.	1	2	3	4	5	6
8	In my department, people give open and honest feedback to each other.	1	2	3	4	5	6
9	In my department, people listen to others' views before speaking.	1	2	3	4	5	6
10	In my department, people are encouraged to ask 'why' regardless of position.	1	2	3	4	5	6
11	In my department, whenever people state their view, they also ask what others think.	1	2	3	4	5	6
12	In my department, people treat each other with respect.	1	2	3	4	5	6
13	In my department, people spend time building trust with each other.	1	2	3	4	5	6
14	In my department, teams/groups have the freedom to adapt their goals as needed.	1	2	3	4	5	6

	Description	Never	Almost Never	Rarely	Sometimes	Almost Always	Always
15	In my department, teams/groups treat members as equals, regardless of position.	1	2	3	4	5	6
16	In my department, teams/groups focus both on the group's task and on how well the group is working.	1	2	3	4	5	6
17	In my department, teams/groups revise their thinking as a result of group discussions or information collected.	1	2	3	4	5	6
18	In my department, teams/groups are rewarded for their achievement as a team/group.	1	2	3	4	5	6
19	In my department, teams/groups are confident that the department will act on their recommendations.	1	2	3	4	5	6
20	My department uses two-way communication on a regular basis, such as open meetings.	1	2	3	4	5	6
21	My department enables people to get needed Information at any time quickly and easily.	1	2	3	4	5	6
22	My department maintains an up-to-date database of employee skills.	1	2	3	4	5	6
23	My department creates systems to measure gaps between current and expected performance.	1	2	3	4	5	6
24	My department makes its lessons learnt available to all employees.	1	2	3	4	5	6
25	My department measures the results of the time and resources spent on training.	1	2	3	4	5	6
26	My department recognizes people for taking initiative.	1	2	3	4	5	6
27	My department gives people choices in	1	2	3	4	5	6

	Description	Never	Almost Never	Rarely	Sometimes	Almost Always	Always
	their work assignments.						
28	My department invites people to contribute to the department's vision/goals.	1	2	3	4	5	6
29	My department gives people control over the resources they need to accomplish their work.	1	2	3	4	5	6
30	My department supports employees who take calculated risks.	1	2	3	4	5	6
31	My department builds alignment of visions/goals across different levels and work groups.	1	2	3	4	5	6
32	My department helps employees balance work and family.	1	2	3	4	5	6
33	My department encourages people to think from a global perspective.	1	2	3	4	5	6
34	My department encourages everyone to bring the consumer's perspective into the decision making process.	1	2	3	4	5	6
35	My department considers the impact of decisions on employee morale.	1	2	3	4	5	6
36	My department works together with the outside community to meet mutual needs.	1	2	3	4	5	6
37	My department encourages people to get answers from across the organization when solving problems.	1	2	3	4	5	6
38	In my department, leaders generally support requests for learning opportunities and training.	1	2	3	4	5	6
39	In my department, leaders share up-to-date information about industry trends and organizational directions.	1	2	3	4	5	6
40	In my department leaders empower others to help carry out the department's	1	2	3	4	5	6

	Description	Never	Almost Never	Rarely	Sometimes	Almost Always	Always
	vision/goals.						
41	In my department, leaders mentor and coach those they lead.	1	2	3	4	5	6
42	In my department, leaders continually look for opportunities to learn	1	2	3	4	5	6
43	In my department, leaders ensure that the department's actions are consistent with the values.	1	2	3	4	5	6

PART C. ABOUT YOUR ORGANISATION

In this section we ask you to reflect on your view of the performance of your organization. Based on your experience and perception please rate the extent to which you believe each statement is accurate about your organization's current performance when compared to the previous year.

	Description	Not very true	Not true	Probably not true	Probably true	True	Very true
44	In my organization, we have achieved greater gains for the same investment.	1	2	3	4	5	6
45	In my organization, average productivity per employee is greater than last year	1	2	3	4	5	6
46	In my organization, the process for delivering services is more efficient than last year.	1	2	3	4	5	6
47	In my organization, response times for customer complaints are better than last year.	1	2	3	4	5	6

	Description	Not very true	Not true	Probably not true	Probably true	True	Very true
48	In the past year, the capacity of this organization has increased to meet the needs of our market.	1	2	3	4	5	6
49	In my organization, we serve more people for the same shilling than last year.	1	2	3	4	5	6
50	In my organization, consumer satisfaction is greater than last year.	1	2	3	4	5	6
51	In my organization, the number of suggestions implemented is greater than last year.	1	2	3	4	5	6
52	In my organization, in the past year there has been innovation in the services/products provided.	1	2	3	4	5	6
53	In my organization, the percentage of skilled workers compared to the total workforce is greater than last year	1	2	3	4	5	6
54	In my organization, the percentage of total spending on technology and information processing is greater than last year.	1	2	3	4	5	6
55	In my organization, the number of individuals Learning new skills is greater than last year.	1	2	3	4	5	6

56. Approximately how many employees are in your organization?

_____

_____

PART D. YOUR EXPERIENCE

In this section we ask you to share your views on learning in your organization.

57. Think about your workplace. In what ways has your workplace had an impact upon the skills and knowledge that you have learnt?

_____

_____

58. What has prevented you from trying out new skills that you have learnt?

_____

_____

59. What has encouraged you to try out new skills that you have learnt?

_____

_____

60. In your opinion what are the influences in the pharmaceutical industry that prevent or encourage learning?

_____

_____

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Appendix 2: Complementary Letter to the Respondents

University of Nairobi
School of Business
PO Box 30197,
Nairobi.
Telephone +254 020 732160

Date _____

To Whom It May Concern:

The bearer of this letter_____Registration number _____.Telephone_____is a Master of Business Administration (MBA) student at the University of Nairobi.

The student referred to above is required to undertake research on an identified topic on the relationship between learning organization and performance of pharmaceutical manufacturing firms in Kenya.

We would therefore appreciate your assistance in enabling the student to collect data. All information collected will be treated as confidential by researchers. The results of this study will be used solely for the purpose of academic research and in no way will your organization be implicated in the research findings.

A copy of the report would be availed to the interviewed organization upon request.

Thank you.

The Coordinator, MBA Program.

Appendix 3: List of local Pharmaceutical Manufacturing Firms

1. Alpha Medical Manufacturers
2. Beta Healthcare (Shelys Pharmaceuticals)
3. Cosmos Limited
4. Dawa Pharmaceuticals Limited
5. Didy Pharmaceutical
6. Diversey Lever
7. Eli Lilly (Suisse) SA
8. Elys Chemical Industries Limited
9. High Chem East Africa Limited
10. Ivee Aqua EPZ Limited Athi River
11. Mac's Pharmaceutical Limited
12. Manhar Brothers (Kenya) Limited
13. Novartis Rhone Poulenic Limited
14. Novelty Manufacturers Limited
15. Pfizer Corp (Agency)
16. Pharmaceutical Manufacturing Co (K) Limited
17. Pharmaceutical Products Limited
18. Phillips Pharmaceuticals Limited
19. Regal Pharmaceutical Limited
20. Universal Pharmaceutical Limited

Source: Kenya Association of Manufacturers web site (June 2010)