

**EFFECT OF ORGANIZATIONAL LEARNING ON PERFORMANCE OF FOOD
MANUFACTURING FIRMS IN NAIROBI COUNTY, KENYA**

BY

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**A Research Project Submitted to Graduate School in Partial Fulfillment of the
Requirements for the Award of the Degree of Master in Business Administration of
Egerton University**

EGERTON UNIVERSITY

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DECLARATION AND RECOMMENDATION

Declaration

I declare that this research project is my original work and has not been submitted for examination in this or any other institution.

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Recommendation

This Research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This work is dedicated first to my parents Prof George, Prof Josephine Ouma and my sisters who gave me the drive, prayers and moral support I needed for every step. Lastly to John Murigi who has been my eyes, ears and my support.

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ABSTRACT

The evolving dynamic changes in the business environment have led to a focus on knowledge as a driver of superior performance in firms. As a result, some firms are adopting organizational learning to manage their knowledge assets for competitive advantage and increased performance. While past studies have demonstrated the importance of organizational learning to firms, few have empirically examined the effect of organizational learning on organizational performance. This study sought to examine the effect of organizational learning on performance of food manufacturing firms in Nairobi County. The objectives of the study were to determine the effect of knowledge acquisition, information distribution, information interpretation and organizational memory on firm performance. A correlational survey research design was adopted for the study. The target population comprised food manufacturing firms in Nairobi which are subdivided into 7 subsectors. A sample of 71 firms was used in the study. Disproportionate stratified random sampling method was used to ensure the sample is representative of the 7 sub-sectors of the food manufacturing industry. Primary data was collected using questionnaires which were administered to executive officers in the firms. To summarize the data, descriptive statistics such as mean and standard deviation were used. To examine the relationship between organizational learning and performance, Pearson's correlation analysis was used. To examine the effect of organizational learning on organizational performance, multiple regression analysis was used. The results were presented using tables. The results revealed a significant positive relationship between organizational learning and organizational performance. The findings also revealed that among all organizational learning dimensions, information distribution had the strongest relationship with organizational performance. The results also showed that the joint effect of organizational learning components on organizational performance was significant. The study recommended that while information distribution needs to be the key vision of organizational learning goals in firms, all organizational learning dimensions should be combined for a greater increase in organizational performance. The researcher recommends replication of the study in different sectors and countries to enhance understanding of the relationship between organizational learning and organizational performance.

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ABBREVIATIONS AND ACRONYMS

EPZ	Export Processing Zone
GDP	Gross Domestic Product
ICT	Information and Communications Technology
KAM	Kenya Association of Manufacturers
KBV	Knowledge Based View
KM	Knowledge Management
NGO	Non-governmental Organization
OL	Organizational Learning
OP	Organizational Performance
RBV	Resource Based View
SME	Small and Medium Enterprises

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The business economy today faces increasing challenges posed by a competitive and dynamic business environment. Some of these challenges are globalization, innovation in technology and a growing dynamic consumer market. This has led to disruptive changes that have forced businesses to change their course in order to survive. To develop and sustain a superior competitive advantage, firms have resorted to managing their knowledge resources (Grant, 1996). Prahalad and Hamel (1990) believe that in order to improve performance, value must be created from knowledge assets as a firm merely possessing knowledge is not enough to impact performance. In addition, an organization's capacity to learn, acquire, apply and spread new insights is considered a fundamental strategic capability (Fiol & Lyles, 1985).

Guided by the knowledge based theory, it was postulated in this study that organizational learning is a vital strategic asset that creates value from knowledge assets and it is anticipated that its application leads to increase in knowledge stocks that lead to efficiency and effectiveness that translates to increased firm performance. Therefore, it was expected that manufacturing firms practice organizational learning to enhance competitive advantage and performance.

1.1.1 Organizational Learning

The concept of organizational learning emerged in the 1980s, but its scientific background and principles goes back into many perspectives of management. Different scholars have given various definitions and perspectives of organizational learning. Huber (1991) gives a comprehensive framework for organizational learning to take place. This comprehensive framework is the process knowledge goes through to attain organizational learning. He conceptualizes organizational learning by assigning constructs and processes that will lead to other sub constructs and sub-processes that are contributing factors to organizational learning. These constructs are knowledge acquisition, information distribution, information interpretation and organizational memory. He posits that an entity learns if through its processing of information, there is a change in organizational knowledge, increase in the range of possible actions and the range of potential behaviors is changed.

Probst and Buchel (1997) view organizational learning in terms of the ability of the institution as a whole to discover errors and correct them and to change the organization's knowledge base and values so as to generate new problem solving skills and new capacity for action. This enables the organization to attain a superior competition and adapt to the rapid changes in the environment. Smith (2001) compliments this view by defining organizational learning as a key characteristic that enables an organization to adapt to changes in its external and internal environment and remain competitive in times of uncertainty.

Direkes et al. (2001) suggest that organizational learning requires both the appropriate structural mechanisms and the cultural conditions that promote habits of inquiry, experimentation and reflection. In conclusion, these definitions ascertain that generally, organization learning entails acquiring new knowledge, modifying the existing knowledge, sharing and interpreting this knowledge to suit the needs of the organization in relation to the requirements of the business environment. That it further demands changing or modifying behaviors, skills, values or preferences to align with the mission and vision for the organization in creating a learning environment.

1.1.2 Organizational Performance

Organizational performance is a multidimensional concept that is considered one of the most important constructs in management research. A wide variety of definitions of organizational performance have been proposed in literature with frequent reference to how efficiently and effectively a firm utilizes its resource in generating economic outcomes (Barney, 2007). Organizational efficiency refers to the amount of resources used to achieve an organizational goal while organizational effectiveness is the degree to which an organization achieves a stated objective (Daft, 2013).

Performance can be determined in two ways; one is based on factors that exist in the firm's external environment and the other is based on internal organizational factors. Most literature highlights that firms would benefit more if they can use knowledge acquired from the external environment to strengthen their internal environment as the external environment is beyond the firms' control while internal environment can be controlled. It is important for managers to know which factors influence organization performance in order to take appropriate steps to improve performance. Organizational performance is therefore the

dependent variable of the study. Performance indicators most commonly used are financial performance and market performance which were used in study.

1.1.3 Food Manufacturing Industry in Kenya

Today, the manufacturing sector in Kenya is the third leading sector contributing to the Gross Domestic Product in Kenya by a little over 10 percent thus has a direct impact on economic growth. There are over 700 established enterprises in the manufacturing sector in Kenya, most of which are privately or family owned. According to the Kenya Association of Manufacturers Directory (2014), Food and Beverages is the largest sector comprising of 181 members, which constitutes 24 per cent of the total Kenya Association of Manufacturers membership. However, manufacturing has been on the decline for a considerable period of time and its contribution to the country's GDP has remained stagnant at about 10 percent since Independence. Furthermore, according to the Kenya Economic Survey (2013), the Manufacturing sector decelerated from an expansion of 3.4 percent in 2011 to a growth rate of 3.1 percent in 2012.

The manufacturing sector in Kenya has faced increased competition from both domestic and international countries. The integration of traditional manufacturing, increase in innovation technologies, use of information and knowledge to improved supply chain management and growth of national markets has transformed manufacturing in Kenya from a domestic focus to an international scope. Furthermore, the establishment of free trade zone in Mombasa and EPZs has contributed \$543m to the Kenyan economy in 2013 by reducing tax and regulatory hurdles to enable the sector to focus primarily on industry activities (Kenya Economic Survey 2013). In order to channel the manufacturing sector into economic growth, the Kenyan government has created objectives to expand the manufacturing sector as it is a major part of the government's Vision 2030 economic development plan to transform Kenya into a middle income country. The government's goal is for manufacturing to account for 20% of the GDP by 2030, nearly twice today's level at 10.6%, manufacturing represents 11% of GDP (Kenya Economic Survey 2013).

Given the fact that manufacturing firms in Kenya are operating in a competitive environment, it would be important for firms to adapt organizational learning strategies to enhance competitive advantage and improve performance. Studies examining institutionalization of

KM in manufacturing enterprises in Kenya (Cheruiyot et al., 2012) found that the firms were sourcing and using knowledge as a basis of improving effectiveness and efficiency, and hence competitiveness. However, previous studies have not been done in food manufacturing firms to investigate the relationship between organizational learning and organization performance in large food manufacturing firms in Nairobi County. It is anticipated that the application of organization learning leads to increase in knowledge stocks that lead to efficiency, effectiveness that translates to increased firm performance.

1.2 Statement of the Problem

Organizational learning research has been robust in the last two decades, however, majority of the studies have been carried out in developed nations. Although diverse literature suggest the many possible benefits of organizational learning to an organization, empirical work testing the relationship between organizational learning and organizational performance are scarce. Furthermore, current studies demonstrate a lack of consensus on how best to facilitate it as a comprehensive model that can be incorporate in the daily operation of the organization in order to influence performance outcomes. Huber (1991) postulated that there was a lack of continuing empirical work in the integration of organizational learning constructs that require a systematic investigation.

1.3 Objectives of the Study

The general objective of this study is to examine the effect of organizational learning on performance of food manufacturing firms in Nairobi County. The specific objectives of this study are to:

- i. Determine the effect of knowledge acquisition on organizational performance.
- ii. Determine the effect of information distribution on organizational performance.
- iii. Determine the effect of information interpretation on organizational performance.
- iv. Determine the effect of organizational memory on organizational performance
- v. Determine the combined effect of knowledge acquisition, information distribution, information interpretation and organizational memory on organizational performance.

1.4 Research Hypotheses

The study seeks to test the following hypotheses:

HA1 Knowledge acquisition positively affects organizational performance

HA2 Information distribution positively affects organizational performance

HA3 Information interpretation positively affects organizational performance

HA4 Organizational memory positively affects organizational performance

HA5 Knowledge acquisition, information distribution, information interpretation and organizational memory combined positively affects organizational performance.

1.5 Significance of the Study

This study is important to the management policy and practice: it seeks to guide managers and practitioners in dealing with the rapid changes in today's dynamic business environment and guides them on how they can use knowledge assets to improve efficiency, effectiveness in learning for better performance outcomes. The findings and recommendations of this research might provide insight that shall enable them to use organizational learning to enhance performance, effectiveness and efficiency of their organizations and how they can overcome obstacles to its sustainability. In addition, it might also help them come up with appropriate measures to counter the challenges experienced in integrating organizational learning in the culture, systems and day to day operations of the organization. To policy makers and the government who bear the primary responsibility for promoting sustainable development to benefit the public, the outputs of this study could help in re-evaluating the quality of their interventions with a view of improving the effectiveness and efficiency of large manufacturing organizations.

This study seeks to enhance knowledge and literature in the field of strategic management: it might be useful to the academicians and researchers as well. It might enrich existing knowledge on the organizational learning practice as applied in large manufacturing organizations in Nairobi and invite further research in this field and other settings as well. The results of the study might be used as a basis for further research by other academicians in the field of manufacturing performance. The study also aims at providing a descriptive analysis on the relevance of performance theories for economists and large scale firms in Kenya.

1.6 Scope and Limitations of the Study

1.6.1 Scope of the Study

The intent of the study was to find out the effect of organizational learning on organizational performance on food manufacturing firms located within Nairobi County, Kenya. The study was conducted during the period of March 2013 to March 2015.

1.6.2 Limitations of the Study

There may be challenges acquiring certain types of information from respondents as they might be deemed sensitive and may limit cooperation. However, this limitation might be minimized by promising confidentiality and including a clause promising so in the questionnaire.

1.7 Definition of Terms

- Competitive Advantage** This is a superiority gained by a firm over its competitors that arises from matching its core competencies to the opportunities in the environment.
- Information Distribution** This refers to the processes through which individuals, groups or different units of the organization share data and information among themselves.
- Information Interpretation** This is the process through which organizations make sense of new information that they have acquired and disseminated.
- Knowledge Acquisition** This is the process of adding new knowledge to a knowledge base and refining or otherwise improving knowledge that was previously acquired.
- Knowledge -Based Theory** This theory views firms as bundles of knowledge resources. It considers these stocks of knowledge and information as the underlying sources of competitive advantage as they do not depreciate as traditional economic productive factors. Knowledge stocks are valuable as they are difficult to imitate and are socially complex in nature.
- Knowledge Management** This is where a firm consciously gathers organizes and shares knowledge in terms of resources, documents and people skills
- Organizational Learning** This is a firm's capability to acquire, apply and spread new insights gathered from the environment that enables the organization to quickly change its knowledge base to adapt to its environment.

Organizational Memory This is sometimes called institutional or corporate memory is the accumulated body of data, information and knowledge created in the course of an individual organization's existence.

Organizational Performance This is the attainment of organizational goals by using resources in an efficient and effective manner.

Resource Based View This is based on the premise that development and appropriate use of all resources determine its competitive advantage.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical perspectives of the study. It reviews the concept of organization learning and examines the past research relevant to the study. It further presents a general model that places organizational learning (OL) processes in the context of organizational conditions and performance outcomes. It discusses the nature of these interrelationships among variables, focusing on how organizational learning affects organizational performance and presents a conceptual framework.

2.2 Theoretical Perspective

This study is guided by the knowledge-based theory which is an extension of the resource-based theory of the firm. The resource based theory considers that a firm's competitive advantage primarily lies in the application of a bundle of tangible and intangible resources at the firm's disposal (Penrose, 1959). Although the resource-based view of the firm recognizes the important role of knowledge in firms that achieve competitive advantage, proponents of the knowledge based view argue that the resource based perspective does not go far enough as it treats knowledge as a generic resource rather than having special characteristics.

The knowledge-based theory of the firm considers knowledge as the most strategically significant resource of a firm. The special characteristics of knowledge are embedded and carried through multiple entities including organizational culture and identity, policies, routines, documents, systems and employees (Wernerfelt, 1984). KBV proponents argue that because knowledge based resources are usually difficult to imitate and socially complex, heterogeneous knowledge bases and capabilities among firms are the major determinants of sustained competitive advantage and superior corporate performance.

Knowledge forms the key component of organizational learning. It is posited that organizational learning regenerates and recreates present knowledge, leads to increase in knowledge stocks, and is a fundamental source of value in building firm capabilities (Choo & Bontis, 2002; Jackson et al., 2003). This implies that knowledge stocks and the learning capabilities of organizations become key economic factors in the productivity of knowledge-

based organizations (Martin de Castro et al., 2013). KBV further propositions knowledge as a strategic resource that does not depreciate the same way traditional economic productive factors do since it has the capacity to generate increasing returns (Wang et al., 2009). It is anticipated that the application of organizational learning translates to efficiency and effectiveness which leads to improved performance.

2.3 Organizational Learning

The construct of organizational learning has been articulated for more than 40 years, and scholars have acknowledged that the concept was first mentioned by March and Simons in 1958 (Casey, 2005). During this time period, the field of organizational learning has evolved into a diverse network of ideas. Theories of organizational learning attempt to understand the processes which lead to changes in organizational knowledge as well as the effects of learning and knowledge on behaviors and organizational outcomes.

The knowledge systems in an organization define how and when knowledge is processed and who the end users are. Huber (1991) propositioned organizational learning as a dynamic process through which knowledge moves along different levels of action in order for organizational learning to take place; that is from knowledge acquisition, information distribution, and information interpretation to organizational memory. These are the defining constructs of organizational learning. This dynamic process gives way to sub constructs and sub processes that further define what is involved in each activity. In addition, he considers that an entity learns if through its processing of information, it recognizes this knowledge as potentially useful to the organization and the range of its potential behaviors changes. He also states that more organizational learning occurs when more varied and uniform interpretations are developed.

In addition to knowledge systems and processes, the social aspect is seen as a contributing factor to organizational learning as people are the ultimate end users of knowledge and their actions determine if organizational learning will take place. Garratt (1999) posits that in order to satisfy ever changing consumer demands, organizations should develop both personal or group learning abilities. In order to accomplish this, proper knowledge management systems should first be in place. Crossan et al. (1999) view organizational learning as a dynamic process defining how knowledge moves and is interpreted along different levels namely from individual level, group level and to organizational level and back to individual level. The

proposition is that for organizational learning to be implemented throughout the organization, four dimensions must be present; system perspective, oneness and experimentation and knowledge transfer. System perspective entails bringing the organization's members together to form a common identity. Oneness and experimentation involves creating a climate that welcomes new ideas and different points of view, both internal and external, allowing individual knowledge to be constantly renewed, widened and improved while knowledge transfer and integration refers to two closely linked processes which occur simultaneously rather than successively. This involves creation of a chain processes detailing new and old knowledge is processed and disseminated to members of the organization and integration of this into existing routines.

Nonetheless, it is important that organizations have additional characteristics and features that promote organizational learning. Proposed features include: values and assumptions (Argyris & Schön, 1978), skills (Fiol & Lyles, 1985), core competencies (Prahalad & Hamel, 1990), support and legitimacy of practitioner oriented learning (Brown & Duguid, 1991), the use of whole systems planning and decision making forums (Dannemillar & Jacobs, 1992), adaptive and responsive organizations where learning is the norm, for example the learning organization recreated by Senge (1994), firm's learning intent (Inkpen & Crossan, 1995), processes and tools that permit the flow or transfer of knowledge between individuals and groups (Zander & Kogut, 1995), organizational strategies and processes identifying, capturing and leveraging knowledge (Manasco 1996), flexible rather than rigid structures, norms and belief systems supporting learning (Levitt & March, 1988), corporate success, and employee satisfaction (Bontis et al, 2002), strategies supporting innovation, capability development, enlightened transformational leadership and distributed authority (Vera & Crossan, 2004), and management commitment to promote the culture of learning. Although financial outcomes are important, there may be more proximate outcomes that may mediate the relationship with financial results.

Due to the rapid dynamic changes today, organizational learning is seen as a key factor to adaptation and survival. In essence, Dulworth and Bordonaro (2005) argue that learning is imperative in the current business environment and that rapid learning enables employees to reach peak performance faster, drives organizational productivity and agility, and enables faster response to competitive threats, develop new product opportunities and customer

requirements. This makes organizational learning a competitive resource in a growing global knowledge economy.

Yeo (2005) summarized research on organizational learning for the period 1990-2004 and concluded that all concepts of organizational learning have a common theme in the sense that organizational learning denotes a change in organizational knowledge and organizational learning is seen as a driver of organizational performance and competitive advantage. In broader perspective, he states that organizational learning, in essence, deals with the process of change and transformation that comes as a result of knowledge. That this change and transformation has to do with the expansions of people's values and beliefs about what is possible and how things work. Conclusively, organizational learning concepts differ and lack consensus on a comprehensive model. Shulz (2000) postulates that the uneven development of the field makes it difficult to cast its recent history as a continuous succession of dominant ideas.

2.4 Organizational Performance

Performance is the center of strategic management literature and research studies. The prescriptive literature considers financial results as business performance (Lei et al., 1999). A wide variety of definitions of firm performance have been proposed in literature with frequent reference to how efficiently and effectively a firm utilizes its resource in generating economic outcomes and achieving organizational goals.

Literature in the past strongly endorses the view that improved manufacturing performance will translate into higher profits, sales volume and market shares (Hayes, Wheelwright & Clark, 1988). Ferdows and De Meyer (1990) proposition that the most commonly accepted dimensions of manufacturing performance are cost, quality, delivery and flexibility as they consider that a plant cannot attain competitive advantage by concentrating on only one performance dimension. In other words, while a plant must excel on at least one dimension (cost, quality, delivery, cycle time or flexibility), other dimensions must at least exceed some minimum level in order for the plant to be competitive. Different manufacturing companies may operate on different strategies and compete on different dimensions.

Maani et al. (1994) used inventory, delivery, manufacturing cost and flexibility as manufacturing performance measures to relate it to business performance. Their findings

indicate that manufacturing performance has a positive relationship with business performance i.e. return of sales, return of assets, sales volume growth and market share growth. Delaney and Huselid (1996) also employed relative measures to measure organization performance by comparing organizations to its competitors. The dimensions used were quality of products, development of new products, ability to retain essential employees, ability to attract essential employees, customer satisfaction, management and employee relationship, relationship among employees, sales growth, profitability and market share.

According to Yeo (2003), performance measurement presents various benefits, not only does it demonstrate how an organization performs, how well it does and how much progress it makes over time in achieving goals but it also helps the organization manage change. Darroch (2005) uses comparative and internally reflective performance measures by using industry averages to compare research results. These performance measures capture both financial as well as non-financial measures. In conclusion, to effectively measure organizational performance, market performance and financial performance measures should be used as they cover all measures of performance.

2.5 Organizational Learning and Organizational Performance

Quite a few studies have emerged in recent times that have scrutinized the relationship between organizational learning process and organizational performance. Slater and Narver (1995) found that that financial performance, sales growth and customer retention are enhanced by the firm's ability to learn. Baker and Sinkula (1999) and Farrel (1999) found that organizational learning yields promising results in organizations. Farrel (1999) empirically tested a model of the background and consequences of organizational learning and found that organizational learning has a positive effect on organizational commitment, spirit de corps and on organizational performance.

Figueiredo (2003) and Dimovski & Škerlavaj (2005) studied the relationship between organizational learning and performance and found that the impact of organizational learning on business performance differs and depends on what they understand by performance. Understanding the performance goals of an organization enables management to know the knowledge needs required to achieve organizational learning and consequently increased performance.

Recent studies show that organizational learning curves are increasingly being utilized to achieve total quality management objectives. The first wave of organizations implementing Total Quality Management are using learning tools such as single loop learning, double loop learning, triple loop learning, action learning, continuous improvement, benchmarking and problem solving to improve quality control and performance (Hafeez et al., 2006). They further suggest that businesses should adopt learning tools that will enable them to adapt in different scenarios and contexts they face in a dynamic business environment.

In Kenya, a few empirical studies have been done to examine the effect of organizational learning on performance. Amulyoto (2004) studied organizational learning practices and their impact on performance among donor agencies in Nairobi, while Khakina (2006) studied the determinants of success in NGOs. They both concluded that organizational learning was a major tribute to the success of non-governmental organizations and they are increasingly embracing the concept of organizational learning, however, they could not conclusively assume the same impact in competitive firms. Njuguna (2008) studied how organizational learning influences Small and Medium Enterprises performance in Nairobi, Kenya and concluded that organizational learning has a positive influence on performance in SMEs but concluded that more research needed to be carried out in larger firms as efficiencies and performance may differ. Therefore this study sought to examine the effect organizational learning on organizational performance in food manufacturing firms in Nairobi County Kenya. Overall, it can be concluded that an organizational environment in which organizational learning is encouraged; individuals was more committed to achieving firm's goals, encouraged to share information and learn, develop new skills and knowledge therefore facilitating an improved firm performance.

2.5.1 Knowledge Acquisition and Organizational Performance

Research on knowledge strategies posits that the configuration of activities used by companies to acquire new and leverage existing knowledge is an important influencing factor of organizational performance. Knowledge acquisition is the process by which knowledge is obtained (Huber, 1991). Cohen and Levinthal, (1990) posit that for firms to acquire knowledge, they must increase their absorptive capacity which is the capacity to identify new knowledge from the environment, acquire it, however, the study concludes that it is not

enough that firms obtain knowledge, but that they should exploit it to generate insights that enhance learning and subsequently lead to increased performance.

One way companies commonly acquire information is by evaluating what competitors are doing in similar situations. Most literature highlight that firms would benefit more if they can use knowledge acquired from the external environment (competitors) to strengthen their internal environment as the external environment is beyond the firms' control while internal environment can be controlled. A study by the Brookings Institution Washington, D.C., revealed that sixty percent of an organization's competitive advantage is derived from internal advancements in knowledge, innovation and learning (Carvenale, 1992). This means that all knowledge acquired from the environment must be channeled internally for improvement of strategies.

Bierly and Chakrabarti (1996) study on pharmaceutical firms suggested that successful firms were found to place equal emphasis on learning from their own knowledge as well as others' knowledge. Ingram and Baum (1997) argue that vicariously learning from other organizations' experiences is an important way that organizations acquire knowledge, however empirical studies on vicarious learning focuses on the positive replication of routines, strategies and designs of apparently successful organizations as a means of constructing their best practices based on industry benchmarks. This is supported by Pfeffer and Sutton (1999) study which concludes that possessing knowledge is not enough, that knowledge must be turned into action.

The activities and processes by which companies learn and acquire new knowledge and the strategic implications for competitiveness have been a fundamental part of the literature on organizational learning (Easterby-Smith, Crossan & Nicoline, 2000). Researchers (Calantone et al., 2002) highlighted that learning creates new knowledge which can help firms quickly respond to the dynamic changes in the external environment like changing customer needs and industry changes thereby concluding a positive relationship between organizational learning and organizational performance. In addition, it is important knowledge acquisition activities are carried out to particularly address and close knowledge gaps. Previous studies show that company performance and survival are dependent on new knowledge acquisition in order to close existing knowledge gaps and subsequently create learning opportunities for the organization (Chistman & McMullan, 2004).

Besides acquisitions and mergers, other ways in which organizations acquire knowledge are from knowledge transfer, creation and collaboration (Hibbert & Huxman, 2005). A major reason for acquisitions and mergers is often for gaining new knowledge from the acquired company and then to transfer that knowledge among other parts within the organization (Bresman, Birkinshaw & Nobel, 1999). Grant (1996) argues that these rare sets of knowledge and the manner in which the knowledge is integrated within an organization can lead to unique capabilities that are prerequisites for a competitive advantage.

In their study on knowledge acquisition strategies of SMEs, Danis and Shipilov (2012) found that though managerial knowledge and marketing knowledge were perceived as critically important for success, managerial knowledge was perceived as the most difficult to acquire. In Kenya, Nzioka (2012) found that there exist a positive relationship between factors of organizational learning and organizational performance in commercial banks in Kenya. However, he found that generative learning, knowledge acquisition and conversion, and empowerment contributed more to organizational performance than adaptive learning

2.5.2 Information Distribution and Organizational Performance

Information distribution determines how and to what extent organizational learning occurs. It extends individual learning into a more broad based learning. This also denotes how knowledge is transferred. When information is widely distributed in an organization, so that more varied sources for it exists, retrieval efforts are more likely to succeed and individuals and units are more likely to be able to learn (Huber, 1991). Combining information from different sub-units not only leads to new information but also to new understanding of the different roles that help the organization realize its vision, mission and objectives. This fact highlights the role of information distribution as a precursor to aspects of organizational learning that involves information interpretation (Huber, 1991).

According to Maira and Scott-Morgan (1997), organizations view learning more narrowly than they should. They argued that organizational learning needed to take place in many different parts of an organization and on many different subjects therefore established that cross-functional teams could assist the organization in learning and distributing new knowledge over the whole scope of the organization. They further postulate that firms ought to utilize these cross-functional teams to develop and introduce new products and processes,

elevate learning and reflection from that which is meaningful to individuals, to that which involves and benefits the entire organization. New technologies and media, as discussed by Buchel and Raub (2003), can be enablers to improving the effectiveness of cross-functional teams that are increasingly global in nature and demand process capability for fast and effective storage and retrieval of organizational knowledge, history, and experience. Thus, information distribution leads to organizational learning hence increasing organizational performance. Sperling et al (2006) found that distribution of task specific information sources will enhance shared knowledge therefore improve co-ordination and decision making that will improve firm performance.

For information distribution to take place effectively, knowledge sharing activities must be defined as information distribution happens in a social/ human context. Most researchers report that knowledge sharing improves organizational performance (Lesser & Storck, 2001). Knowledge sharing is the platform where employees directly or indirectly mutually exchange information. This process is characterized by formal and informal collaboration involving dissemination of information between people, groups or organizations (Ford & Staples, 2010). In the case of Buckman laboratories, human networks and not IT networks is a fundamental of effective knowledge sharing (Laycock, 2005). Furthermore, it is from the tacit knowledge of the employees that information can be distributed according to the particular needs of the organization. However, this process poses various challenges. When knowledge is regarded as power, individuals would be reluctant to share tacit knowledge (Kinsey, 2007) and when they perceive that the organization does not have mechanisms that rewards information sharing, employees may sit on knowledge that should be shared as they will not be motivated enough to do so (Wah et al. 2005)

Ayilo (2013) studied the relationship between organizational learning and operational performance in commercial banks in Kenya and found that team work, knowledge sharing and systemic thinking are factors of organizational learning that have a positive impact on operational performance to a greater extent. Knowledge sharing enables workers to be up to date with the current standards and processes of the information. Without it, no learning can take place. Ndegwa (2015) concludes that when knowledge is shared, better decisions are made leading to better performance.

2.5.3 Information Interpretation and Organizational performance

Learning and unlearning are ways of interpreting information. Unlearning centers on minimizing behaviors that distort information while learning and relearning focuses on maximizing behaviors that enable acquisition of new information. Hedberg (1981) defines unlearning as an intentional, functional process through which learners discard obsolete and misleading knowledge in a sense to decrease the range of potential behaviors that gives way for new learning process to take place. An extreme form of unlearning may be discharging employees or management that is unable to move from outdated ways of doing things. Information interpretation thus creates a stock of only useful knowledge from which organizational learning takes place and this will increase organizational performance.

Daft and Weick (1984) argue that information must be processed through interpretation to give meaning and to develop shared understandings and conceptual schemes. How information is interpreted depends on an individual's prior cognitive map and these maps will vary across organizational units having different responsibilities. Furthermore, information must be appropriately labeled to suit the audience so that it is correctly interpreted (Dutton & Jackson, 1987). Clarity of information through various media influences how an organization will learn. Certain media may be more effective and efficient than others depending on the organizational setting because media can convey too great a range of symbols for interpretation. Dutton and Jackson (1987) found that there is a greater level of inconsistency on how organizations uniquely interpret information as it depends on how this information will be utilized.

Management role in interpreting information is considered crucial. Researchers have developed a number of models to describe the way managers and organizations deal with potentially significant information (Dutton & Duncan, 1987). Daft and Weick (1984) proposed that organizational adaptation entails three key processes namely; scanning, interpreting and responding. Essentially, because the modern environment is complex and dynamic, a key role of top management is to keep up with the constant changes that leads to new information every now and then. The key role of top management has become providing meaningful interpretations for patterns of ambiguous information. Those interpretations are often seen as critical to the success and even the survival of organizations mainly because

their implications for influencing action alternatives and subsequent outcomes (Dutton & Jackson, 1987).

Different areas and levels of an organization may be involved in the scanning activities associated with interpreting information but it is top managers who have primary influence over which strategic issues are attended to and how they are labeled and in which time lines they can be acted upon. Primarily, how information is labelled mobilizes action in a particular direction that will affect performance (Hambrick & Mason, 1984). However, various challenges to information interpretation are; beliefs, experiences, perceptions, politics and goals all which conspire to complicate the process and gives rise to non-linear effects.

2.5.4 Organizational Memory and Organizational Performance

Knowledge is the key asset in organizational learning. The term organizational memory is sometimes used to refer to whatever exists today in individuals' memories. Nonaka (1994) revolutionized the interaction between tacit and explicit knowledge. Tacit knowledge is knowledge that resides in individuals and is not easily expressed is personal, difficult to formalize and to communicate to others while explicit knowledge is knowledge that can be articulated formally, systematically, can be communicated easily and shared through manuals, codes among others.

However, individuals in an organization are deficient repositories of organizational information and knowledge. Nonaka (1994) sought to further link tacit knowledge to collective knowledge in order to create and increase knowledge. He concluded that for this to happen, organizations must articulate and expand knowledge obtained by individuals through continuous dialogue. This interaction between individuals plays a fundamental role in the development of these ideas. He posits that knowledge must go through individual, group and organization levels to be legitimized and stored.

According to Huber (1991), various challenges posed in creating organizational memory may also impact performance due to knowledge inefficiencies, for example; employee turnover, management change, non anticipation of future need for certain information causes great amounts of information not to be stored, organizational members with information needs often do not know of the existence or whereabouts of information possessed or stored by other members. He also posits that information is stored based on individual, group and

organizational levels. This is also consistent with Cross and Baird (2000) suggestion that knowledge repositories no matter how functional, do not directly influence performance, rather, a person's network of human relationships often determines which knowledge they access and performance thereof.

Empirical research has consistently found that organizational learning through learning curves and types of learning contribute positively to performance. Argote and Epple (1990) posit that organizational learning curve studies conducted across a number of industry settings show that organizational learning through cumulative experiential learning with a task enhances performance. Furthermore, experiential learning has enabled firms to pass knowledge and develop skills through hands on experience through training of the work force. Studies show that training programs can be used to impact organizational memory as they lead to increased job satisfaction in staff. Job satisfaction will lead to retention of valuable employees as they serve to be the knowledge repositories of the organization consequently leading to increased in firm performance in the long run.

Organizational memory may also imply an organization's way of doing things. Businesses need to keep changing their methods to adapt to the rapidly changing environment however, organizational memory could be an obstacle as the old way of doing things may not match the current realities. Organizations need proper mechanisms to store both new and current knowledge in a way that does not contradict one another.

2.6 Conceptual Framework

In this study, the independent variables are knowledge acquisition, information distribution, information interpretation and organizational memory while the dependent variable is organizational performance. These variables are related as shown in Figure 2.1 below.

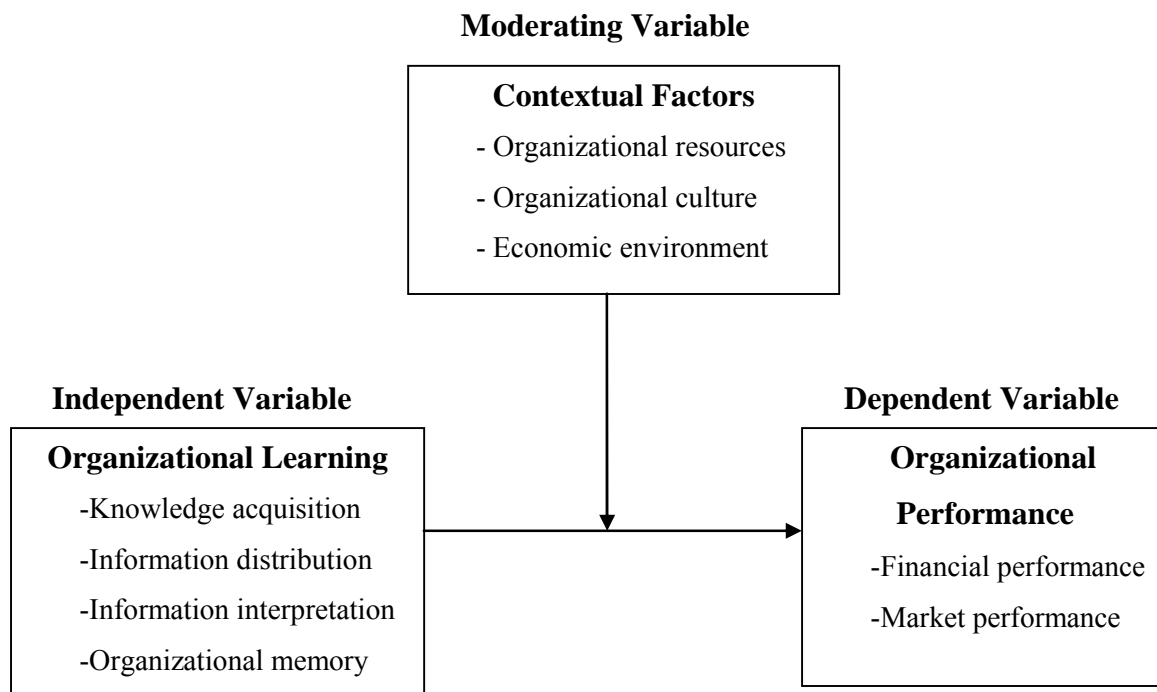


Figure 2.1: Relationship between Organizational Learning Contextual Factors and Organizational Performance.

As shown in figure 2.1 above, there exists a relationship between independent and dependent variables in the study. However, these variables are affected by contextual factors such as the organizational resources, strategies, culture and leadership. Performance outcomes determine the amount of slack resources available for learning processes (Hedberg, 1981). Slack resources are considered critical to support the activities of a parallel organization that fosters learning activities as well as production activities. Performance outcomes can influence an organization’s capacity to support organizational learning as they provide feedback on the effectiveness of knowledge assets which may heighten motivation to improve or redirect learning activities.

Organizational learning must be established through appropriate knowledge platforms that enable learning to take place that is, through knowledge acquisition, distribution, interpretation and storage in the organization’s memory. Organizational knowledge in the form of cognitive maps influences how knowledge is acquired, distributed, interpreted and how the organization stores memory subsequently affecting organizational performance (Daft & Weick, 1984; Dutton & Jackson, 1987). The absorptive capacity of an organization also

determines the capacity of the organization to learn new skills and ideas relevant to influencing performance.

The contextual factors can either hinder or facilitate organizational learning processes and this impacts organizational performance (Garvin, 1993; Ulrich et al., 1993). They can be categorized into internal and external factors. External factors also impact organizational learning. An organization's position in the industry, its access to resources and nature of competitive dynamics influences organizational learning (Barnett & Hansen, 2007). In this manner, competition from other forms helps an organization to learn and improve (Barnett & Hansen, 2007). Various organizational factors such as culture, strategy, structure have been found to facilitate organizational learning. Woiceshyn (2000) further suggested that various factors such as resources allocated to learning, motivation, incentives provided, shared values and organizational strategy influenced organizational learning. Furthermore, Hult et al., (2000) found out that openness, participative decision making culture and transformational leadership has a positive influence on organizational learning and performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides insight into the research design adopted, the target population studied, the sample size used, data collection methods employed and data analysis techniques or tools used when organizing and analyzing the data.

3.2 Research Design

This study adopted a mixed method design which is both quantitative and qualitative approaches. Correlational study which is a quantitative method was used to investigate the possibility of relationship among variables. A cross-sectional survey design was used to study the relationship between organizational learning and firm performance at a single point in time.

3.3 Target Population

The population of the study comprises of food manufacturing firms in Nairobi County, Kenya and this included small, medium and large firms. According to Kibera (1996), the criteria used to determine the size of a firm are capital, sales turnover or number of employees but recommends the use of number of employees' criteria as it is information which is readily available to researchers. According to Kibera (1996), the sizes of firms in Kenyan context are classified as micro firms (below 10 employees), small firms (11-50 employees), medium firms (51-100 employees) and large firms (above 100 employees). Thus the researcher used the number of employees as criteria to determine the size of the firm. The food manufacturing firms in the study were identified using the Kenya Association of Manufacturers and Exporters Directory (KAM 2014) because the researcher established that KAM maintains the most updated coverage of manufacturing firms in Kenya.

There are a total of 87 food manufacturing firms in Nairobi (Appendix II) which are members of KAM (KAM 2014). The firms are classified into 7 sub-sectors of the Food and Beverages Sector: The Sub-sectors are: Alcoholic Beverages; Bakers and Millers; Cocoa, Chocolate and Sugar; Juices/Waters/Dairy/Carbonated Soft Drinks; Tobacco; Vegetable Oils and Slaughtering/Preparation and Preservation of Meat.

3.4 Sample Design

A sample was used for this study. The sample units comprised food manufacturing firms operating in Nairobi, Kenya. To determine the sample size, the statistical formula suggested by Kothari (2004) was used.

$$n = \frac{z^2 \cdot p \cdot q \cdot N}{e^2 (N-1) + z^2 \cdot p \cdot q}$$

Where;

N = size of population

n = size of sample

e = acceptable error (the precision)

z = standard variate at a given confidence level

p = sample proportion

q = $1-p$

Here;

$N = 87$, e = at 95% confidence level is 0.05, $z = 1.96$, $p = 0.5$, $q = 0.5$

$$n = \frac{(1.96)^2 \cdot (0.5) \cdot (1-0.5) \cdot (87)}{0.05^2 (87-1) + (1.96)^2 \cdot (0.05) \cdot (1-0.05)}$$

$n = 71$

Substituting these figures into the formulae gives a minimum sample size of 71 respondents. To select 71 firms (Appendix III), disproportional stratified random sampling method was used to ensure the sample representative of the 7 sub-sectors of food manufacturing sector. In the selection of particular firms, firms with communication and knowledge systems were given priority over those that do not in the selection of the samples as they were considered appropriate for the study.

Table 3.1: Sampling Procedure

Manufacturing sub-sectors	Population	Sample
Alcoholic Beverages	7	6
Bakers and Millers	30	24
Cocoa, Chocolate & Sugar	19	15
Juices/Waters/Carbonated Soft Drinks/Dairy	20	16
Tobacco	2	2
Vegetable Oils	3	3
Slaughtering/Preparation and Preservation of Meat	6	5
Total Number of Firms	87	71

Source: Kenya Association of Manufacturers (2014)

3.5 Data Collection

The study used primary data. Primary data consists of original data gathered by the researcher for the specific purpose of the study at hand (Mugenda & Mugenda, 1999). Data was collected by use of questionnaires administered by the researcher. The use of questionnaires is justified because this is the most effective and affordable way of collecting information from a small literal sample within a short period of time. The unit of analysis was the firms and data was collected at the firm level. For each firm one respondent filled in a questionnaire. The respondents were production managers, operations managers, marketing managers and finance managers conversant with the organization's strategy.

3.6 Measurement of Variables

In this study, the independent variable is organizational learning while the dependent variable is organizational performance. Borrowing from literature, organizational learning was measured in terms knowledge acquisition, information dissemination, information interpretation and organizational memory dimensions (Baker & Sinkula, 1999). A five point Likert scale ranging from strongly agree (1), disagree (2), neutral (3), agree (4) and strongly agree (5) was used. Financial Performance and market performance among large scale manufacturing was measured using a five point Likert scale ranging from very much decreased (1), decreased (2), not changed (3) increased (4) and very much increased (5).

3.7 Validity and Reliability of Research Instrument

3.7.1 Validity

Validity refers to the accuracy and meaningfulness of inferences which are based on the research results (Mugenda & Mugenda, 1999). If such data is a true reflection of the variables, then inferences based on such data was accurate and meaningful. To ascertain the validity, the researcher used content validity through supervisor assistance. Construct validity of the instrument was obtained through the development of the scales with the help of the experts in the Faculty of Commerce, Egerton University.

3.7.2 Reliability

According to Devellis (1991), reliability is the extent to which the measurement is random error-free and produces the same results on repeated trials. It also refers to consistency of scores obtained by the same test on different occasions, or with different sets of equivalent items or under other variables examining conditions. Cronbach reliability coefficient was used for this study because it helps to establish the internal consistency of the responses. It was used to ascertain the reliability of factors extracted from the Likert scale in the questionnaire because it determines the internal consistency or average correlation in a survey instrument. Cronbach alpha is a coefficient of internal consistency used as an estimate of reliability and it ranges in values from 0-1. If the values exceed the standard of 0.7 then the reliability of the model was considered accurate enough (Nunnaly, 1978). The results for the overall reliability for all the items of all the constructs and individual constructs are presented in Table 3.2a and Table 3.2b.

Table 3.2: Reliability Statistics

a) Overall Reliability Statistics

Number of Items	Cronbach's Alpha
43	.908

The results indicate that the overall Cronbach alpha coefficient is above the threshold of 0.7.

b) Cronbach alpha coefficients for the measurement scales for the constructs

Construct Measured	Number of Items	Alpha (α)
Knowledge Acquisition	10	.738
Information Distribution	7	.708
Information Interpretation	9	.809
Organizational Memory	8	.889
Financial Performance	2	.788
Market Performance	2	.757

The results in Table 3.2b indicates that the alpha reliability coefficient of the items in each objective of the study was appropriate because they were all above the threshold of 0.7. The reliability coefficient ranged from 0.708 to 0.889. Therefore all the questionnaire items were considered to have internal consistency and hence were used for further analysis.

3.8 Data Analysis and Presentation

The data collected from the field was edited and coded to ensure completeness and accuracy. The data was entered using Statistical Package for Social Science (SPSS). Data that was obtained from the research questionnaire was summarized using Descriptive Statistics. To test hypothesis HA₁ to HA₄, Pearson's Correlation Analysis was used. To test hypothesis HA₅, Multiple Regression model was used below and the results of the analysis were presented using tables.

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y = is the dependent variable (Organizational Performance)

a = constant

X₁ = Knowledge acquisition

X₂ = Information distribution

X₃ = Information interpretation

X_4 = Organizational Memory

β_1 - β_4 = regression coefficients

ε = error term

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussions of the results of the study. The presentation of the results is based on the objectives. The chapter starts with descriptive statistics of the study variables, correlation analysis and test of hypotheses. Finally, the chapter presents discussion of the results of the study.

4.2 Descriptive Statistics

This section presents and discusses results of descriptive statistics of the profile of respondents and organizations. It also presents descriptive analyses results of the study variables.

4.2.1 Profile of Respondents

The study targeted 71 food manufacturing firms in Nairobi County. Responses were obtained from 68 firms representing a response rate of 94.4%. The respondents in this study were production, operations, human resources, marketing and finance managers involved in the strategic planning process in the organizations. It also presents descriptive analyses results of the study variables. The profile of the respondents of the studied organizations is shown in Table 4.1.

Table 4.1: Distribution of Respondents by Position

Position	Frequency	Percentage
Production/Operations Manager	30	44
Sales/Marketing Manager	12	17.6
Human Resource Manager	11	16.2
Administrator	6	8.8
Finance Manager	4	5.9
Other	5	7.4
Total	68	100

As shown in Table 4.1, the majority of the respondents were production and operation managers (44%), 17.6% were sales and marketing managers, 16.2% were human resource managers, 8.8% were administrators and 5.9% were financial managers. Given the positions of the respondents, it can be concluded that the respondents' responses were considered informed.

4.2.2 Profile of Organizations

The 68 firms that were studied were assessed by characteristics such as ownership, number of years in operation, nature of business and number of employees in the firm. Frequencies and percentages were used to examine the distribution for each characteristic. Table 4.2 provides the distribution of the food manufacturing firms in Nairobi County and presents the results of the analysis.

Table 4.2: Distribution of Firms by Ownership, Years in Operation, Nature of Business and Number of Employees

Ownership		
	Frequency	Percentage
Local	56	82.4
Foreign	12	17.6
Type of Firm		
	Frequency	Percentage
Public	9	13
Private	59	87
Number of years in operation		
Years	Frequency	Percentage
Less than 5 years	16	24
5 to 10 years	16	24
11 to 19 years	18	26.5
More than 20 years	18	26.5
Total	68	100.0
Nature of Business		
	Frequency	Percentage
Bakers and Millers	26	38.2
Juices/Water/Soft drinks/Dairy	12	17.6
Vegetable Oils	12	17.6
Cocoa/Chocolate/Sugar	5	7.5
Alcoholic Beverages	4	5.9
Tobacco	2	2.9
Other	7	10.3
Total	68	100.0
Number of employees in Firm		
Employees	Frequency	Percentage
Less than 50	2	3.0
51 to 100	36	52.9
More than 100	30	44.1
Total	68	100.0

As shown in Table 4.2, the study sought to establish the distribution of ownership of the firms, number of years in operation, nature of business and number of employees. Frequencies and percentages were used to establish the distribution.

Regarding ownership of firms, Table 4.2 shows that majority of the firms were local (82.4%), while the rest were foreign (17.6%). Regarding the type of firm, majority of the firms were private (87%) while the others were public (13%). Most of the firms (26.5%) have been

operating in Kenya for over 20 years and 26.5% have been operating in Kenya between 11-19 years. 24 % of firms have been operating in Kenya less than 5 years while 24% of firms have been operating between 5-10 years. This indicates that majority of the firms (77%) have operated in Kenya for over 5 years thus it can be assumed that most firms had operated long enough for the respondents to evaluate the strategic knowledge management aspects in the firms and their impact.

Table 4.2 also shows the distribution of firms according to the nature of business. The study established that 26 firms (38.2%) that participated in the study were Bakers and Millers, 12 firms (17.6%) were Juices/Waters/Soft Drinks/Dairy firms and 12 firms (17.6%) were Vegetable oil firms. 5 firms (7.5%) represented Cocoa, Chocolate and Sugar firms while 4 firms (5.9%) represented Alcoholic Beverages firms. Only 2 firms (2.9%) represented Tobacco Firms. The rest 7(10.3%) were involved in other food manufacturing activities not included in the above categories.

Regarding the number of employees in the firms, Table 4.2 shows that 3% of the firms employed less than 50 employees, 52.9% employed 51 to 100 employees, and 44.1% had more than 100 employees. Organizations can be classified as small, medium or large on the basis of the number of employees, sales turnover or capital (Coughlin & Ikiara, 1991; Kibera, 1996). Because information on sales turnover or capital employed is considered sensitive and confidential, and may therefore not be easily obtained, usually the number of employees is used as a measure of size (Coughlin & Ikiara, 1991; Kibera, 1996). In Kenya, firms employing 10 or fewer workers are called micro-enterprises, those with 11 to 50 workers are labelled small, those employing between 51 and 100 workers are categorized as medium, and those employing more than 100 workers are regarded as large firms (Kibera, 1996). Using this perspective, the results of this study indicate that 3% of the firms studied were small firms, 52.9% were medium firms and 44.1% were large firms.

Organizational learning was hypothesized to have four dimensions that is, knowledge acquisition, information distribution, information interpretation and organizational memory that positively affect organizational performance.

4.2.3 Knowledge Acquisition

The study sought to describe knowledge acquisition in firms. Respondents were asked to indicate the extent to which they agreed that the statements on the items of dimensions of knowledge acquisition described their firms in response to the objective. Each item had a 5-point Likert-type scale, ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). To measure the distribution of the responses to the statements, mean and standard deviation was used. The results were presented in Table 4.3.

Table 4.3: Mean and standard deviation for measures of Knowledge Acquisition

Knowledge Acquisition items	N	Mean	Std. Deviation
Knowledge Acquisition		4.1	1.221
Previous decisions are a very useful source of information for current decisions.	68	4.24	1.223
We try and promote risk taking, innovation and experimentation in our working methods	68	3.54	1.408
There is an emphasis on Research and Development at our company.	68	4.19	1.406
Joint tasks and mergers contribute a great deal of knowledge about industry and economic environment, new methods and services/products	68	3.56	1.530
Top managers in any important decision seek information or advice from the board of directors or owners	68	4.46	.888
Top managers in any important decision seek information or advice from sources outside the company	68	4.19	1.162
Our organization has employees whose job is related to searching for external information and are rewarded based on that.	68	4.16	1.323
External sources (reports, consultants, newsletters, etc.) are extremely important for the operations of our operations.	68	4.44	.853
In our organization we often organize internal training of our employees	68	3.72	1.381
We frequently send our employees to various seminars, workshops, conferences with intention to acquire knowledge and provide ways they can pass that knowledge to other employees	68	4.51	.938

As shown in Table 4.3, the mean score for the knowledge acquisition dimension was 4.1. The overall standard deviation was 1.211 which reflects that the responses were not far spread from each other among the respondents thus indicating low variability in response to

the statements. The item with the highest score was ‘top managers in any important decision seek information or advice from the board of directors or owners.’(M= 4.46, SD=0.89) while the item with the lowest score was ‘We try and promote risk taking, innovation and experimentation in our working methods.’ (M=3.54, SD= 1.41). The results generally indicate that the respondents agreed with the statements regarding knowledge acquisition in their organizations. These results were interpreted to mean that the firms practice knowledge acquisition to a great extent.

4.2.4 Information Distribution

The study sought to describe information distribution of the firms. Respondents were asked to indicate the extent to which they agreed that the statements on items of dimensions of information distribution described their firms in response to the objective. Each item had a 5-point Likert-type scale, ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). To measure the distribution of the responses to the statements, mean and standard deviation was used. The results were presented in Table 4.4.

Table 4.4: Mean and standard deviation for measures of Information Distribution

Information Distribution Items	N	Mean	Std. Deviation
Information Distribution		3.96	0.6772
Our Information system allows for efficient and effective exchange of information within the organization	68	4.50	0.872
There is an open culture of employees being encouraged to share knowledge and ideas	68	3.50	1.203
Stakeholders are allowed to share their ideas and these ideas are acted on by the organization	68	3.38	1.327
We frequently hold meetings with purpose to inform employees	68	4.44	1.084
We have formal mechanisms and systems that ensure transfer of best practices among various areas of work	68	4.01	1.029
In our organization we have individuals that work in more than one team or project groups together with individuals from other organizational units	68	3.41	1.417
We have individuals dedicated to collecting and internal dissemination of improvement propositions from employees	68	4.47	1.000
Team meetings and committees are important for information distribution and decision making	68	4.34	1.074
Written memos, notes are essential in distributing information	68	4.60	.715
Seminars, conferences and workshops enable employees to distribute information to other employees	68	4.65	.806

Table 4.4 shows that the mean score for information distribution was 3.96. The overall standard deviation was 0.68 which reflects that the responses were not very far from each other among the respondents. The respondents almost had the same idea about the statements. The item with the highest score was ‘seminars, conferences and workshops enable employees to distribute information learnt to other employees.’ (M=4.65, SD=.806) and the item with the lowest score was ‘stakeholders are allowed to share their ideas and these ideas are acted upon by the organization’ (M=38, SD=1.327). The results generally indicate that the respondents agreed with the statements regarding information distribution in their organizations. These results were interpreted to mean that the firms practice information distribution to a great extent.

4.2.5 Information Interpretation

The study sought to describe information interpretation of the firms. Respondents were asked to indicate the extent to which they agreed that the statements on items of dimensions of information interpretation described their firms in response to the objective. Each item had a 5-point Likert-type scale, ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). To measure the distribution of the responses to the statements, mean and standard deviation was used. The results were presented in Table 4.5.

Table 4.5: Mean and standard deviation for measures of Information Interpretation

Information Interpretation Items	N	Mean	Std. Deviation
Information Interpretation		4.07	1.037
Team Meetings and Committees are important for information interpretation and decision making	68	4.34	1.074
Written memos, notes, letters are essential in interpreting information.	68	4.60	.715
Seminars, conferences and workshops enable employees to learn and apply new knowledge	68	4.65	.806
Formal chain of command necessary for the correct interpretation of information.	68	4.09	1.129
Company intranet, email, online forums and e databases as a means of information interpretation.	68	4.26	.908
Policies and strategy as a form of information interpretation and are subject to change with new information.	68	3.32	1.215
Work practices can be changed in order to incorporate new practices for better efficiency.	68	3.51	1.165
Employees are empowered to interpret new information or ideas and apply as they see fitting in their areas of influence.	68	3.37	1.370
New ideas or information officially accepted by the management is distributed officially to all members	68	4.47	.954

The results presented in Table 4.5 indicate that the overall mean for the items for information interpretation was 4.07. This indicates that the respondents generally agreed with the statements regarding aspects of information interpretation in their organizations to a great extent. The item with the highest mean score was ‘seminars, conferences and workshops enable employees to learn and apply new knowledge’ had a mean score of (M= 4.65, SD=

.806) and the item ‘policies and strategy as a form of information interpretation and are subject to change with new information’ had the lowest score of (M= 3.32, SD= 1.215). The results generally indicate that the respondents strongly agreed with the statements regarding information interpretation in their organizations. These results were interpreted to mean that the firms practice information interpretation to a great extent.

4.2.6 Organizational Memory

The study sought to describe organizational memory of the firms. Respondents were asked to indicate the extent to which they agreed that the statements on items of dimensions of organizational memory described their firms in response to the objective. Each item had a 5-point Likert-type scale, ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). To measure the distribution of the responses to the statements, mean and standard deviation was used. The results were presented in Table 4.6.

Table 4.6: Mean and standard deviation for measures of Organizational Memory

Organizational Memory Items	N	Mean	Std. Deviation
Organizational Memory		4.3	0.894
There are policies regarding how the organization stores new and old information and in defined format.	68	4.57	.869
This information is stored systematically and can be assessed by all employees in ways specific to their areas of work.	68	3.81	1.083
Organization creates and keep manuals as a way of storing information, updating new knowledge and dealing with old information.	68	4.31	.697
The organization keeps secondary information of other parties (about events, products and third party information)	68	3.37	1.091
Company policies highlight who the end users of particular information are.	68	4.63	.879
Organization has a controlled main server, central library and archives for storing all company information.	68	4.44	.780

The results presented in Table 4.6 indicate that the overall mean for the items for organizational memory was 4.3. The item with the highest mean score was ‘Company policies highlight who the end users of particular information are with (M= 4.63, SD= .879)

and the item ‘the organization keeps secondary information of other parties (about events, products and third party information)’ had the lowest score of (M= 3.37, SD= 1.091). The results generally indicate that the respondents agreed with the statements regarding organizational memory in their organizations. These results were interpreted to mean that the firms practice organizational memory to a great extent.

4.2.7 Organizational Performance

The study sought to describe the performance of food manufacturing firms in Nairobi County. Respondents were asked to approximate their firms’ performance on each dimension of performance. Each item had a 5-point Likert-type scale, ranging from ‘very much decreased’ (1) to ‘very much increased’ (5). The responses were analyzed using mean scores and standard deviations. Higher mean scores indicated stronger agreement on the item and lower mean scores implied strong disagreement. The results were presented in Table 4.7.

Table 4.7: Mean and standard deviation for measures of Organizational Performance

Organizational Performance Items	N	Mean	Std. Deviation
Financial Performance		3.65	
Return on Assets	68	3.54	.679
Return on Investment	68	3.75	.677
Market Performance		3.65	
Market Share	68	3.51	.985
Sales Volume	68	3.78	.666
Overall Mean		3.65	

As shown in Table 4.7, the mean score for financial performance dimension was 3.65. The item ‘return on investment’ had a higher mean score (M= 3.75, SD=.677) and the item ‘return on assets’ had a lower mean score (M= 3.54, SD=.679). The score for market performance dimension was 3.65. The item ‘sales volume’ had a higher mean score (M= 3.78, SD=.666) and the item ‘market share’ had a lower mean score (M= 3.51, SD=.985). The overall mean for organizational performance was 3.65. This mean score indicates that the respondents generally agreed that their firm performance increased as a result of organizational learning.

4.3 Test of Hypothesis

This section discusses the results of hypotheses testing in relation to the research hypotheses. The study sought to examine how the variables of the study; knowledge acquisition, information distribution, information interpretation and organizational memory and organizational performance were related (Hypothesis HA₁ to HA₄). The analysis was done using Pearson's correlation matrix. The results were presented in table 4.8 below.

Table 4.8: Correlation Matrix for Knowledge Acquisition, Information Distribution, Information Interpretation, Organizational Memory and Organizational Performance

		Knowledge Acquisition	Information Distribution	Information Interpretation	Organizational Memory	Organizational Performance
Knowledge Acquisition	Pearson	1	.689**	.757**	.814**	-.147
	Correlation					
	Sig.(1 Tailed)		.000	.000	.000	.117
	N	68	68	68	68	68
Information Distribution	Pearson	.689**	1	.655**	.830**	.254*
	Correlation					
	Sig.(1 Tailed)	.000		.000	.000	.018
	N	68	68	68	68	68
Information Interpretation	Pearson	.757**	.655**	1	.721**	-.018
	Correlation					
	Sig.(1 Tailed)	.000	.000		.000	.443
	N	68	68	68	68	68
Organizational Memory	Pearson	.814**	.830**	.721**	1	-.023
	Correlation					
	Sig.(1 Tailed)	.000	.000	.000		.427
	N	68	68	68	68	68
Organizational Performance	Pearson	-.147	.254*	-.018	-.023	1
	Correlation					
	Sig.(1 Tailed)	.117	.018	.443	.427	
	N	68	68	68	68	68

** . Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed)

4.3.1 Knowledge Acquisition and Organizational Performance

The study sought to examine the effect of knowledge acquisition on organizational performance. It was hypothesized (Hypothesis HA₁) that knowledge acquisition has a positive effect on organizational performance. Data was analyzed using Pearson's correlation and the results were presented in Table 4.8.

The results in Table 4.8 indicate that there is a negative insignificant relationship between knowledge acquisition and organizational performance ($r = -0.147, p > 0.05$). Therefore according to the results, the hypothesis that: there is a positive relationship between knowledge acquisition and organizational performance was rejected.

These findings are consistent with Cohen and Leventhal's (1990) findings that affirm the negative and insignificant relationship between knowledge acquisition and firm's performance. Cohen and Leventhal, (1990) indicated that it is not enough for firms to acquire knowledge; they must increase their absorptive capacity which is the capacity to identify new knowledge from the environment, acquire it and exploit it in order to impact on performance. Thus the finding of the study empirically confirms the perspective that acquisition of knowledge is not enough, knowledge must be explored and exploited to lead to a generation of insights which enhance learning and consequently leads to increased competitive advantage and performance.

4.3.2 Information Distribution and Organizational Performance

The study sought to examine the effect of information distribution on organizational performance. It was hypothesized (Hypothesis HA₂) that information distribution has a positive effect on organizational performance. Data was analyzed using Pearson's correlation and the results were presented in Table 4.8.

The results in Table 4.8 indicate that there is a positive significant relationship between information distribution and organizational performance ($r = 0.254, p < 0.05$). Therefore the according to the results, the hypothesis that: there is a positive relationship between information distribution and organizational performance was accepted.

The findings are consistent with Huber (1991) findings that information distribution determines how and to what extent organizational learning occurs. According to Huber

(1991), information distribution extends individual learning into a more broad based learning. He posits that when information is widely distributed in an organization so that more varied sources for it exists, retrieval efforts are more likely to succeed and individuals and units are more likely to be able to learn. The positive and significant correlation is therefore attributed to the fact that when information is distributed then it enhances learning which leads to organizational performance. This study therefore confirms the prediction of the theory by showing that firms with a higher information distribution function, increase knowledge stocks and learning that lead to higher organizational performance.

4.3.3 Information Interpretation and Organizational Performance

The study sought to examine the effect of information interpretation on organizational performance. It was hypothesized (Hypothesis HA3) that information interpretation has a positive effect on organizational performance. Data was analyzed using Pearson's correlation and the results were presented in Table 4.8.

The results in Table 4.8 indicate that there is a negative insignificant relationship between information interpretation and organizational performance ($r = -0.018, p > 0.05$). Therefore according to the results the hypothesis that: there is a positive relationship between information interpretation and organizational performance was rejected.

These findings are consistent with Dutton and Jackson (1987) findings that there a greater level of inconsistency on how different organizations interpret the same piece of information and how that information will be used differently in varied organizations. Similarly, how information is interpreted depends on an individual's prior cognitive map and these maps will vary across organizational units having different responsibilities.

4.3.4 Organizational Memory and Organizational Performance

The study sought to examine the effect of organizational memory on organizational performance. It was hypothesized (Hypothesis HA4) that organizational memory has a positive effect on organizational performance. Data was analyzed using Pearson's correlation and the results were presented in Table 4.8. The results indicate that there is a negative insignificant relationship between organizational memory and organizational performance ($r = -0.023, p > 0.05$). Therefore according to the results, the hypothesis that there is a positive relationship between organizational memory and organizational performance was rejected.

These findings are consistent with observations of Huber (1991) that information storage is legitimized based on varied individual, group and organization levels. He also observed that various challenges posed in creating organizational memory impact performance due to knowledge inefficiencies, for example; employee turnover, management change, non-anticipation of future need for certain information causes great amounts of information not to be stored, organizational members with information needs often do not know of the existence or whereabouts of information possessed or stored by other members.

4.4 Effect of Organizational Learning on Organizational Performance

The study sought to establish the joint effect of organizational learning dimensions on organizational performance. It was hypothesized (HA5) that organizational learning dimensions have a positive effect on organizational performance. The hypothesis was done using multiple regression. The results of the analysis were presented in Table 4.9.

Table 4.9: Multiple Regression Results for Effect of Knowledge Acquisition, Information Distribution, Information Interpretation and Organizational Memory on Organizational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.547 ^a	.299	.254	.480

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.169	4	1.542	6.708	.000 ^b
Residual	14.485	63	.230		
Total	20.654	67			

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.624	.403		8.999	.000
Knowledge Acquisition	-.362	.166	-.438	-2.181	.033
Information Distribution	.728	.157	.888	4.636	.000
Information Interpretation	.040	.142	.048	.281	.780
Organizational Memory	-.358	.195	-.437	-1.833	.072

a. Predictors: (Constant), knowledge acquisition, information distribution, information interpretation, organizational memory. (b) Organization Performance (Dependent Variable)

Model in Table 4.9 shows the effect of organizational learning dimensions on organizational performance. The Model shows that R Square is 0.299, which shows that 29.9% of the variation in organizational performance is explained by the joint dimensions of organizational learning.

The ANOVA demonstrates test for the combined effect of the dimensions of organizational learning on organizational performance. The ANOVA results show that the model was significant ($F = 6.708, p < 0.05$). This indicates that the combined dimensions of

organizational learning; knowledge acquisition, information distribution, information interpretation and organizational memory have a positive significant effect on performance. The findings are supported by Sadler-Smith et al., (2001) and Farrel (1999) findings which postulate that organizational learning does impact a firm's performance. They empirically tested a model of the background and consequences of organizational learning and found that organizational learning has a positive effect on organizational commitment, spirit de corps and on organizational performance.

The standardized coefficients show that the effect of knowledge acquisition on organizational performance is negative and significant ($\beta = -0.438$, $t = -2.181$, $p < 0.05$), the effect of information distribution on organizational performance is positive and significant ($\beta = 0.888$, $t = 4.636$, $p < 0.05$), the effect of information interpretation on organizational performance is positive and insignificant ($\beta = 0.048$, $t = 0.281$, $p > 0.05$) and the effect of organizational memory on organizational performance is negative and insignificant ($\beta = -0.437$, $t = -1.833$, $p > 0.05$). This shows that information distribution has the greatest effect on organizational performance ($\beta = 0.888$).

The full regression model in Table 4.9 can also be interpreted to show how dimensions of organizational learning affect organizational performance. Information distribution and knowledge acquisition had significant results. The unstandardized coefficients show that for every unit increase in knowledge acquisition, a -0.362 unit decrease in organizational performance is predicted holding other variables constant. For every unit increase of information distribution, a 0.728 unit increase in organizational performance is predicted holding other variables constant.

The findings of this study are consistent with by Huber (1991) findings that information distribution determines how and to what extent organizational learning occurs as information distribution extends individual learning into a more broad based learning. Cohen and Leventhal (1990) found that it is not enough for firms to acquire knowledge, that it is what they do with the knowledge that matters. Firms must increase their absorptive capacity which is the capacity to identify new knowledge from the environment, acquire it and exploit it in order to impact on performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the research findings, conclusions and recommendations of the study. The chapter discusses summary of findings regarding the research objectives, hypotheses and conclusions of the study. Finally, the chapter discusses implications of the study to management theory and practice and directions for further research.

5.2 Summary of the Findings

The first objective was to find out the effect of knowledge acquisition on organizational performance. The findings reveal a negative insignificant relationship between knowledge acquisition and organizational performance. Thus Hypothesis HA1 was rejected. Regarding knowledge acquisition practices, the findings of the study revealed that in any important decision, top managers seek information or advice from the board of directors or owners was a factor with the greatest effect on organizational performance. However, risk taking, innovation and experimentation in working methods had the least effect on performance.

The second objective of the study was to determine the effect of information distribution on organizational performance. The findings reveal a positive significant relationship between information distribution and organizational performance. Therefore Hypothesis HA2 was accepted. Regarding information distribution practices, the findings of the study revealed that seminars, conferences and workshops enable employees to distribute information learnt was a factor with the greatest impact on organizational performance. However, stakeholders are allowed to share their ideas and ideas are acted upon by the organization had the least effect on performance.

The third objective of the study was to determine the effect of information interpretation on organizational performance. The findings reveal a negative insignificant relationship between information interpretation and organizational performance. Hence Hypothesis H3 was rejected. Regarding information interpretation practices, the findings of the study revealed that seminars, conferences, workshops enable employees to learn and apply new knowledge a

factor with the greatest effect on performance while policies and strategy as a form of information interpretation are subject to change with new information as a factor with least effect on performance.

The fourth objective of the study was to determine the effect of organizational memory on organizational performance. The findings reveal a negative insignificant relationship between organizational memory and organizational performance. Therefore, Hypothesis HA4 was rejected. Regarding organizational memory practices in organizations, the findings revealed that company policies highlight the end users of particular information are is the factor with the greatest effect on performance while organizations keep secondary information of other parties as the factor with the least effect.

The fifth objective of the study was to determine the joint effect of knowledge acquisition, information distribution, information interpretation and organizational memory on organizational performance. The corresponding hypothesis was tested using multiple regression analysis. The regression results showed that the combination of knowledge acquisition, information distribution, information interpretation and organizational memory explained a greater variance in organizational performance than individual variables alone. The findings further revealed that information distribution had the greatest effect on organizational performance.. Therefore Hypothesis HA5 was accepted.

5.3 Conclusions

The results of the study revealed that food manufacturing firms in Nairobi County practice organizational learning to a greater extent. The findings of the study lead to the following conclusions:

There is a link between information distribution and organizational performance of food manufacturing firms in Kenya; information distribution is positively related to the organizational performance of firms. The finding confirms that information distribution is crucial in enhancing organizational performance. Hence, higher levels of information distribution would result in higher levels of organizational performance.

Results of the study also revealed that information interpretation and organizational memory had a positive but insignificant relationship since interpretation varies with the use of

information. Knowledge acquisition had a negative and insignificant relationship organizational performance as more value for knowledge is in how it is used after its acquisition. Lastly, organizational memory had the least impact on organizational performance as it had a negative and insignificant result.

Finally, the results show that the combined effect of knowledge acquisition, information distribution, information interpretation and organizational memory on organizational performance is greater than the effect of individual variables alone. This shows that synergizing knowledge acquisition, information distribution, information interpretation and organizational memory initiatives achieves a greater effect on organizational performance than implementing individual variables one at a time. Thus in the long run, this creates a high performance work system.

5.4 Recommendations of the Study

This study was based on the knowledge based theory to determine the effect of knowledge acquisition, information distribution, information interpretation and organizational memory on organizational performance respectively. It also used knowledge based theory to determine the joint effect of these dimensions of organizational learning on organizational performance. The findings of the study conducted in food manufacturing firms in Nairobi County have various implications for strategic management theory and management policy and practice explained below.

5.4.1 Recommendations for Management Policy and Practice

This study has implications to management policy and practice. First, the study confirmed a positive relationship between information distribution and organizational performance. This implies that information distribution is essential for an increased organizational performance. Thus to create a competitive advantage and improve performance, firms need to focus on creation and distribution of information widely in the organization to create stocks of knowledge that will encourage organizational learning and consequently, organizational performance. Information distribution having the greatest impact on organizational performance among the dimensions needs to be the key vision of organizational learning goals as it is assumed that for a more broad based learning to take place, information must be

shared and be equally distributed to empower the organizational learning process, as information distribution determines how and to what extent learning takes place.

Secondly for a broader based learning to take place, the organization needs to define a learning structure that specifies the people who are accountable for capturing, distributing, interpreting and storing knowledge. This will establish a concise path of networks that knowledge will follow in order for organizational learning to take place.

Lastly, the results show that the joint effect of knowledge acquisition, information distribution, information interpretation and organizational memory have a greater impact on organizational learning than the effect of information distribution on organizational performance alone. This implies that to enhance organizational performance, managers need to integrate all dimensions of organizational learning into a cycle that will encourage repeat processes that will lead to long term sustainable performance. Managers should champion this initiative by creating a culture of continuous improvement that values organizational learning.

5.4.2 Recommendations for Further Research

The study adopted a cross-sectional survey research design in which data was collected once at a single point in time due to constraints of cost and time. Although cross-sectional studies are helpful in getting insights into aspects of variables, perceptions vary over time and faces limitations in determining other causal relationships that may affect the study. Therefore, future research should adopt longitudinal research design in data collection to enhance understanding of the linkages between variables or other causal relationships involved in the study.

This study was conducted on food manufacturing firms in Nairobi County. Manufacturing firms may differ in terms of knowledge needs and levels of competency in this regard as compared to service firms and technological firms. Thus the results cannot be generalized to all firms. Other contextual differences across counties may affect level of performance as this study focused on manufacturing firms within Nairobi County only. The study should be replicated in other industries and in other countries. Such replication could further determine whether the results of this study can be generalized to a wider context. This will enhance

understanding of the relationship between organizational learning and organizational performance in different contexts.

In this study, knowledge based theory was the only theory of reference for the study thus limiting other aspects of study that may affect organizational performance. Future research should broaden the conceptualization of knowledge theory to include other theories that may give depth to the study. There is also need for a study to cover other factors related to organizational learning that can impact organizational learning to a larger extent since the factors used in this study can explain only 29.9% of the increase in performance.

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APPENDICES

Appendix I: Questionnaire

Introduction

I am an MBA (Strategic Management) student at Egerton University. The purpose of this questionnaire is to gather information on the effect of organizational learning on the performance of food manufacturing firms in Nairobi County. The information provided for this research will be purely for academic purposes and will be treated with utmost confidentiality. The research will be carried out from March 2013 to March 2015. Questionnaire was adopted from University of Ljubljana Faculty of Social Sciences 2006 Organization Learning Assessment.

Section A: Company's Profile

Please tick the appropriate box for the questions that follow below:

1. What is your job position in the firm? _____

2. What type of firm do you operate?
 - (a) Private
 - Public
 - (b) Majority Local
 - Majority Foreign

3. How old is your organization?
5 years and below 5-10 years 11-19 years over 20 years

4. How many employees are in this company?
Less than 10 between 11-50 between 51-100 above 100

5. What is the nature of business of your manufacturing company?
Alcoholic beverages Cocoa, Chocolate & Sugar Tobacco
Bakers and Millers Juices/Waters/Soft Drinks/Dairy Vegetable Oils
Slaughtering/Meat Preparation and Preservation

Section B: Organizational Learning Assessment

Indicate the degree of agreement or disagreement by ticking the choice that fits the situation in your company best using the following key where

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I	Knowledge Acquisition	1	2	3	4	5
1.	Previous decisions are a very useful source of information for current decisions.	1	2	3	4	5
2.	We try and promote risk taking, innovation and experimentation in our working methods.	1	2	3	4	5
3.	There is an emphasis on Research and Development at our company.	1	2	3	4	5
4.	Joint tasks and mergers contribute a great deal of knowledge about industry and economic environment, new methods and services/products.	1	2	3	4	5
5.	Top managers in any important decision seek information or advice from the board of directors or owners.	1	2	3	4	5
6.	Top managers in any important decision seek information or advice from sources outside the company.	1	2	3	4	5
7.	Our organization has employees whose job is related to searching for external information and are rewarded based on that.	1	2	3	4	5
8.	External sources (reports, consultants, newsletters, etc.) are extremely important for the operations of our operations.	1	2	3	4	5
9.	In our organization we often organize internal training of our employees	1	2	3	4	5
10.	We frequently send our employees to various seminars, workshops, conferences with intention to acquire knowledge and provide ways they can pass that knowledge to other employees	1	2	3	4	5
II	Information Distribution	SD	D	N	A	SA
1.	Our information system allows for efficient and effective exchange of information within the organization.	1	2	3	4	5
2.	There is an open culture of employees being encouraged to share knowledge and ideas	1	2	3	4	5
3.	Stakeholders are allowed to share their ideas and these ideas are acted on by the organization.	1	2	3	4	5
4.	We frequently hold meetings with the purpose to inform employees.	1	2	3	4	5
5.	We have formal mechanisms and systems that ensure transfer of best practices among various areas of work	1	2	3	4	5
6.	In our organization we have individuals that work in more than one team or project groups together with individuals from other organizational units	1	2	3	4	5

7.	We have individuals dedicated to collecting and internal dissemination of improvement propositions from employees.	1	2	3	4	5
8.	Team Meetings and committees are important for information distribution and decision making	1	2	3	4	5
9.	Written memos, notes are essential in distributing information	1	2	3	4	5
10.	Seminars, conferences and workshops enable employees to distribute information learnt to other employees	1	2	3	4	5
III	Information Interpretation	SD	D	N	A	SA
1.	Team meetings and committees are important for information interpretation and decision making	1	2	3	4	5
2.	Written memos, notes, letters are essential in interpreting information.	1	2	3	4	5
3.	Seminars, conferences and workshops enable employees to learn and apply new knowledge.	1	2	3	4	5
4.	Formal chain of command necessary for the correct interpretation of information.	1	2	3	4	5
5.	Company intranet, email, online forums and e-databases as a means of information interpretation.	1	2	3	4	5
6.	Policies and strategy as a form of information interpretation and are subject to change with new information.	1	2	3	4	5
7.	Work practices can be changed in order to incorporate new practices for better efficiency.	1	2	3	4	5
8.	Employees are empowered to interpret new information or ideas and apply as they see fitting in their areas of influence.	1	2	3	4	5
9.	New ideas or information officially accepted by the management is distributed officially to all members	1	2	3	4	5
IV	Organization Memory	SD	D	N	A	SA
1.	There are policies regarding how the organization stores new and old information and in defined formats.	1	2	3	4	5
2.	This information is stored systematically and can be accessed by all employees in ways specific to their areas of work.	1	2	3	4	5
3.	The organization creates and keeps manuals as a way of storing information, updating new knowledge and dealing with old information.	1	2	3	4	5
4.	The organization keep secondary information of other parties (about events, products and third party information)	1	2	3	4	5
5.	The company policies highlight who are the end users of particular information.	1	2	3	4	5
6.	The organization has a controlled main server, central library and archives for storing all company information.	1	2	3	4	5
7.	The company encourages a culture that re-enacts organizational memory through branding, creating memorabilia, company specific events and commemorations and award shows.	1	2	3	4	5
8.	The organization employs professionals who control how information and knowledge is stored.	1	2	3	4	5

Section C: Organizational Performance

For each of the following dimensions of organizational performance, tick as appropriate to indicate the change in dimension on average in the last 2 years using the key where (1=very much decreased, =2 decreased, 3=no change, 4= increased, 5= very much increased).

D.	Organizational Performance	VMD	D	N	I	VMI
	Financial Performance					
1.	Return on Investment (ROI)	1	2	3	4	5
2.	Return on Assets (ROA)	1	2	3	4	5
	Market Performance	VMD	D	N	I	VMI
1.	Sales Volume	1	2	3	4	5
2.	Market Share	1	2	3	4	5

Thank you for your participation

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Appendix II: Food Manufacturing Firms in Nairobi

Alcoholic Beverages

1. Africa Spirits Limited
2. London Distillers
3. EA Breweries
4. Kenya Breweries Ltd.
5. Erdemann Co.
6. Global Merchants
7. Kenya Wine Agencies

Bakers and Millers

1. Pembe Flour Mills
2. Rafiki Millers LTD.
3. Unga Group
4. Kamili Packers
5. Kapa Oil Refineries
6. Tri-Clover Industries
7. Barley EAML Ltd
8. Jambo Biscuits
9. Bakers Corner Ltd.
10. Ennsvalley Bakery Ltd.
11. Mini Bakeries Ltd.
12. Company (K)
13. Proctor & Allan (E.A) Ltd
14. Manji Food Industries
15. Danone Baby Nutrition
16. Haco Tiger Bands
17. Gonas Best Ltd
18. Chirag Kenya Limited
19. Tropikal Brand (Afrika) Ltd.
20. DPL Festive Ltd.
21. Spice World
22. Nairobi Flour Mills
23. Premier Flour Mills
24. Mayfeeds Kenya Limited
25. Melvin Marsh International
26. Promasidor Kenya Limited
27. Wanji Food Industries Ltd
28. Belfast Millers
29. Biofood Products
30. Value Pack Foods

Cocoa, Chocolate and Sugar

1. Cadbury Kenya Limited
2. C.Dormans Ltd
3. Chandaria Industries
4. Candy Kenya Ltd.
5. Kenafic Industries Ltd.
6. Kenya Sweets Ltd.
7. Kwality Candies & Sweets Ltd.
8. Kenya Nut Company
9. Nestle Foods Kenya
10. Patco Industries Ltd
11. Pearl Industries
12. Wrigley Company EA
13. Desbro Kenya Ltd
14. Kenafic Dairies
15. Premiere Food Industries
16. Tru Foods Ltd
17. C.Czarnikorv Sugar EA
18. Al-Mahra Industries
19. Kenya Tea Development Agency

Juices/Water/Carbonated Soft Drinks/Dairy

1. Aquamist Ltd.
2. Excel Chemicals Ltd
3. Kevian Kenya Ltd
4. Europack Industries Ltd
5. Avoken Limited
6. Razco Ltd
7. Glaciers Products
8. Beverage Services Ltd
9. Miritini Kenya Ltd
10. Pristine International
11. Coca-cola East and Central Africa Ltd
12. Kuguru Food Complex Limited
13. Nairobi Bottlers
14. SBC Kenya Ltd
15. Green Forest Foods
16. Bounty Ltd
17. Trust Feeds Ltd
18. New KCC Ltd
19. Sameer Agriculture& Livestock Kenya Ltd.
20. Palmhouse Dairies

Tobacco

1. British American Tobacco Kenya Ltd.
2. Mastermind Tobacco Ltd

Vegetable Oils

1. Edible Oil Products
2. Giloil Company Limited
3. Frigoken Ltd

Slaughtering /Preparation and Preservation of Meat

1. Kenchic Ltd
2. Highland Cannery Ltd
3. Alpha Fine Foods Ltd.
4. W.E Tilley Ltd
5. Farmers Choice Ltd
6. East African Sea Food Ltd.

Total Number of Food Manufacturing firms in Nairobi = 87

Source: Kenya Association of Manufacturers Directory (2014)

Appendix III: Target Sample

Alcoholic Beverages

1. London Distillers
2. EA Breweries
3. Kenya Breweries Ltd.
4. Erdemann Co.
5. Global Merchants
6. Kenya Wine Agencies

Bakers and Millers

1. Pembe Flour Mills
2. Jambo Biscuits
3. Unga Group
4. Kamili Packers
5. Bakers Corner Ltd
6. Mini Bakeries Ltd.
7. Proctor & Allan (E.A)Ltd
8. Manji Food Industries
9. Danone Baby Nutrition
10. Haco Tiger Bands
11. Gonas Best Ltd
12. Chirag Kenya Limited
13. Tropikal Brand (Afrika) Ltd
14. DPL Festive Ltd
15. Spice World
16. Nairobi Flour Mills
17. Premier Flour Mills
18. Mayfeeds Kenya Limited
19. Melvin Marsh International
20. Promasidor Kenya Limited
21. Wanji Food Industries Ltd
22. Belfast Millers
23. Biofood Products
24. Value Pack Foods

Cocoa, Chocolate and Sugar

1. Cadbury Kenya Limited
2. C.Dormans Ltd
3. Kenya Tea Development Agency
4. Candy Kenya Ltd.
5. Kenafriic Industries Ltd.
6. Al-Mahra Industries
7. Kwality Candies & Sweets Ltd.
8. Nestle Foods Kenya
9. Patco Industries Ltd
10. Pearl Industries
11. Wrigley Company EA
12. Desbro Kenya Ltd
13. Kenafriic Dairies
14. Premiere Food Industries
15. C.Czarnikorv Sugar EA

Juices/Water/Carbonated Soft Drinks/Dairy

1. Aquamist Ltd.
2. Kevian Kenya Ltd
3. Avoken Limited
4. Razco Ltd
5. Glaciers Products
6. Beverage Services Ltd
7. Miritini Kenya Ltd
8. Pristine International
9. Coca-cola East and Central Africa Ltd
10. Kuguru Food Complex Limited
11. SBC Kenya Ltd
12. Bounty Ltd
13. Trust Feeds Ltd
14. New KCC Ltd
15. Sameer Agriculture & Livestock Kenya Ltd.
16. Palmhouse Dairies

Tobacco

1. British American Tobacco Kenya Ltd.
2. Mastermind Tobacco Ltd

Vegetable Oils

1. Edible Oil Products
2. Giloil Company Limited
3. Frigoken Ltd

Slaughtering /Preparation and Preservation of Meat

1. Kenchic Ltd
2. Highland Cannery Ltd
3. Alpha Fine Foods Ltd.
4. Farmers Choice Ltd
5. East African Sea Food Ltd.

Target sample of Food Manufacturing firms in Nairobi = 71

Source: Kenya Association of Manufacturers Directory (2014)