

**RESPONSE BY KENYAN MANUFACTURING FIRMS  
TO GLOBALIZATION: A SURVEY OF  
MANUFACTURING FIRMS IN NAIROBI AND  
ATHI-RIVER**

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**2015**

**Response by Kenyan firms to Globalization: A survey of  
manufacturing firms in Nairobi and Athi - River**

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**A thesis submitted in partial fulfillment for the degree of Doctor of  
Philosophy in Business Administration in the Jomo Kenyatta  
University of Agriculture and Technology**

**2015**

## DECLARATION

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

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## **DEDICATION**

This thesis is dedicated to my family for their understanding, support and encouragement during my study.

## **ACKNOWLEDGEMENT**

I acknowledge the support given by my Supervisors: Dr. Margaret A. Oloko, Dr. Hazel Gachunga and Dr. Beatrice G. Gathondu for guiding me throughout this enormous task. Thank you for your tireless effort, encouragement and valuable critique, during the writing of this thesis. I was touched by your mode of supervision, which had no limit of means, editorial skills, knowledge of the subject matter and your ability to help me translate abstract ideas into coherent thoughts. I acknowledge the moral and intellectual support accorded to me by my colleagues in class at the Karen campus. Dr. Agnes Njeru, the postgraduate coordinator Karen campus, Dr. Esther Waiganjo and Dr. Antony Waititu, JKUAT (Juja Campus) gave me great support. My special thanks go to the management and staff of Sols Inclinations Limited & Exhibition and Events Organizers Limited for the support and understanding especially when I had to step aside to give more attention to course work. I cannot forget special thanks to Loise Wanjiru who held brief for me in many occasions, Nadya Khalid and Elizabeth Njoki Githinji from whom I learned how to manage word documents.

My acknowledgement also goes to the Kenya Association of Manufactures' library staff, the association members in Nairobi and Athi River (Machakos). I would also like to thank Mr. Chifalu of Export Processing Zones (EPZ) for their cooperation during the data collection; their contributions made this study a success. My appreciation also goes to research assistants, Peter Kimani, Fay Atieno and Erick Okoth for their assistance during the collection of the data, which was used for the study. My appreciation also goes to my lovely wife, Anne Kinyanjui and my supportive children Kimani, Maina and Wangari for their patience, encouragement and prayers during my study. To Anne and Maina thank you especially for your dedicated contribution at work by taking off the pressure of business workload off my back. My final appreciation goes to the authors whose publications have been of help in this study.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

CEO	Chief Executive Officer
ERP	Enterprise Resources Planning
HR	Human Resource
ICT	Information Communication Technology
IT	Information Technology
KAM	Kenya Association of Manufacturers
MD	Managing Director
SPSS	Statistical Package for Social Sciences
TOC	Theory of Constraints
UN	United Nations
USA	United States of America

## **DEFINITION OF TERMS**

- Capability** This study defines capability as a firm's ability to utilize its resources effectively such that it creates market demand of the product higher than the competitors do (De-Marchi, 2012).
- Competition** Providing products or services to buyers in a market that has rival vendors but among them none presents a monopolistic influence to determine the going price of the goods or services offered (Enz, 2010).
- Competitive advantage** This study takes competitive advantage as the ability of a firm to raise demand of its products using resources and capabilities either by creating differentiated products or by lower-priced products than their competitors (Porter & Heppelmann, 2014).
- Distribution chain** This study takes distribution chain as the chain of businesses or intermediaries through which products (goods or services) pass until they reach the end consumer (Segetlija & Dujak, 2010).

<b>Global strategy</b>	This study defines global strategy as pre-determined actions that a firm uses to venture into the global market successfully (Gupta & Govindarajan, 2008).
<b>Globalization</b>	This is the growing economic interdependence of countries on a global scale brought about by the increasing volume and variety of cross-border transaction in goods and services and of international factor flows, and also through the more rapid and widespread diffusion of technology (Awad & Nassar, 2010). This study adopts this definition for globalization.
<b>Managerial innovation</b>	This study takes managerial innovation as the invention and implementation of management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals (Birkinshaw, Hamel, & Mol, 2008).
<b>Performance</b>	This is the extent of realization of a given task measured based on pre-set goals (BusinessDictionary.com). This study adopts this definition.

<b>Resource</b>	This study defines resource as a specific asset under the custodian of a firm, which can be used to create a cost or differentiation advantage (Otchere & Annan, 2013).
<b>Resource management</b>	This study takes resource management as the efficient and effective allocation and deployment of a firm's resources when and where they are needed (Jørgensen, Becker, & Matthews, 2009).
<b>Response</b>	This is the reaction to an event, occurrence or situation, aimed at its containment or control (Business Dictionary.com). In this study it refers to the action taken by manufacturing firms in their reaction to the effects of globalization on their operations.
<b>Technology</b>	This study takes technology as the use of science and engineering in manufacturing to invent useful things or solve problems (Schrettle, 2013).

## **ABSTRACT**

Globalization affects local and international firms in many ways. Studies have shown that factors in the internal as well as external environments of firms influence the rate at which globalization affects them. The concept of globalization is multidimensional and its influence is varied in nature. This study aimed at investigating how manufacturing firms in Kenya have responded to probable pressure from the forces of globalization in order to sharpen their competitiveness. To achieve this, the study focused on manufacturing firms' response on managerial innovation, resource management, distribution chain, adoption of technology and competition. Cross sectional survey design was adopted for the study. The target populations of the study were CEOs/MDs and their deputies from 545 manufacturing companies in Nairobi and Athi-River. Stratified sampling technique was used to categorize the targeted manufacturing firms into sectors where purposive sampling technique was used to sample the respondents for the study. A total of 100 firms from the 14 sectors were targeted by the study out of which 80 responded giving a response rate of 80%. A questionnaire was used to collect primary data. Regression and correlation analysis was done to test the relationship between the study variables. The study found that continued global technological advancement has enabled management come up with innovations to respond to customer needs and economic and regulatory factors, which have prompted outsourcing some operations, respectively. The results of the correlation analysis showed that adoption of technology was significant. The study also found out that continued global technological advancement has enabled management come up with innovations in response to customer needs and economic and regulatory factors, which have prompted outsourcing some operations respectively. The findings of the study showed that there was a positive correlation between globalization and managerial innovation. The results from the study also showed that there was a positive correlation between globalization and resource management. The study found a positive relationship between the distribution chain and globalization in manufacturing firms in Kenya. The research established that legislative measures had led to the use of local intermediaries who understand legislative matters.

The study concluded that manufacturing firms in Kenya have adopted the use of technology, managerial innovation, resource management, distribution chain and competition as response strategies to globalization. The study recommends that manufacturing firms in Kenya should; keep abreast with new technologies and encourage employee knowledge and skill development ranging from low to highly specialized besides the development of hard infrastructure, work closely with institutions of higher learning to sponsor research and enhance their research departments so as to embrace innovation as a response to globalization, improve on their resource management strategies, become globally integrated enterprises, The study finally recommends that other studies should be done to find out the relationship between specific industry technologies and globalization, to bring out the technology specific challenges, to determine different managerial innovations that can stimulate firms to respond more effectively to globalization, to establish the reasons as to why energy resource is more costly to manufacturing firms and on the challenges facing manufacturing firms in their response to globalization, which was not the concern of this study.



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Globalization has come with both positive as well as negative effects on the way people conduct businesses across the world (Ray, 2007). In response to the outcomes impacted by globalization, firms that have re-organized themselves strategically have been found to achieve competitive advantage. According to Parker (2005), Ervin and Smith (2008) and Ray (2007), many firms have achieved competitiveness through product branding and adoption of new ways of approaching markets.

According to Peltonen, Skala, Alvaro and Gabor (2008), import competition among manufacturing firms has led to a negative impact on firms' profitability. Myatt (2006) notes that 21<sup>st</sup> century businesses should not overlook taking advantage of the benefits inherent in globalization. He emphasizes that through globalization, firms can reposition themselves at a higher competitive level. Myatt adds that through globalization the international business boundaries have been opened, thus allowing the movement of goods from one nation to another without many hindrances. Ervin and Smith (2008) further support this notion that through globalization, the import and export business of nations has increased significantly. Other advantages of globalization to businesses are increased customer base courtesy of targeting international customers, stabilizing commodity prices, increased opportunities for a business to expand its revenues (Myatt, 2006), enhanced relationship and goodwill between nations and the ability to import expertise (Parker, 2005).

Several factors have lead to globalization. Rowbotham (2000) asserts that a well functioning financial system adopted across the world after creation and easy supply of money across national economies; international trade imbalance; acute debt bothering the developing nations; and flexibility in the flow of financial capital are key drivers to globalization. Mussa (2000) on the other hand argues that opening up of national boundaries due to tastes, technology and public policy, which interact in important ways has, contributed to globalization. He presents political, economic and

social factors as key drivers of globalization. Social factors such as tastes of people attract economic benefits to those who respond to such tastes through using technology to either produce or supply to such tastes.

Several researchers have also condemned globalization. Globalization modifies the nature of conflicts existing between nations and regions, intensifying religious, ethnic, political and economic differences (Hardt & Negri, 2000; Steger, 2000; Stiglitz, 2002). A small economic fault that results into poor economic performance can also spread to other nations; not to mention that communicable diseases have been rampant in the advent of globalization (Adams, 2006). Parker (2005) adds that as an outcome of globalization, local manufacturing firms have faced stiff competition from multinationals with all its accompanying effects. Though to a given extent globalization has presented certain challenges to the growth and performance of businesses across the world, it has led to strategic gains making some businesses more competitive (Myatt, 2006; Wilczek, 2008).

Based on this, globalization has been appreciated more than condemned. In fact, the former UN secretary general Kofi Annan once said that arguing against globalization is like opposing the force of gravity (Crossette, 2000). Adams (2006) agrees that based on the merits globalization has brought to the business world, it is abstract for one to think of demonizing it based on a few negative effects one has encountered. He adds that through globalization, customers have been provided with products and services of high value. In addition, there is a rise in technological diffusion and investment levels as well as the number of opportunities presented to potential investors and consumers. Adams (2006) opined that the effects of globalization are similar across several industries. The effects manufacturing firms face due to globalization may therefore be the same as the ones identified above if Adams' sentiments are to be considered. Adopting this assumption basing on the argument by Adams alone shows disregard to the uniqueness of manufacturing firms.

As spelt by Loganathan (2013) firms expand globally due to the desire for high levels of growth, saturation of domestic markets, demand from overseas markets and the fact that discount retailing is key to developing economies with double-digit

growth rates. Presence of opportunities from economic factors, political factors, legislative factors, social factors, E-business, inorganic growth leading to consolidation and a growing middle class globally can also trigger a firm to go global.

Globalization has been seen to have significant effects on manufacturing firms across the world – whether positive or negative. This is because manufacturing firms deal with the production of goods. Successful multinational firms do not only venture in any global market but also identify the opportunities resulting in a global market, then formulate a strategy that will enable the firm to venture successfully. Therefore, a global strategy is a guide giving organizations ways to penetrate in the global markets. Livesey (2006) defines manufacturing as “the transformation of raw materials into finished products”. This explains manufacturing firms as those which handle raw materials and transforms these raw materials into finished goods. Therefore, given the current opening of global markets, manufacturing firms have been exposed to certain challenges that trigger the management to use diverse methods in response to this competition.

Firms operating in the same country and industry respond to globalization in very diverse ways. Empirical work using micro-level data on firms or plants initially highlighted this contrast for export decisions and how this decision correlates with observable firm performance measures such as size and productivity; only a subset of relatively bigger and more productive firms export. Bloom, Draca and Van-Reenen (2008) document a relationship between changes in the trading environment, firm innovation and skill upgrading, but on the import competition side. Most firms in European industries exposed to increased import competition from China respond by increasing their innovation and information technology intensity (Bernard, Jensen, & Schott, 2006). Subsequent work has documented a wide range of other responses to globalization that consistently vary across firms in the same country and industry, and are also strongly correlated with firm level performance measures; the number and location of export destinations, entry and exit from the domestic market, the

range of products produced, the international organization of production and innovation activities such as research and development.

### **1.1.1 Manufacturing Sector in Kenya**

Kenya's manufacturing sector is highly import-dependent (Kagechu, 2013). It is among the key productive sectors identified for economic growth and development because of its immense potential for wealth, employment creation and poverty alleviation (Kagechu, 2013). The firms face a number of challenges that include limited access to the market, high labour costs and start-up capital. According to research (Kagechu, 2013), Kenya's manufacturing sector contributes to 10% of the Gross Domestic Product (GDP) and 12.5% of exports (Were, 2007). In recent years, manufacturing firms have increased exports of textiles, mainly targeting the US market. This is attributed to the export-led growth as a policy priority in Kenya.

Most of the firms registered under this sector are owned and operated by families. The bulk of the products manufactured include food and beverages, building and construction materials, household items and chemicals. The sector is key to achieving the country's vision of becoming prosperous and globally competitive by 2030 (Were, 2007). The manufacturing sector in Kenya has been the main conduit for the country's integration into regional and world markets like Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC) (Were, 2007). The sector has attracted international investors as well (Muhoro, 2011).

### **1.2 Statement of the Problem**

For a long time Kenya has been known as a nation with adequate political stability compared to its neighbors making it a favorable state to invest in (Muhoro, 2011). The country's weak unions and less saturated market also make Kenya a favorable place for investments (Firestone, Butler, Hardy, & Karlin, 2009). As such, Kenya has attracted many international investors, who have caused competition in the local markets. This forms one of the explanations why the Kenyan market has been filled

with products most of them from overseas markets particularly Asian countries like China and India (Miriga, 2010; Nyabiage, 2012). On the flipside however, with the increase in people's and societies' interconnectedness resulting from globalization, there has been continued threats to the stability of Kenya's market environment. These threats have manifested in the form of terrorism and kidnappings of both local and foreign nationals on Kenyan soil.

In Kenya, manufacturers have also had a fair share of challenges. They have struggled to attain a competitive cutting edge against multinational firms operating in the local market (Nyabiage, 2012). Even agricultural produce manufacturers, though expected to perform well locally due to adequate availability of raw materials, have faced rapid competition from imported products. These challenges have affected local manufacturers trading internationally and locally. The statistics on the contribution of Kenya Gross Product by activity measured in market prices show that the contribution of the manufacturing sector is on the uptrend (KAM, 2011). On the side of growth rates by industry, statistics show that the growth of the manufacturing sector has been fluctuating with 2009 registering the lowest growth of 1.3% from the previous 3.5%, which later recovered in 2010 and 2011 (KAM, 2011).

There is a possibility that these fluctuations are caused by intensifying globalization and its effects on manufacturing firms. While a number of literary articles present discussions on globalization and its influence on business, less has been done to try to understand how firms are coping or responding to the ever-changing nature of globalization. According to Honkala, Goldstein, Thul, Baptist and Grugan (1999), inadequate response to the globalization phenomenon has made some countries like USA to observe increases in poverty levels. They further assert that this increase in levels of poverty has seen the gap between the rich and poor widening as poor people are denied better payment and jobs while higher profits and reduced costs continue to be experienced by corporation owners. Of particular importance is that such information in regard to manufacturing firms in Kenya is truly lacking. The reality is that globalization is an unavoidable phenomenon (Mamman, 2009), and as such, the

study sought to establish the response of Kenyan manufacturing firms to globalization.

### **1.3 Objectives**

#### **1.3.1 General Objective**

This study investigated the response by Kenyan manufacturing firms to globalization.

#### **1.3.2 Specific Objectives**

1. To establish the relationship between adopting technology and globalization in manufacturing firms in Kenya;
2. To examine the link between managerial innovation and globalization in manufacturing firms in Kenya;
3. To determine the affiliation between resource management and globalization in manufacturing firms in Kenya;
4. To establish the relationship between distribution chain and globalization in manufacturing firms in Kenya;
5. To examine the relationship between competition and globalization in manufacturing firms in Kenya.

### **1.4 Research Hypothesis**

1. H<sub>01</sub>: Adoption to technology does not have significant influence on globalization.
2. H<sub>02</sub>: Managerial innovation does not have significant influence on globalization.
3. H<sub>03</sub>: Resource management does not have significant influence on globalization.
4. H<sub>04</sub>: Distribution chain does not have significant influence on globalization.
5. H<sub>05</sub>: Competition does not have significant influence on globalization.

### **1.5 Significance of the Study**

By presenting the responses taken by different firms and the position they place on globalization, a firm in the international markets will have informed managers, entrepreneurs and the public of the best responses that can be taken to help a firm be competitive in the global business. This study also gives information that can influence policy makers to use strategies that create and maintain advantage over other firms in the same global markets. Managers from other industries can also use the findings of this study to assess whether they can enhance their competitiveness through adoption of technology, managerial innovation, resource management, distribution chain, and competition strategies. According to Hart (2003) any scientific study carried out in this social world adds to the pool of existing knowledge. To other scholars and researchers, carrying out research presents the information from which they can easily refer to in developing future arguments. This study, having observed all the scientific requirements of social research, presents such information that can benefit interested scholars or researchers.

This study is significant to manufacturing firms in Kenya, in order to help them identify the role of distribution chain strategies, resource management, adoption of technologies and managerial innovation as a way of building their competitive capabilities in the global business. This is because with the current opening and expansion of global markets due to political, technological, economical, social and legislative factors, it is quite important to understand the responses taken by manufacturing firms. In investigating the role of the above variables, management will recognize their competitive strategies in line with these factors thus enabling them to be more competitive. In addition, this will intensify the competition in the global economy with firms adopting these strategies. By presenting the responses taken by different firms in the international markets, managers, entrepreneurs and the public can know how a firm can be competitive in the global business. This study also gives information that can influence policy makers to use strategies that create and maintain advantage over other firms in the same global markets.

### **1.6 Scope of the Study**

This study investigated the response made by Kenyan manufacturing firms to globalization. The study focused on strategic responses that were able to make a firm more competitive than if it never adopted such strategies. The study focused on responses taken by these firms in the last ten years. The study concentrated on four main areas: adoption of technology, managerial innovation, resource management and distribution chain strategies, with the aim of understanding the response of Kenyan manufacturing firms toward globalization. This means that responses by Kenyan manufacturing firms outside this period were not considered.

### **1.7 Limitations of the Study**

A number of limitations were faced while conducting the study. Other unrelated previous studies had sought audience and response from the same respondents. Thus, they had a perception that all studies done focus on the same research goal. This was overcome by elaborately explaining the purpose of the study to the respondents through phone conversations and physical meetings. Also, accessing the export processing zone area was a challenge because of stringent security details. It required special permission be granted from those in authority. This was overcome by contacting and getting permission (special pass) from the EPZ offices. Finally, the firms that participated in the study had a view that many scholars conduct their studies, but fail to share their findings with them. This was overcome by promising to share the study findings with the participating firms.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents review of diverse studies explaining the concept of globalization. The chapter starts by theoretically explaining the process of globalization and then empirical literature. The study then presents the conceptual framework and knowledge gaps. According to Hart (2003) the review of literature concerns a researcher bringing out the old information about the subject under study. This helps the researcher to identify the new information by comparing the reviewed literature and the collected findings. The main aim of literature review was to identify gaps in the available information that need to be addressed by the study (Dawidowicz, 2010). This review was therefore aimed at giving the study a foundation for the gaps the study aimed to address.

#### **2.2 Theoretical Framework**

This section presents relevant theories, which were used in the study to explain the study variables. It also presents the conceptual framework used in the study. Theories such as transformational theory, convergence theory and theory of comparative advantage were used in this study.

##### **2.2.1 Transformational Theory**

Transformationalist perspective holds that there is no single cause (be it the market or economic logic) behind globalization; and that the outcome of processes of globalization is not determined (Held, McGrew, Goldblatt, & Perraton, 1999). According to Held *et al.* (1999) Transformationalist scholars' approach to the globalization process is significantly less certain on the historical lines of changes of globalization. The perspective is also less limiting of the drivers of globalization. According to Transformationalist, viewing the globalization process in terms of it reducing the power of nations (as hyper globalists do) or enhancing the power of nations (as skeptics do) is being extreme and oversimplifying the whole concept. They argue that the globalization process should be looked at in terms of changing the nature of national governments through reconstitution and restructuring rather

than growing or waning (Held & McGrew, 2007). While hyperglobalists describe the attrition of old models of stratification; and skeptics argue that globalization is marginalizing the southern nations, Transformationalist posit a somewhat harmonizing view that the globalization process is creating a new world order except that the true nature of the resultant patterns of stratification is yet to be defined. The conclusion of Transformationalist is that a larger number of factors influence the process of globalization and the outcomes of this process are highly less certain (Held & McGrew, 2007).

Some two key concerns about the hyperglobalist and skeptical perspectives on globalization are that; first, they significantly focus on teleology in globalization, which is highly less accurate. The two perspectives link the current processes of globalization to ideal cases, which is hard to achieve. They also argue that the processes of globalization are automatically making linear progress towards the ideal outcomes. Second is that the two perspectives are unacceptably empiricist. Statistical patterns should be interpreted based on a range of meanings (Held *et al.*, 1999). These limitations deny the process of globalization to be understood in sophisticated terms apart from observation hence the questionability of the skeptical and the hyperglobalist perspectives. This study, just like other scholars have done, embraces the Transformationalist theory as the main theory with ideas useful in discussing its findings since it presents globalization as without strict judgment as has been seen in the other theories. However, ideas from the other two theories shall be borrowed in the study's discussions nevertheless.

### **2.2.2 Convergence Theory**

This theory derives its foundation in the functionalist perspective that presumes that nations have specific requirements that need to be met for them to survive and operate effectively. This theory provides that to respond to these specific requirements nations must become increasingly industrialized hence resembling other industrialized nations that finally converge forming a global village (Crossman, 2013). Here, convergence of nations causes developing countries to replicate

production methods, technologies and institutions making their per capita income grow faster than the developed economies. As a result, it causes further convergence in terms of per capita income. Some of the opponents of this theory argue that convergence does not occur because of the adoption of closed economic policy of some developing countries (Sachs, 1997). However, Korotayev, Zinkina, Bogevolnov and Malkov (2011) have objected to this argument since economies are now open and technologies are easily diffusing.

### **2.2.3 Theory of Comparative Advantage**

This theory first developed by economist David Ricardo in 1817, best explains how international trade comes by and its effect among countries. According to Deardoff (2005) opportunity cost is the amount of products or services a firm sacrifices in order to produce another good, and it makes a certain firm have comparative advantage in the good it has lowest opportunity cost. Therefore, a firm should dedicate its resources in producing the good with the lowest opportunity cost then sell it at a lower price, hence deriving competitive advantage. This theory, though formulated in relation to production between countries, is relevant today since firms can produce goods they can produce best then outsource with other firms. In fact, Cassey (2012) argues that the growing outsourcing and international procurement has been derived from understanding of this theory. However, Chang (2002) criticizes this theory arguing it is in favor of big producers not small-scale producers. In addition, the fact that manufacturers in the agricultural countries under this theory should specialize in agriculture, Chang proposes that such firms would not grow in the long run and would attract more firms in the country.

### **2.2.4 Five Forces of Competitive Position Model**

The study also engaged Michael Porter's five forces of competitive position model to discuss and make meaning in the findings. This model presents a simple way of analyzing the competitive strength of a firm or organization (Enz, 2010). According to Roy (2009) the five forces of competition championed by Porter are: existing competitive rivalry between firms; threat of new market entrants; bargaining power

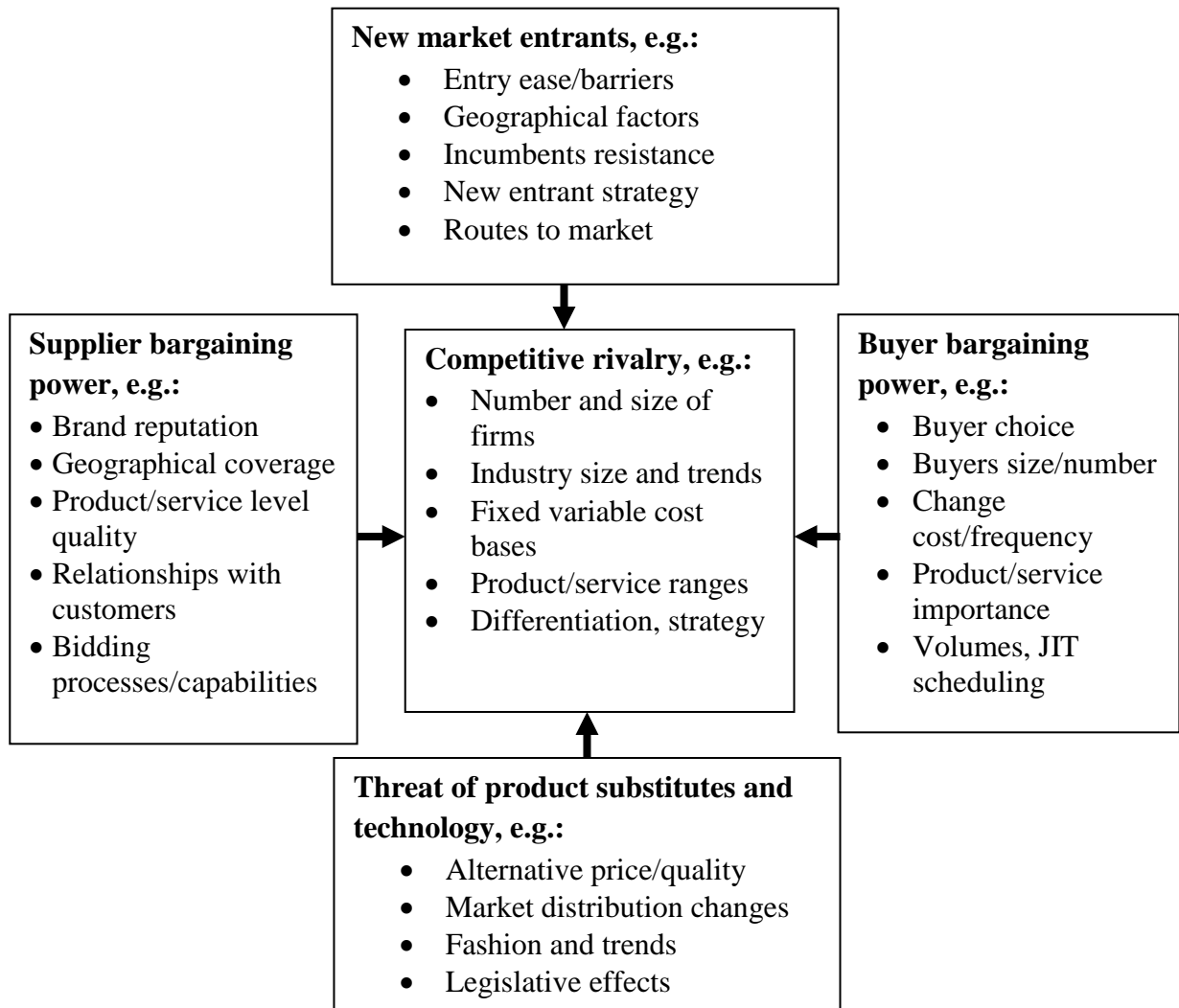
of buyers; power of suppliers; and threat of substitute products (including technology change), Figure 2.1.

Competitive rivalry also affects the success of firms in their competitive environments. The number of competitors as well as their capabilities and magnitude will determine the intensity of rivalry. Industry rivalry is considered high when: customers have low switching costs; there are high exit barriers; the industry is growing; and there are high fixed costs that lead to high production and lower prices (Hill & Jones, 2010). Rivalry has been seen to constitute price wars, advertising wars and difficulty in competing (Enz, 2010).

The bargaining power of buyers is the potential with which buyers will bargain down the prices charged by firms or the power by which they will demand better quality and service of products (Hill & Jones, 2010). When the buyers have a strong bargaining power, they will be few in number. Since they have a high purchasing power, they will purchase in large (bulk) quantities. They are well informed about the product and the market; the cost of switching to a competitor's product is low; when the product is not differentiated; or when the shipping cost is low. In this way, buyers are identified as a threat to the firm.

The bargaining power of the suppliers is considered as the ability of suppliers to increase prices of inputs. Strong suppliers deny firms of their profits through increasing their costs. Suppliers gain a higher bargaining power when there are few substitutes; they cannot be substituted; they are unique; they have high switching cost; or they are a significant input to the buyers' products. In this case the suppliers pose a threat to the profits of the firm since they dictate to the firm (Hill & Jones, 2010).

Threat of substitute products considers how easily the customers of a firm can shift to competitor products (Roy, 2009). In case a firm's customers can easily switch to competitor products, it means that the firm is likely to lose its market grip, something that will significantly affect the firm's business activities and revenue, and, depending on the magnitude of the switch, failure of the firm. A successful firm is one that exists in a market where the threat to substitute products is very low.

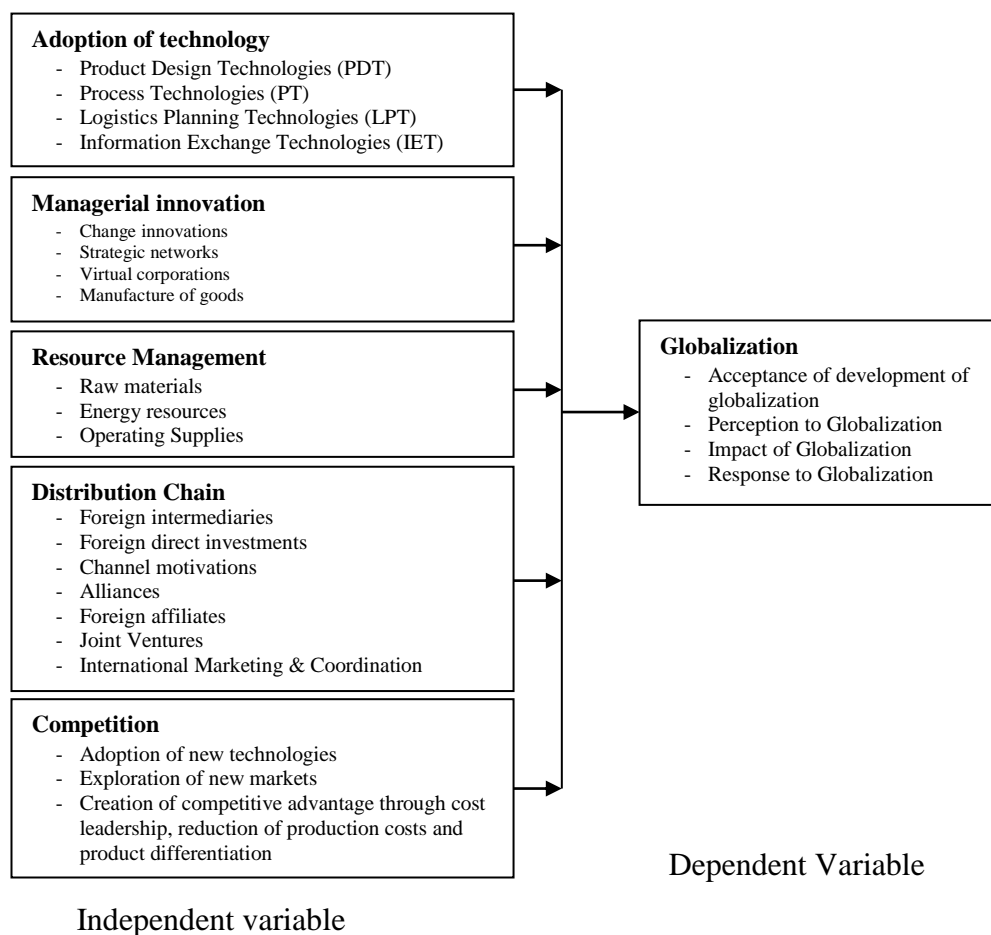


**Figure 2.1:** Porter’s five forces of competitive position [Adapted from: Enz (2010)]

Since globalization opens the boundaries of trade among nations and firms from different regions of the world, these five forces of competition model significantly helped explain the study variables under a globalised market. For instance, globalization has seen increased rivalry due to increased competition. It has also reduced the entry barriers to several areas of business. This model therefore played a significant role in discussing the findings of this study.

## 2.3 Conceptual Framework

The conceptual framework, figure 2.2, shows the relationship between the study variables. It is based on the transformational, convergence, and comparative advantage theories. The independent variables for the study are: adoption of technology, managerial innovation, resource management, distribution chain and competition to gain competitive capabilities while the dependent variable is globalization.



**Figure 2.2: Conceptual Framework**

## 2.4 Review of Literature

### 2.4.1 Adoption of Technology

According to Eldemery (2009), there has been a notable effect on the nature of work as a result of technology diffusion. Introducing a new culture on modes of information dissemination because of computers and communication technologies

evolution, has further affected the social life of people. In fact, study shows globalization has become an unstoppable historical process that has been matured by technological changes spurred by science and technology (Vassigh, 2004). Firms that have embraced technology are said to have acquired place identity (Burd, 2008) a case that has promoted their competitiveness.

Among the technological innovation that has facilitated progression of globalization and business there of is the rise of personal computers, invention of world wide web, fiber optic cable, creation of work flow software, supply chaining, digital, mobile, personal and virtual movement, and out sourcing. These innovations have eliminated barriers inhibiting globalization such as distribution, communication, ordering from any country, delivery, multi tasking, integrating horizontally suppliers, retailers, and customers to create value of firm's products (Lawlor & Glass, 2007).

#### **2.4.2 Managerial Innovation**

Management innovation unlike operational innovation which deals with the work of transforming input into output, it alters way in which work is carried out to achieve overall organizational strategy. Firms that main strategy is to win global market share of its product will not only focus on ways of transforming inputs into output but will also alter the way the transformation process is done to achieve the global customers needs (Todd, 2010).

To respond to new market needs the managers are setting tools that allow them respond to external and internal opportunity, through coming up with new ideas of expanding sales, production process that is cost effective (Kelly & Kranzburg, 1978). Among the strategies used in integrating firms, technology and markets, are a series of activities that capture market demand (Joseph & Bruce, 2010).

According to Antoldi, Cerrato and Depperu (2011) strategic networks is an agreement between linked firms, in which it allows these firms to gain competitive advantage over the competitors who are not in the network. This relationship does not necessarily make firms dependent on each other but it gives these firms final

competitive position. As a way of surviving in the global competition, some firms are building economic strategic networks such as trade blocks with aim of increasing competitiveness of their firms within the blocks. Antoldi *et al.* further argues that the concept of strategic network will comprise of different coalitions such as strategic alliances, long-term supplier buyer agreement, trade associations among others that gives a firm an advantage of accessing market information, resources, technology, helps firms share risk and outsource some activities giving advantages to the firm and enhancing competitiveness.

According to Bloomberg (1993) with the current growing global competitions, firms are finding windows of opportunity frustrating. Management have adopted diverse means of surviving in which temporary network of independent firms such as suppliers or even customers have linked themselves through information technology to share their skills, costs and at the same time access to one another's market. In many occasion these virtual corporations exist until the opportunities are captured. For instance, IBM, Apple computer, and Motorola have been found using an inter firm alliance so that they can develop an operating system and microprocessors for new generation of computers that are aimed to attract large number of customers. Generally, firms are forming virtual corporations in response to global competitions that are more of alliances and out sourcing agreements (Bloomberg, 1993).

According to Kale (2006), management should understand that businesses today are exposed to global environment. In fact, this environment forces companies regardless on their geographical location to take in to consideration the rest of the world in their competitive strategy analysis. Among the consideration that needs attention is supply chain management, which can help a firm produce product in one geographical location and sell it in another location despite their political, social, or economic boundaries.

In the global competition today with customers being in a position to buy product anywhere in the globe, company's competitive position will depend upon its ability to familiarize with the changing consumers demand and management responding



appropriately to meet those demands. Among the change, innovation adopted to counter such changing demands is supply chain management tools and techniques that allow firms to respond to these environment changes. Therefore, due to increased competition firms management is seeking for core competences for enhanced performance. Through global outsourcing, firms with core competence for a product in a certain country will outsource with businesses for that product (Kale, 2006). Generally, firm's competitive strategy will define the set of consumer demand to satisfy through its products and services while supply chain strategy will help determine the nature of procurement raw materials, how to transport to and from the company, manufacture of product, and distribution for the product to the customer as well as follow up service.

Todd (2010) provides that as competition intensifies in the global market, firms should not only aim produce new product but also innovate on ways of managing their employees. Among the key areas to be considered is strategic innovation, which is a form of bold new business model and results in creating short-term competitive advantage. According to Nag, Hambrick and Chen (2007), strategic management helps a firm analyze the key initiatives taken by a company management to improve resource utilization of resources and manage internal and external environments. Therefore, with increase in competition created by multinational firms should respond by focusing on remaking organization mission, vision, and objectives, coming up with plans and policies designed to achieve competitive advantage. Further, a firms engaging in international business should employ more structured management model to broaden its size, scope of operations and encompass requirement in global markets.

### **2.4.3 Resource Management**

There are wide benefits of resource management in the current global atmosphere where competition has become a major threat. Generally, a resource is a supply from which benefit is produced. Resource may be inform of land, capital, labour (Sullivan, Sheffrin, & Perez, 2009) entrepreneurship, or other possessions, which is transformed to produce valuable output through a process. As a result of resource

utilization benefits like increased demand of a product may be achieved which may in turn boost company's competitiveness in all spheres (Miller & Spoolman, 2011).

According to Czuchry and Yasin (2001) one of the main reason why globalization has become complex with few firms surviving in this market is there is mandatory requirement of time and resources that are needed in determining whether it is feasible to operate and gain competitiveness in the global market arena. According to Martin and Mathew (2008) one of the main foundation of Americas firms' success in the pursuit of global economy competitiveness is the ability of the education system to deliver quality graduates with a transformed mindset that are able to come up with ways of countering global competition. Greater human resource has supported new technology, entrepreneurship of many kinds and the ability to learn from the job for expertise in the global atmosphere. Generally, as a response to the current global skills requirement companies are a spending more financial resources to invest in human resource skills to learn new talents and develop capacities to support ever changing product and need of firms customer across the globe which earns firms competitiveness (Martin & Mathew, 2008). Singapore, which has massively invested in human resource, has managed to be in the second position in the Asian economies in 2011 (WEC, 2012).

Moore and Pollushin (2008) asserts among the new entrants who fail in the global markets are those who underestimate time, effort, and resources. Any firm that aims to enter in to global markets should consider whether the firms have sufficient human and financial resource to carry out its internalization objectives. The presence of well-developed financial systems such as financial markets that are able to channel financial resource can help a firm achieve global competitiveness. Singapore, which has become the first in the global markets and the ability of management and development of its financial markets, it has become the second position across the world hence giving its industries ability to raise finances and hence managing such resources to build their level of competitiveness (WEC, 2012).

According to Kache, Bettermann and Magerle (2010) firms that have efficient raw material management has a higher affinity to contribute to market share. As a way of managing raw material prices firms need to negotiate long-term pricing contracts and have a security of long-term raw materials supply, which help in balancing the cost of doing so with accessibility constraint. Firms in the country with mines and raw materials processing facilities are in a position to produce commodities that are competitive.

According to European Commission (2011), the functioning of global economy and quality of life thereof is primarily supported by natural resource. In fact by 2050, its projected the world population will have grown by more than 30% which will have attracted higher consumption yet the world use of resources are putting world under pressure calling for more resource management approaches. Firms therefore that aims to gain economic opportunities, to improve their productivity while driving the cost of inputs must improve the management of their resource stocks. In fact, using resources efficiently through sound resource management methods can help a firm achieve its global competitiveness.

According to World Bank (2013) the world economy has a growing demand for sustainable economic growth yet today's trends in the energy use are not sustainable in fact as the economies become more industrialized non-renewable resources are in turn becoming more scarce and more costly. Sharpe (2012) provide that through managing resources and ensuring there is efficiency in use of resources, firms are able to maximize profits and meet their goals.

Birasnav and Rangnekar (2009) provide that human capital development have been taken as a concept in large organization that can help counter changes in the market environment. Therefore, devising strategies for developing and managing employees' human capital can highly boost firm's competitiveness. Noe, Hollenbeck, Gerhart and Wright (2000) sees management of human resource needs attention from the creation of core competence and come up with policies that will influence employees' behavior, attitudes, and performance. Development of human

resource helps them create innovative ideas that can boost firms' competitiveness (Armstrong, 2007). Generally, firms that respond to the competition through investing in human capital, have been found to have achieved competitive advantage since such employees are in a position to give innovative suggestions to solve complex engineering problem (Kerrin & Oliver, 2002).

#### **2.4.4 Distribution Chain**

Companies are trying to connect customer relationship management (CRM) activities and customer insight information with upstream operations in the supply chain. In this way the sales force is connected with the right data in the supply chain; a salesperson is exposed to updated inventory and production data, so that he/she will be able to offer accurate information to customers. Information shared between supply chain partners can provide upstream partners with comprehensive customer information for them to better plan product development and manufacturing. By integrating CRM with supply chain management (SCM), companies are able to deliver customer-configured products (Xu, Yen, Binshan, & Chou, 2002).

Distribution has changed in character during the last decades from an emphasis on speculation (requiring forecasts, inventories and several layers of intermediaries) to an emphasis on postponement (customization, less inventories and more direct contact between manufacturers and end users). Gadde (2001) who observes the above change argues that a distribution system should not be seen as a channel of distribution "out of the manufacturer" (a supply oriented view), but as a network of specialized actors, active in fulfilling customer specific and heterogeneous needs (a demand oriented view). Hulthen (2002) and Kaplan (2002) show the considerable heterogeneity in the distribution of computers at a specific time period.

Efforts to lower costs and enhance service levels need closer coordination in the network and reorganization of relationships between actors. Lawson (2001) stresses the operational complexity of reorganizing retailer's supply chains for greater effectiveness. Speed and flexibility are of increasing importance and distribution arrangements become more differentiated according to Gadde (2001). Gadde's

analysis does not specifically account for globalization processes. If we consider globalization, we add considerably to the complexity.

Flows of goods and information have to be coordinated across national borders and the network processes involved to build and maintain relationships for coordination of distribution activities as well as for production and use activities becomes more complicated. How then are globalization and distribution linked to each other? Four main types of linkages can be identified.

First, distribution specialists globalize. Retailers, wholesalers, freight forwarders and other transportation firms, globalize as an aspect of their own growth strategy. That is in itself an interesting aspect worthy of research. Such research has mainly concerned retail firms and to a rather limited extent freight forwarders (Ludvigsen, 2000). Andersson (2002) is one of the very few academic publications on internationalization of wholesaling. Lately, Internet-based retail and wholesale actors have of course been of growing interest both for academic research and for the business press.

Second, globalization of manufacturing firms requires coordination between distribution and manufacturing activities. Since globalization of manufacturing firms is often concerned with specialization of production resources and activities to spatially dispersed locations, and since, as was pointed out in the previous section, speed and flexibility are of great importance, it is obvious that globalization of distribution and globalization of manufacturing are closely interlinked. Globalization of a manufacturing firm is not only a matter of international production and sales, but also internationalization of procurement. Thus, distribution matters both “downstream” and “upstream”. In the literature on internationalization of manufacturing companies, distribution aspects are considered with regard to extension and penetration dimensions.

Extension refers to entry strategies (direct export, sales agent or sales subsidiary) and penetration to the change from agent to subsidiary during increasing market commitment. Integration, as an aspect of globalization, increases the distribution

task. Globalization of manufacturing firms will no doubt require substantial re-organization of the firms' distribution activities and its links to complementary distribution specialists. It is very likely that globalization of manufacturing firms is an important driving force for globalization of distribution firms especially firms that are involved in distribution between points of manufacturing, such as transportation firms and wholesale firms. Andersson (2002) showed that internationalization of wholesale intermediaries is very much inter-dependent with internationalization of their suppliers and customers.

Third, globalization of retail firms drives globalization of manufacturing firms that sell through retailers. If a retailer coordinates his/her purchasing and assortment across markets, then the suppliers of goods to such retailers will be influenced, either in terms of conditions for supply to markets where it already sells or is given the opportunity to sell in new markets, or, it risks being out-competed by alternative suppliers to the new markets (Ruiz, 2000). Mitchell (2000) restates the often-heard argument that national brand manufacturers face difficult problems when their retail customers globalize. Their margins are cut due to centralized sourcing and there is a move towards global branding.

Fourth, development of electronic commerce is said to have a globalizing effect on national markets. The most enthusiastic proponents during the hype a couple of years ago grossly over-estimated the reach and speed of the process. Several studies suggest why Internet retailing has not become as strong a globalization force as was generally expected. Chakrabarti (2002) refers to the often-held opinion that competition between e-retailers is increasingly intense, continuously narrowing margins. Therefore, the argument goes that the firms need to rapidly expand their market size by international expansion.

A major difference that process management identifies from traditional management is the break with the view that businesses comprise functions. What is emerging is a basic structure of the virtual organization. Virtuality defines the ability to create partnerships across companies using value chain structures. More competition and

more collaboration in today's world economy imply a shift away from self-damaging behavior (such as that inflicted by price competition) towards a more collaborative approach to customer satisfaction. Contemporary evolution in management orientation is called cyber-centrism. This concept is described as the "management of highly interactive digital economic universe, capturing a 'real-time' vision of market realities without physical size limitations to corporate operations or growth" (Gordon, 2001). A new knowledge-based business culture so-called "global digital economy" is transforming "terrestrial" industry structures and business environments into "space" or virtually extended enterprises (Gordon, 2001). Key to the definition of this cyber-centric business model is the evolutionary practice of firms acquiring virtual skills. The so-called virtually extended enterprises are changing the way customers are treated, and the way products and services are delivered.

#### **2.4.5 Competition**

Key pillars of competitive advantage are laid on factor endowment such as land, size of population, labor, and natural resources. It is in these factors that porter argues nations can create new superior factor support and strong technology endowments such as skilled labor, culture, government support and strong technology and knowledge base. Therefore using diamond shaped diagram porter illustrates the above four components to illustrate determinants of national advantage.

According to Friedman (2006), globalization leads to increased competition due to the introduction of products from countries all around the globe with ever-increasing lower prices. It used to be that firms would only compete against firms that were geographical close and of similar size. Now with globalization, companies are competing against other companies all around the globe and all of different sizes. This growing competition also leads to what is known as commoditization; where there are so many companies with so many similar goods that a company's specific good becomes a commodity in its market because there are so many others just like it. The rate at which commoditization has occurred was unanticipated as well; just a few years ago organizations were competing against a few companies with some similar products (Friedman, 2006).

On similar consideration, globalization causes new competitors to enter national and international markets, affects buyers' power and sellers' power since the opening up of borders influences international purchasing as well as international market. Globalization, by enhancing de-territorialization and time-space compression increases the number of products or companies targeting the Kenyan market for example. It also opens up ways for more differentiated products from multinational firms. These forces of competition also affect the level of managerial innovation, resource management, adoption of appropriate technologies and firms' distribution chains. These, consequently build into firms' competitive capabilities.

#### **2.4.6 Globalization**

Some researchers, who study globalization of economies, define the global economy by means of the indicators of international integration of markets, such as international trade, foreign direct investment (FDI), activities of transnational companies, international financial flows and information communication technology (ICT) (UNCTAD, 2004; OECD, 2003). Others deal with this topic in a more holistic way; they view global economy as its competitiveness which influences the economic growth (Hamalainen, 2003).

National governments are increasingly interested in the position and potentials of their economies in the period of contemporary globalization. This interest is combined with the realization that the economies that actively participate in the globalization processes achieve higher positive effects of globalization. According to Srinivasan (2002) globalization is a benevolent force that creates opportunities for rapid growth and faster poverty alleviation, namely in the economies that are ready for it, that is, in those economies in which domestic economic, political and social environment is conducive to underpinning the globalization processes. Thus, the active participation of economy in these processes comprises the creation of such environment, which then increases the possibilities for higher economic growth and welfare.



The source of challenges to manufacturing firms can be found in the fast and unstoppable advances in information technologies, market deregulation and large reductions in transport costs, which together constitute what is commonly called globalization. These aspects put together define a new and more intensely competitive scenario and, in this way, globalization has become one of the phenomena that better explains the recent slowdown in some traditional industrial sectors in the EU (Buckley & Ghauri, 2004). To face these challenges, the response of many manufacturing firms has been to relocate their operations to reduce costs in labour intensive tasks (Marques, 2005). According to Buckley and Ghauri (2004) globalization is leading to a relocation of some of the key functions of a firm. Production operations are sliced in smaller pieces and each piece is located in an optimal location or country with lower labour cost.

## **2.5 Empirical Review**

### **2.5.1 Adoption of technology**

Pook, Hart and Szabo (2010) carried out a study in developing countries through interviews with CIOs in Hungary, Romania and South Africa. They reported on a series of interviews conducted with CIOs in these developing countries focusing on national and organizational strategies used to prepare for international competition and globalization. They achieved competitiveness by investing in information technologies (IT) that deliver strategic information to their stakeholders. CIOs expressed their views on national economic and market policies as those policies affected their organizations, their markets, and the local economy. Many CIOs remained confident in the general benefits of globalization though some hope for government protection, they nurture local expertise and bestow upon it the best IT they can offer, use IT as a value added component and where their firms use imported technologies they improve on them. Hungarian and Romanian CIOs perceived their organizations were investing more significantly in Internet technologies than South African CIOs, however, that may be a sampling aberration or a cultural bias.

Gabrielsson, Al-Obaidi and Salimaki (2010) studied firm response strategies under globalization impact in high-tech and knowledge-intensive fields. The study explored several specific theoretical approaches, namely firm competitive advantage, the resource-based view, and the eclectic model, to develop a theoretical framework by which it is possible to evaluate the impact of globalization on firms originating in small and open economies. The study investigated operation mode and marketing strategies as a possible means to respond to globalization pressure. The study highlighted the need to develop dynamic capabilities, particularly in configuration and coordination of the global value chain, and recommends usage of response strategies that result in multiple advantages, such as cost and differentiation. Also, focus strategy was used especially in the growth phase of the industry. Moreover, the results indicated that the response strategies are environment and situation-specific and their nature is dependent on whether the industry is in the growth or maturity stage.

Dahlman (2006) studied the challenges that developing countries face in technology, globalization and international competitiveness. He traced the role of technology in economic growth and competitiveness, summarized the strategies of the fastest growing economies over the last 50 years from the perspective of their technology strategy, summarized some of the key global trends which are making it more difficult for developing countries to replicate the fast growth experience of the countries mentioned, and traced the impact of the rise of China on developing countries.

Lee (2006) did a study on the social impact of globalization in the developing countries. He used an ex-post measurable definition of globalization, namely increasing trade openness and FDI. He found that: 1) the employment effect can be very diverse in different areas of the world, giving raise to the concentration and marginalization phenomena; 2) increasing trade and FDI do not emerge as the main culprits of increasing within-country income inequality in developing countries, although some evidence emerges that import of capital goods may imply an increase

in inequality via skill-biased technological change; and 3) increasing trade seems to foster economic growth.

Archibugi and Pietrobelli (2002) explored the impact of the different forms of the globalization of technology on developing countries. They found that through travelling, media, scientific and technical workshops, Internet and many other communication channels, globalization allows the transmission of knowledge at a much greater pace than in the past. However, this does not automatically imply that developing countries succeed to benefit from technological advances. On the contrary, this will strongly rely on the nature of the technology and the policies implemented in both advanced and developing countries.

### **2.5.2 Managerial Innovation**

Daniel, Myers and Dixon (2008) did a study on adoption of managerial innovations. Four case studies were undertaken of the adoption of organization-wide managerial innovations. These were used as a means of subjecting the rationales that Sturdy (2004) posited for the adoption of managerial innovations to empirical inquiry. The study also sought to explore how the identified rationales may relate to characteristics of the subsequent adoption process, namely, the timing of adoption in the life cycle of the innovation and how long the adoption process takes.

Whilst the study proposed his rationales as a simple list, this study suggested a relationship or pattern between the rationales. In all four cases, a rational justification for adoption of the managerial innovation in question was identified; and each was in addition to another distinct rationale. The cultural rationale was not explicitly observed in the study. Cerdin (2003) and Fenton (2003) both report studies of the international diffusion of HR practices. They observe that culture does not drive or prevent adoption, but it does result in “translation” of the innovation to fit with local custom and practice. Indeed, the case studies provided examples of translation in the case of the balanced scorecard. For example the need as a public sector organization to continue with existing measures for external reporting and monitoring

requirements, slowed down the impetus in some divisions to develop measures for the scorecard.

Khaledabadi (2008) did a study on the main drivers of sustainable vehicle development. Based on a comprehensive theoretical framework on the concepts of sustainability and corporate social responsibility, innovation and knowledge management, the study aimed at adding to the knowledge of industrial competition and technological innovation. Moreover, as most analyses of industrial evolution have primarily relied on retrospective studies, by adopting a real-time research approach, the thesis adds to this literature. The advantage of such an approach is that it provides an opportunity to learn from an ongoing and highly uncertain process. The study focused on patent analysis and empirically, builds upon studies of European patent data on the main alternative fuel vehicle technologies hybrid electric, battery electric, and fuel-cell and on manufacturers' data on product releases.

The findings of the study revealed that the Japanese carmakers are head and shoulders above others in AVT; where both in HET and FCT, Toyota, Honda and Nissan hold the first ranks. The only European automotive manufacturer that has an appealing number of patents in FCT is Renault, which in turn has close partnership with Nissan. Other giant manufacturers, including the American carmakers, seem to be quite passive. Only Ford holds 16 patents in HET since 2002 when its first patent was assigned. The reason why Ford has adopted a "follower" approach might be linked to the high level of uncertainty or lack of technological knowledge (Khaledabadi, 2008).

Singh (2008) studied globalization, national innovation systems and response of public policy. He attempted to set the significance of public innovation policies in contemporary developing countries in the context of the fast pace of globalization. It is fairly well established both in theory and practice that investment expenditure on innovation projects is likely to be low if left in the hands of private economic agents as they have a tendency to under-invest due to the 'public good' nature of the

outcomes of R & D. However, policy in developing economies seldom takes seriously the importance of investment in innovation projects. This has not been without far-reaching implications for the growth and development performance of developing countries in general. The study found that developing countries, however, seem to ignore the importance of national innovation systems, preferring instead to adhere to the intellectual property rights regime put in place by the WTO. There are two possible reasons for this.

First, developing countries appear to perceive, if naïvely, that because technological globalization has become pervasive, domestic agents of production will have no problem in drawing on the global pool of knowledge. The focus is thus on liberalization policies, the global knowledge market and its accessibility to developing countries. But this position assumed by developing countries smacks of the naïve neoclassical view that innovation is an automatic and costless process. The paper explores the role of international institutions and national governments in the task of strengthening national innovation systems through innovative interventions at national and international levels.

Aghion, Robin, Stephen and Fabrizio (2005) found that the effect of competition on firms' or industries' willingness to innovate depends on their level of efficiency (technology). In particular, competition is expected to spur innovation by firms close to the efficient frontier (those with highest efficiency) while it discourages innovation by firms that are far from the frontier. In Aghion *et al.* (2013) the predictions arise from a Schumpeterian model where incumbent firms that are closer to the frontier have an incentive to innovate when faced with potential (foreign) entrant in order to retain their market.

Firms that are far from the frontier cannot compete with the more efficient entrant and competition simply reduces their expected benefits from innovation. Schumpeterian model is about generated by innovations, innovations result from entrepreneurial investments that are themselves motivated by prospects of monopoly rents and new innovations replacing new technologies. In other words, growth

involves creative destruction (Aghion *et al.*, 2013). Competition thus provides incentives for innovation for the more efficient domestic firms and a disincentive for the less efficient ones.

### **2.5.3 Resource Management**

Otieno (2010) did a study to investigate the organizational and national context within which enterprise resource planning (ERP) is adopted and used in Kenya. In general, this research was based on the need to study organizations in their societal contexts and information systems in their organizational settings. The study findings suggested that the company sector plays an important role in ERP implementations in several key dimensions. ERP systems with in-built business practices express the tendency towards standardization. In addition, the study investigated the challenges faced by organizations implementing ERP systems in Kenya and factors influencing ERP upgrade decisions. The findings suggested that ERP implementation and upgrade is influenced by existing contextual factors. The study proposed an IT strategy framework, which can be used by organizations planning to implement ERP to align their businesses and IT strategy. Finally, the study provided practical guidelines to practitioners on ERP implementation and upgrade based on the experience of the case study organizations and the ERP consultants interviewed.

Mohammed (2012) did a study to explore the local practice in construction resources management and develop a construction resources management system to facilitate the management of construction resources. He explored PHP programming language capabilities and utilized these capabilities in developing construction resources management software, which he named Construction Resources Management Software (CRMS). A survey questionnaire supported by interviews was used to explore the local practice in construction resources management. The study found that most contracting companies considered the main obstacles in using computer in construction resources management as shortage of user-friendly computer programs and lack of understanding of the importance of using a computer program. The study clarified that improper cutting of materials was one of the most important factors affecting material waste. The survey also indicated that the stability of the work and

work discipline was one of the most important factors affecting increasing productivity. It was also revealed that lack of satisfaction of workers reduced productivity.

Faugoo (2009) studied globalization and its influence on strategic human resource management, competitive advantage and organizational success. The study principally examined the Resource Based View (RBV) perspective of Strategic Human Resource Management, which views human resources with their knowledge, skills and experience as the central source for organizational performance. It also sought to understand the relationship between HRC ‘Human Resource Capability’ and organizational performance, and the ideologies advocated by the ‘Type 3 Company, which sets out a new agenda for human resource management and is evidence of the new people-first approach to strategy, and are synonymous with the basic principles of the (RBV) perspective of strategic human resource management.

The study further sought to assess how this perspective can provide the basis for an organization’s competitive advantage and can act as a contributor to organizational success. The research methodology used to investigate the issue is the case study approach, with secondary research data which looks at examples from French, German and Indian global organizations who are attempting to implement these approaches. Empirical findings stress that in current times companies cope with the challenges posed by globalization, through the use of the RBV perspective, which regards employee skills, knowledge and experience as a source of competitive advantage through the use of ‘HRC, HR capabilities and by adopting the principles of the Type 3 companies, such companies are likely to gain competitive advantage, enjoy superior performance and attain organizational success.

Nivlouei (2014) studied electronic human resource management system: the main element in capacitating globalization paradigm. Perhaps we can claim that current era is the period at which human is standing on the bilateral edge of industry and tradition. The basic characteristics of the complex industrial society in the future confirm that most of the human management and communication mechanisms will

not change during human life. Therefore, moving towards the electronic world is a predictable phenomenon. In recent years electronic human resource management (E-HRM) is being used in most of the big companies and institutions and is among the leading organizational systems in human resource management (HRM) which its applications are considered to be very effective and cost-effective. Doubtless in nowadays chaotic world, implementation and development of the E-HRM systems as one of the basic features and elements in capacitating globalization paradigm play a significant role in companies and countries.

Globalization paradigm is a set of multidimensional and complex processes which comprises several fields including economics, ideology, politics, culture and natural environments and leads to more dependency among different countries. The study sought to propose an implicit model to identify the nature, objectives, policies and strategies, applications and E-HRM system outputs in order to clarify the role of this system as one of the most affective and affected basic elements in capacitating globalization paradigm by relying on its dimensions, and point out the importance and necessity of the phenomena of organizational globalization in modern societies via E-HRM system.

Hickman and Olney (2010) examined whether American workers respond to globalization by increasing their investment in human capital. Specifically, they measured the extent to which offshoring and immigration affect enrollment at institutions of higher education. The results indicated that both offshoring and immigration increase enrollment at community colleges, particularly among older students. We conclude that workers in the U.S. are responding to offshoring and immigration by acquiring the skills necessary to compete in a global economy.

Shastri (2008) studied human capital response to globalization in education and information technology in India. The study focused on the impact of globalization varies across Indian districts with different costs of skill acquisition. The focus was on the cost of learning English, a relevant qualification for high-skilled export jobs. Linguistic diversity in India compels individuals to learn either English or Hindi as a



lingua franca. Some districts have lower relative costs of learning English due to linguistic predispositions and psychic costs associated with past nationalistic pressure to adopt Hindi. It was demonstrated that districts with a more elastic supply of English skills benefited more from globalization: they experienced greater growth in both information technology jobs and school enrollment. Consistent with this human capital response, they experienced smaller increases in skilled wage premiums. Recent studies have shown that trade liberalization increases skilled wage premiums in developing countries. This result suggests globalization may benefit elite skilled workers relatively more than poor unskilled workers, increasing inequality. This effect may be mitigated, however, if human capital investment responds to new global opportunities. A key question is whether a country with a more elastic human capital supply is better positioned to benefit from globalization.

Gachunga (2008) did a study on the impact of globalization on the human resource management function in developing countries: a case study of Kenya public corporations. Gachunga found out that globalization has a major impact on the management of human resources in developing countries including Kenya in that it has led to homogenization and convergence in organization strategies, structures and processes as well as in consumer choice. With accelerating globalization, organizations have had to change and new trends have set in even in the management of human resources.

Globalization has led to changes in organization design and organization structures are leaner thus improving efficiency but having a negative impact on staff numbers, which have had to be reduced. This means that employees have been retrenched in many sectors like telecommunications, the Kenya Railways and other public service sectors in order for those organizations to gain competitive advantage. Reward management systems have changed and even the human resource planning strategy is to have a leaner staff in the core areas and to hire part time workers in a bid to reduce costs and to enable the business to run profitably and efficiently. The non-core jobs have been outsourced which has led to an increase in independent contractors to service industries. However, the homogeneity that results from globalization has had

a major effect in developing countries because of brain drain. Gachunga (2008) concluded that globalization has its positive side as well as its negative side. It affects the economic dimensions; that is trade, finance, aid, migration and ideas. Increases in these dimensions of globalization, if managed in a way that supports development in all countries, can help alleviate global poverty under certain conditions.

Boohene (2011) assessed whether Graphic Communications Group Limited's (GCGL) human resource management practices, particularly recruitment and selection, performance appraisal, remuneration, and training and development practices influence its performance. Simple random sampling was used to select one hundred employees from GCGL. T-tests were carried out to examine the relationship between the selected HR practices and corporate performance. The results revealed that, from the perceptions of the respondents, there exists a positive relationship between effective recruitment and selection practices, effective performance appraisal practices and GCGL's corporate performance. The research did not gather sufficient evidence to conclude on how remuneration, training and development practices influence GCGL's performance. The study recommends that the management of GCGL continue to ensure that the company's HR policy, effective recruitment and selection practices, as well as effective performance appraisal practices are upheld.

#### **2.5.4 Distribution Chain**

Eyong (2009) explored lean and agility frameworks as tools for achieving supply chain integration. The study sought to point out the impact that the concepts of lean and agility can have on the supply chain as a whole. Four companies were investigated in connection to the level of awareness, perception, and practical application of these tools in their supply chain. The information was collected in a survey questionnaire from the four companies and supported by an interview. The results showed that lean and agility are important tools to achieve supply chain integration, but respondents are yet to fully achieve the transition to lean/agile enterprise. It could be said that lean/agile supply chain is still more in theory than in practice.

The level of awareness to market changes is high but there seem to be no specific way in achieving integration in the supply as there is wide variation in the way one company achieves it with respect to another. Generally, respondents are implementing lean/agile principles in cooperation and collaboration with suppliers and customers, demand pull system, and using combination of strategies. However, it is clear that adequate market information is required when trying to fit lean/agile principles into supply chain strategy. Furthermore, all respondent recognized the need for change to satisfy customer need, but the respond to change vary from one company to another. Also, there is a gradual shift from traditional focus solely on cost and profit to customer relation relationship management and customer satisfaction. Consequently, companies are organizing themselves around the customer who pulls goods and value from the producer of the goods.

Guan (2010) described and analyzed the trends and developments of actors along distribution channel. In particular, the study focused on resellers and manufacturer based on the empirical material from one particular case study. The study had three main goals: (1) to investigate the challenges arising from channel actor developments, the effects of these developments on the structure of the retailer supply chain and their implications for manufacturers and suppliers, (2) to identify explanations for manufacturer's vertical integration of distribution and the resulting impacts and, (3) to conduct a preliminary customer value analysis relating to the distribution channel of solid wood products. The study took an exploratory and qualitative research approach with an abductive reasoning process. A case study strategy was adopted, which studied a distribution channel consisting of a Sweden-based timber manufacturer that vertically integrated a distributor in the UK. Semi-structured interviews comprised the primary data collection technique in this study.

A two-step data collection process was conducted between May 2009 and April 2010, including 29 interviews with 24 interviewees from eight organizations, representing the manufacturer, distributor and reseller in the distribution channel. Non-participating observations were carried out by attending sales meeting and joining account managers on store visits. All interviews were documented and

transcribed and the information was collated into case units, along with any supporting secondary data, such as company magazines, web resources, annual reports, sales reports and meeting presentations. This thesis has produced several findings. Reseller developments have promoted the formation of reseller demands, such as integrated solutions with respects to logistics, marketing, merchandising, innovation, etc. Retailer developments have driven the change of a retailer supply chain structure, and have opened up a number of new questions to be posed on manufacturer and its positioning in the supply chain.

The most important factors driving the manufacturer's vertical integration of distribution are customer demands, the manufacturer's repositioning strategy with regard to its business focus and its positioning in the supply chain. The vertical integration of distribution transforms the manufacturer into a direct supplier to large timber product resellers. It also offers the supplier a great opportunity to enhance offerings and establish strategic relationship with customers. The output of suppliers has expanded from solely manufacturing goods to also include services and knowledge associated with goods. In practice, it can be complicated for a supplier to create and communicate value. A full understanding of what timber product customers seek in terms of value elements has not yet been achieved. This study has assisted in terms of understanding the differing value that channel actors place on a range of product, physical distribution, service and supplier value elements by developing a value analysis framework. Suppliers can use this framework when designing, customizing and marketing offerings for customers.

Henriksson and Nyberg (2009) conducted both theoretical and empirical study of two fields of research: the resource-based view (RBV) and supply chain management (SCM). The theoretical study has two main stages: RBV describing competitive advantage and SCM practices as a source of competitive advantage. A literature survey has been carried out in order to understand the concepts of RBV and SCM. Furthermore, a case study has been carried out in three fast-growth companies by researching whether the company utilizes the practices suggested in the literature. Before the case studies were carried out, secondary information about the case

companies was collected. With this knowledge in mind, interviews were planned and implemented. The study found that it is worthwhile for the case companies to utilize and try to develop supply chain practices.

Adamo (2010) analysed how current trends in Supply Chain Management are affecting the global wine supply chain, and builds on the specific case of the Argentinean wineries that sell their products in the U.S market. This was done by analyzing each tier of the supply chain using Porter's Five Forces model in order to understand the characteristics of each tier, how these forces impact the supply chain as a whole and how companies interact between tiers. Current trends in Supply Chain Management affecting the current state of the supply chain were also analyzed. Possible changes in the supply chain configuration due to the adoption of these new trends by the organizations along the chain were also analyzed and some of the major aspects that Argentinean wineries should take into account in order to gain a better competitive advantage along the chain were described.

Thuong (2011) explored the value chain of frozen white leg shrimp exported to the U.S. market from Khanh Hoa Province, Vietnam. Three objectives were set up, that is, (1) to identify the activities conducted by different actors in the value chain and the corresponding costs and earnings of those activities, (2) to evaluate the distributions of revenue, cost and profit along the chain, and (3) to determine factors preventing shrimp farmers from dealing directly with processing firms. Research findings showed that before being exported to the U.S. market, white leg shrimp has to undergo farming, procurement and processing. Shrimp farming basically comprises of such steps as pond cleaning, seed release and caring. When shrimp attain harvestable size, middlemen perform the procurement, which includes harvesting, preserving and transporting. At the processing plants, shrimp are transformed into final products, packed, labeled, preserved and stored waiting to be exported. During shrimp farming, farmers incur several costs like seed, feed, labour and other miscellaneous expenses. At the procurement stage, in addition to the purchasing costs, middlemen have to add other costs like transport, labour, ice, and other inputs to transfer shrimp to the next stage.

At the processing stage, direct material, direct labour, overhead, and other costs are added in accordance with the accounting format. Based on costs and earnings data, some calculations were made which revealed the distributions of revenue (export price), cost and profit of 1 kg frozen shrimp exported to the U.S. market. Cost and profit distributions were in sync with expectations. The survey revealed three reasons why farmers depend on middlemen to sell their harvest, that is, lack of facilities, delayed payment policy and risk aversion.

### **2.5.5 Competition**

Haggqvist and Lundkvist (2010) investigated the branding strategies of MNCs in international markets. Two research questions were addressed: how can the branding strategies of MNCs in international markets be described and how can the factors determining MNCs' choice of branding strategies in international markets be described. Qualitative case studies of two known MNCs, Procter & Gamble and Sony Ericsson were conducted; the first an example of company with a product brand strategy and the latter one with a corporate brand strategy. The findings showed that MNCs use either a product brand strategy or a corporate brand strategy. However, there may be mixtures of the two types but emphasis is typically on one of them. A product brand strategy is characteristically used when a company offers multiple products within different business, segments and when there are several different target groups. With a corporate brand strategy, the corporate name and the brand are the same. There is typically a master brand which has the same name as the corporation, and which may have additional sub- brands. It was found that the factors determining the branding strategy in international markets are stake holder interests, corporate image and reputation, market complexity as well as marketing costs.

Uslay (2005) did a study on the role of pricing strategy in market defense. He attempted to shed light on the role that price plays in pre-emptive and post-entry market defense of firms. As such, the questions tackled included: how effective is price as an entry-deterrence tool; in conjunction with firm and market specific barriers to entry; and as a post-entry retaliation mechanism? What are the facilitating

conditions for limit, aggressive (predatory), competitive and supra competitive pricing? What are the (long-term) consequences of these strategies? Dynamic process model was adopted for the study where hypotheses were tested in a key network industry – the airline industry. Building upon the advantages of multiple methods, a triangulation, the study found that both limit pricing and predatory pricing can serve as effective strategies for the incumbents' market defense. Predatory use of pricing in network industries may diminish consumer welfare. Results also suggest that firm specific barriers have a more significant role in market defense than market specific barriers.

### **2.5.6 Globalization**

Simpson (2007) did a comparative study on the impact of globalization on the development of Bangladesh and Tanzania. His study sought to understand what the impact has been on two of some of the world's poorest developing countries, Bangladesh and Tanzania. Within the research, globalization was measured by openness, specifically changes in trade and investment flows. Impact was measured through change in development, and in order to do this, a modified human development index was created. By analyzing each of the two countries during the globalization period and comparing and contrasting the experience with the period prior to globalization using common econometric techniques, the study concluded that neither country had been excluded from the most recent period of globalization. Further, it concluded that the net impact of globalization on development in both countries had been neither positive nor negative, thereby suggesting that both positive and negative forces have counterbalanced one another.

Mamman (2009) did a study to investigate the perceived impact of globalization amongst Nigerian bank managers and professionals. Managerial and organizational cognition (MOC) literature was used to evaluate perceptions of impact. The study adopted a survey methodology to gather the information needed. Descriptive statistics and statistical analyses were used to evaluate various relationships. The study found that the respondents viewed the outcome of globalization as unfair. They also viewed globalization as endangering the economy and cultural values of Nigeria.

However, they saw the benefits of globalization in terms of transfer of good management and business practices as well as flow of foreign direct investment. They also seemed to believe that globalization is open enough to accommodate other economic and political systems. However, they also believed that globalization hinders nation states to formulate policies favorable to the economy. Similarly, the majority did not believe that the world would be a better and fairer place if all countries adopted the philosophy and principles underpinning globalization.

## **2.6 Critique of Existing Literature Relevant to the Study**

### **2.6.1 Technology**

With the opening of borders to trade and foreign investment, globalization brings opportunities and pressures for domestic firms in emerging market economies to innovate and improve their competitive position. Many of these pressures and opportunities operate through increased competition from and linkages with foreign firms. Useful knowledge has not necessarily become more evenly spread out across space, as Chesbrough (2003) claim; rather linkages are created between specialized knowledge development nodes located in places which are increasingly more geographically dispersed. Knowledge flows across actors and space as embodied in machinery or components; and between industries or firms with very different degrees of Research and Development (R & D) – intensity and knowledge base characteristics. Low-tech firm users are linked to high-tech knowledge providers, and vice versa; innovation in individual firms by necessity becomes linked to interfacing with lead users located elsewhere; and to interfacing with leading suppliers, research institutes or universities that are more and more likely to be located outside of the immediate surrounding environment.

The intensity of innovation-based competition is increasing, in part triggered by the rise of India and China as major international players. Symptomatic of all this is the internationalization of corporate enterprises and innovation. Whereas we still see that market access or proximity to key users remains the single most important driver of such internationalization in general, the proportion of corporate R & D performed



outside domestic countries is increasing rapidly (Granstrand, 1999). The most important overall motive for this shifting of R & D activities remains customization of technologies to suit local market conditions, but there is clear evidence that technology sourcing plays an increasingly important role (UNCTAD, 2005). This all means that national innovation systems or clusters are forced to open up. This study sought to find out whether manufacturing firms in Kenya have adopted the use of technology in their response to globalization.

### **2.6.2 Managerial Innovation**

Managerial innovation involves the introduction of novelty in an established organization, and as such it represents a particular form of organizational change. In its broadest sense, then, managerial innovation can be defined as a difference in the form, quality or state over time of the management activities in an organization, where the change is a novel or unprecedented departure from the past (Hargrave & Van-de-Ven, 2006). In its broadest sense, managerial innovation has, of course, received considerable research attention over the years.

There are four key perspectives of managerial innovation: (1) an institutional perspective that focuses on the socioeconomic conditions in which new management ideas and practices take shape (Guillen, 1994); (2) a fashion perspective that focuses on the dynamic interplay between users and providers of management ideas (Abrahamson, 1996); (3) a cultural perspective that focuses on how an organization reacts to the introduction of a new management practice (Zbaracki, 1998); and (4) a rational perspective that focuses on how management innovations—and the individuals who drive them deliver improvements in organizational effectiveness (Chandler, 1962). The study evaluated the adoption of managerial innovation as a response to globalization.

### **2.6.3 Resource Management**

Managing resources is increasingly viewed as a process in which the organization forms the central unit of interaction (Coward, 1980). The mode of organization and the pattern of interaction within the organization, in turn, affect the resource management outcome. Materials management is that aspect of management function

primarily concerned with the acquisition, control and use of materials needed and the flow of goods and services connected with the production process having some predetermined objectives in view (Rogich, 2008). The main objectives of materials management are: to minimize material cost; to purchase, receive, transport and store materials efficiently and to reduce the related cost; to cut down cost through simplification, standardization, value analysis and import substitution; to trace new sources of supply and to develop cordial relations with them in order to ensure continuous supply at reasonable rates and to reduce investment tied in the inventories for use in other productive purposes; and to develop high inventory turnover ratios. This study focused on how manufacturing firms in Kenya have adopted resource management as a response to globalization.

#### **2.6.4 Distribution Chain**

Distribution of manufactured products takes place by means of channels that are created by distribution chains. It is through these channels that products are made available to the consumers through intermediaries who buy and sell products from the manufacturers. To ensure success is achieved through these channels, many firms' marketing departments normally design channels and select appropriate channel members or intermediaries. In addition, there should be regular monitoring of the channels performance overtime and modify the channels if necessary to enhance performance (Kotler, Keller, & Burton, 2009).

According to Kotler *et al.* (2009) as a way of managing channels in the distribution chains and winning the loyalty of members in the distribution channels, there is a need to exercise channel motivation. Some of the actions are offering higher margins to the intermediary, special deals, premiums and allowances for advertising. Kotler *et al.* finally argue that since conflicts may arise in the channels, actions such as threatening to cut back on margins should be the customers. This study investigated whether manufacturing firms in Kenya have adopted distribution chain as a response to globalization.

### **2.6.5 Competition**

Studies have examined the heterogeneity in firms' responses to product competition in terms of changes in their productivity (the other part of "capability"). Aghion *et al.* (2005) hypothesized that within-industry variation in firm performance should increase with competition, as those firms further from the frontier and in regions with poorer business institutions invest less while those close to the frontier will invest more in new technologies and production processes. They analyze a three-digit industry data available for all the states in India for the period 1980–97 and find that entry liberalization (de-licensing) led to an increase in within-industry inequality in output, labour productivity and total factor productivity.

Sabirianova, Svejnar and Terrell (2005) also found support for heterogeneous effects of firm entry on firm performance in Russian and Czech industrial firms. They found that entry by foreign firms in a given industry has a positive effect on the productivity of foreign firms (which are at or close to the frontier) but a negative effect on the productivity of domestic firms (which are laggards compared with foreign firms). This study sought to find out whether competition had been adopted as a response strategy to the effects of globalization.

### **2.6.6 Globalization**

While globalization is indeed quite a dynamic and complex phenomenon, it does wield significant influence at local, national and international arena. This occurs through the continued interconnectedness between countries, institutions and people. Consequently, such interconnectedness results in important changes of economic, environmental, political, social and cultural nature. Even though globalization is a multidimensional phenomenon, one cannot deny that some of its most visible aspects are of economic nature (Cochrane & Pain, 2004).

Ritchie (1996) defines globalization as the process of corporations moving their money, factories and products around the planet at ever more rapid rates of speed in

search of cheaper labour and raw materials, and governments willing to ignore or abandon consumer, labour and environmental protection laws. As an ideology, it is largely unfettered by ethical or moral considerations. Firms therefore ignore to respond to globalization phenomenon at their own peril. This study sought to establish how different manufacturing firms in Kenya respond to globalization.

According to Prakash and Hart (2000) globalization has brought out new challenges as well as opportunities, which has shaped both institutional and individual responses to this phenomenon. Stiglitz (2006) provides that in capitalist economies globalization has demanded countries competing to increase labour market flexibility, lower minimum wage and weaken workers protections. However, in countries such as Sweden and the Scandinavian, response to globalization has provided social protection and seen the need to highly invest in people. Instead of abandoning welfare state of individuals these countries have instead fine-tuned it in order to meet the new demands caused by globalization. Stiglitz (2006) finally provides that, as a way to cope with globalization there is a need to invest more in education, manage inflation, moderate unemployment, and ensure taxes are progressive in favour of low-income individuals to enhance their savings.

## **2.7 Research Gaps**

Different studies have been done on technology and globalization. A study by Archibugi and Pietrobelli (2002) explored the impact of the different forms of the globalization of technology on developing countries. They found that through travelling, media, scientific and technical workshops, Internet and many other communication channels, globalization allows the transmission of knowledge at a much greater pace than in the past. Dahlman (2006) did a study on technology, globalization and international competitiveness as a challenge for developing countries. He found that technology is an increasingly important element of globalization and of competitiveness and that the acceleration in the rate of technological change and the prerequisites necessary to participate effectively in globalization are making it more difficult for many developing countries to compete. This study therefore filled the knowledge gap by finding out whether the use of

technology has been adopted by manufacturing firms as a response to the effects of globalization.

On managerial innovation, Daniel *et al.* (2008) did a study on adoption of managerial innovations and the effect of adoption rationales on the adoption process. They found that there was a relationship or pattern between the rationales and that a rational justification for adoption of the managerial innovation was identified. Khaledabadi (2008) did a study on the main drivers of sustainable vehicle development. He found that the Japanese carmakers are head and shoulders above others because of the innovations. This study therefore filled the knowledge gap by looking at how manufacturing firms have adopted managerial innovation as a response to the effects of globalization.

Regarding studies on resource management, Otieno (2010) did a study to investigate the organizational and national context within which enterprise resource planning (ERP) is adopted and used in Kenya. He found that the challenges faced by organizations implementing ERP systems in Kenya and factors influencing ERP upgrade decisions are similar. The study provided practical guidelines to practitioners on ERP implementation and upgrade based on the experience of the case study organizations and ERP consultants interviewed. Mohammed (2012) did a study to explore the local practice in construction resources management and developed a construction resources management system to facilitate the management of construction resources. He found out that most contracting companies considered the main obstacles in using computer in construction resources management as shortage of user-friendly computer programs and lack of understanding of the importance of computer programs. This study therefore sought to fill the knowledge gap by exploring resource management (human, economic and technical) in manufacturing firms in Kenya.

Huselid *et al.* (1997) did a study on the technical and strategic human resource management effectiveness determinants of firm performance. They found that there were relationships between HR management effectiveness and productivity, cash

flow and market value. Boohene (2011) did a study on the effect of human resource management practices on corporate performance in Graphic Communications Group Limited (GCGL). He found that there exists a positive relationship between effective recruitment and selection practices, effective performance appraisal practices and GCGL's corporate performance. This study adopted the use of simple random sampling technique to select 100 firms from 14 different manufacturing sectors in Nairobi County and Athi River in Mavoko Sub-County in Machakos County to find out whether the firms have adopted resource management as a response strategy to globalization.

On the distribution chain, Thuong (2011) did a study to explore the value chain of frozen white leg shrimp exported to the U.S. market from Khanh Hoa Province, Vietnam. He found out that before exporting white leg shrimp to the U.S. market, they had to undergo farming, procurement and processing. When shrimp attain harvestable size, middlemen perform the procurement, which includes harvesting, preserving and transporting. At the processing plants, shrimp are transformed into final products, packed, labeled, preserved and stored waiting to be exported. To fill the knowledge gap, this study assessed the distribution chains used by manufacturing firms in Kenya to establish whether they used their distribution chains as a response to globalization.

Hannah and Camilla (2008) did a study to investigate the branding strategies of MNCs in international markets. They found that MNCs use either a product brand strategy or a corporate brand strategy. Uslay(2005) on the other hand did a study on the role of pricing strategy in market defense and found that predatory use of pricing in network industries may diminish consumer welfare. The results also suggested that firm specific barriers have a more significant role in market defense than market specific barriers. This study filled the knowledge gap by looking at the adoption and use of competition among manufacturing firms in Kenya as a response to globalization.

Finally, on globalization, Simpson (2007) did a comparative study on the impact of globalization on development. This was measured through change in development where human development index was created. He found that neither country had been excluded from the most recent period of globalization. Mamman (2007) investigated the impact of globalization among Nigerian bank managers and professionals. The study found that the impacts of globalization included transfer of good management and business practices as well as flow of foreign direct investment. This study adopted the use of inferential statistics such as regression and correlation analysis to establish the relationship between the variables of the study.

## **2.8 Summary**

In this chapter, the different theories adopted in the study have been presented. Transformational, convergence and theory of comparative advantage were used in the study. Porter's five forces model was also adopted for the study. The conceptual framework, which shows the relationship between the variables of the study, was also presented and the relationships explained. Empirical literature on different study variables has been presented from which different study gaps filled by the study having been highlighted.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology. The methodology entails research philosophy, research design, target population, sample frame, sample and sampling technique, research instruments, data collection procedure, piloting of research instruments and data processing and analysis. Reliability and validity of the research instrument is also presented.

#### **3.2 Research Design**

There are two primary alternatives for the research philosophy; phenomenological philosophy and positivism. The study adopted the positivism philosophy. Positivism works on four principles (Hargrove, 2004). First, only a phenomenon that is observable and measurable can be regarded as knowledge. Secondly, the purpose of a theory is to generate hypothesis that can be tested and that will thereby allow explanations of laws to be assessed. Thirdly, the approach stipulates that knowledge is arrived at through the gathering of facts that provide the basis for laws and lastly, that science can be presumably conducted in a way that is value free (objectivism). According to Cooper and Schindler (2011), for positivism, all factual knowledge is based on positive information gained from observable experiences, and only analytic statements are allowed to be known as true through reason.

This study adopted a cross-section survey design. According to Olsen and Marie (2004), a cross-section design involves surveying a population for purposes of collecting data from them at a given single point in time. Kozloff (2000) considers a cross-section design to be a means through which a researcher will gather data from a population or its sample concerning certain variables of interest at a given point in time. Rubin and Babbie (2009) on the other hand consider a cross-section design as a way of examining phenomena to establish certain behavior in the population at a given point in time. These studies therefore reveal that cross-section designs aim to



collect findings on the relationship of variables of interest to the researcher and at a given specific time.

Cross-section designs can either target the whole population as the sample or can sample out a section of the whole population (Olsen & Marie, 2004). Since this study aimed to investigate the response of Kenyan manufacturing firms to globalization, a cross-sectional survey was able to present the researcher with the opportunity of questioning manufacturing firms the effect globalization has put on them during their lifetime. The study only collected findings concerning the problem at a single point because the aim was not to show the trend of changes due to globalization but rather to identify the responses.

### **3.4 Sampling Frame**

A sampling frame is a list of elements from which the sample is actually drawn and is a representation of the target population (Cooper & Schindler, 2001). The sample frame in this study comprised of a comprehensive list of 735 manufacturing firms in Kenya (Kenya Manufacturers and Exporters Directory, 2013). This study focused on manufacturing firms in Nairobi and surrounding area and Athi-River. There are 545 firms in these two regions that were targeted by the study.

### **3.5 Target Population**

The Kenya Association of Manufacturers (KAM) has nine regions in Kenya including: Athi-River, Coast, Eldoret, Nairobi and surrounding area, Naivasha, Nakuru, Nyanza/Western, Nyeri, and Thika and surrounding area. This study focused on two regions namely: Nairobi and surrounding area and Athi-River. This covered the entire Nairobi County and Athi-River in Mavoko Sub-County of Machakos County. The region was chosen due to the concentration of manufacturing industries.

This study targeted the senior most ranking officer (MDs or CEOs) and their deputies. The study targeted those manufacturing firms who are registered with KAM and are based in the selected regions. This is because being a manufacturers' advocacy body; KAM is likely to share with member firms the different challenges

that affect them due to globalization. As such, members of KAM might be well informed of the responses to globalization more than those who are not members hence only depend on their experiences to identify the responses. This means that the members of KAM were able to give intensive data concerning the responses to globalization by manufacturing firms than non-members. According to KAM (2011) there were about 700 members of KAM in Kenya with 80% of them being located in Nairobi. Targeting Nairobi region ensured easy access to the target respondents due the concentration of manufacturing industries. The target population for the study was therefore 560 (80% of 700) manufacturing firms. Mathworks (2013) provides that a sample of 80% of the estimated population is enough to cover any errors emanating from the chosen sample. Typically the larger the sample size, the more accurate the data is at projecting the responses of the entire population of manufacturing firms. This significantly reduces the margin of error hence increasing accuracy since the manufacturing firms are diverse.

In most firms, the CEOs or MDs and their deputies are always in charge of strategic decision-making. Since the issue of globalization is a factor that affects the competitive strategies of a business, it is certain that these senior officers are best placed to know much information about the effects of globalization to enable them develop strategies that can make their firms to overcome the challenges inherent. As such, it does suffice to say that either the CEOs or their deputies were well placed as the target population of this study since they were likely to have information that was vital to the researcher. The sectors include: building, mining and construction; chemical and allied; energy, electrical and electronics; fresh produce; food and beverage; leather and foot ware; metal and allied; paper and board; pharmaceutical and medical equipment; plastics and rubber; services and consultancy; textiles and apparels; and timber, wood and furniture. Table 3.1 presents the population for the study.

**Table 3.1:** Population for the study

	<b>Sector</b>	<b>Number of firms</b>	<b>Percentage</b>
1	Building, mining and construction	23	3.12
2	Chemical and allied	70	9.52
3	Energy, electrical and electronics	39	5.33
4	Fresh produce	2	0.27
5	Food and beverage	172	23.43
6	Leather and foot ware	10	1.36
7	Metal and allied	71	9.65
8	Motor vehicle and accessories	40	5.44
9	Paper and board	64	8.70
10	Pharmaceutical and medical equipment	24	3.26
11	Plastics and rubber	64	8.70
12	Services and consultancy	75	10.20
13	Textile and apparels	60	8.16
14	Timber, wood and furniture	17	2.31
	<b>Total</b>	<b>735</b>	<b>100.00</b>

### 3.6 Sample and Sampling Technique

#### 3.6.1 Sample Size

A sample size refers to the actual respondents the researcher aims to interview (Babbie, 2010). Bryman and Bell (2003) argue that when selecting a sample size, a researcher must ensure that the right procedures are followed so as to get the most adequate number of respondents. Gay (2003) suggested that 10% of the accessible population is adequate to serve as a study sample. The researcher therefore used Gay's idea to sample the respondents for the study. A total of 100 firms were sampled for the study representing 18.3% of the targeted population. Sampling was done as presented in Table 3.2.

**Table 3.2: Sample size**

Sector	Number of firms in Nairobi and Athi-River	Sample	%
1 Building, mining and construction	15	4	26.7
2 Chemical and allied	65	12	18.5
3 Energy, electrical and electronics	32	6	18.8
4 Fresh produce	1	1	100%
5 Food and beverage	97	16	16.5
6 Leather and foot ware	6	1	16.7
7 Metal and allied	55	9	16.4
8 Motor vehicle and accessories	30	6	20.0
9 Paper and board	57	9	15.8
10 Pharmaceutical and medical equipment	21	5	23.8
11 Plastics and rubber	53	8	15.1
12 Services and consultancy	65	12	18.5
13 Textile and apparels	34	7	19.4
14 Timber, wood and furniture	13	4	28.6
<b>Total</b>	<b>544</b>	<b>100</b>	<b>-</b>

### 3.6.2 Sampling Technique

Babbie (2010) identifies a sampling technique (also known as sampling design) as a strategy through which the researcher will arrive to the most qualified respondents to the study questions. Rubin and Babbie (2009) opine that a sampling method is a process through which respondents with the capacity to give the study less biased evidence are selected to participate in the study. A sampling technique leads a researcher to a sample size, which can be easily managed by the researcher to collect the data needed.

Stratified sampling technique was used to categorize the targeted manufacturing firms into sectors. According to Coopers and Schindler (2001) systematic stratified sampling is whereby the population is first divided into strata; and then study samples are then drawn from every stratum. By sampling from the strata, the researcher ensured that samples were drawn from each sector of the manufacturing

firms. KAM members are categorized into 14 sectors where 12 are in processing and value addition while the other two offer essential services to enhance formal industry. The type of raw materials, company's import or the products they manufacture, defines sub-sectors.

### **3.7 Data Collection Instruments**

There are several data collection instruments a researcher can engage in the process of collecting data for a study. Among the readily available data collection instruments include questionnaires, interviews, focus groups, observations, historical reviews and recordings (Babbie, 2010; Bryman, 2008; Mugenda & Mugenda, 2003). Each of these methods is applied according to the kind of data the researcher needs, the design used, the ease of applicability, the researcher's preference and the kind of questions asked.

Since the study aimed at collecting information that assesses how firms are responding to globalization to remain competitive, collecting precise and accurate data was of essence. The questionnaire was used to collect primary data for the study (Appendix I).

### **3.8 Data Collection Procedure**

The researcher sought authorization of the study from the concerned authorities like the firms targeted. The researcher then expressed the need to conduct a study and the importance of the study to the target population and the society at large. Awareness programs were conducted to inform the respondents of the ethical considerations the research had put into consideration. Study dates were then determined. The researcher then administered the questionnaire through the drop-and-pick method. This method allowed the researcher to follow up with the respondents thus enhancing a higher response rate.

### **3.9 Pilot Test of Study**

The researcher pilot tested the data collection instrument. This was done to ensure that the instrument has the desired reliability and validity. A group of 20 CEOs or

MDs and their deputies who were not part of the sample size were used to test whether the instrument can collect valid information that has the desired reliability.

### **3.9.1 Validity of the Research Instrument**

Validity refers to the extent to which an instrument measures what it is intended to measure (Joppe, 2000). In pre-testing the instrument to establish reliability, the researcher paid attention to whether the questions designed collected the responses desired. The researcher made the questions as direct, clear and short as possible so as to eliminate ambiguity and the likelihood of collecting less valid content. Making the questionnaire quantitative by providing choices ensured that content validity was enhanced. To assure this the questionnaire was structured with open and closed questions. Further, some questions were asked in a different style to test whether the information given was truthful.

### **3.9.2 Reliability of the Research Instrument**

According to Joppe (2000) reliability is “the extent to which results are consistent over time and an accurate representation of the total population under study”. To ensure reliability, the study pre-tested the questionnaire on the pilot sample at different times. Cronbach’s coefficient was used to calculate the reliability achieved in the instrument using the formula

$$\alpha = \frac{N \cdot \bar{c}}{v. + (N - 1) \cdot \bar{c}}$$

Where: N = the number of items; C-bar = the average inter-item covariance among the items; V-bar = the average variance. Using SPSS to calculate the reliability, a coefficient of 0.7 is justifiable of a tool with acceptable reliability (Nunnally & Bernstein, 1993). The research got a coefficient of 0.8 thus the instruments were considered reliable for the study.

### **3.10 Data Processing and Analysis**

The questionnaires were coded for ease of classifying the firms into different sectors. The data collected was cleaned, coded and keyed into SPSS v20 for analysis.

Cleaning of the data entailed checking for completeness of the research instrument. Qualitative data analysis techniques were used. Quantitative data was analyzed using descriptive statistics while qualitative data was analyzed thematically. Inferential statistics such as correlation and regression analysis were used to test on the relationship between the variables of the study. The kind of questions being addressed significantly informed the kind of statistics used among the two. Statistical Package for Social Sciences (SPSS) was used to process the data to get inferential results while Excel was used to give descriptive results. Tables and charts were used to present the summarized findings.

Multiple linear regression model is a statistical technique, which allows for the prediction of response variables based on a set of independent variables. In a nutshell, multiple regression analysis is a method for studying the relationship between a dependent variable and two or more independent variables. The main purposes of multiple regression analysis include: prediction, explanation and theory building. The design requirement includes one dependent variable also known as criterion variable and two or more independent variables also known as predictor variables. In this study the response (criterion) variable (Y) is globalization while the independent (predictor) variables are adoption of technology (X<sub>1</sub>), managerial innovation (X<sub>2</sub>), resource management (X<sub>3</sub>), distribution chain (X<sub>4</sub>) and competition (X<sub>5</sub>). The following is the model that was used in this study:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where:

Y is the dependent variable (Globalization)

X is the set of five independent variables, i.e.

X<sub>1</sub> – Adoption of technology

X<sub>2</sub> – Managerial innovation

X<sub>3</sub> – Resource management

X<sub>4</sub> – Distribution chain

X<sub>5</sub> – Competition

$\beta_i$  ( $i=1,2,3,4,5$ ) are the parameters associated with the corresponding independent variable that are to be estimated (partial regression coefficients)

$\beta_0$  is the intercept

$\mathcal{E}$  is the error variability (error term).

### **3.10.1 Measurement of Variables**

The dependent variable is globalization, which was assessed through five independent variables namely: adoption of technology; managerial innovation; resource management, distribution chain systems and competition. Globalization takes different facets that include acceptance of development of globalization, perception firms have to globalization, impact of globalization and response to globalization. The measurement of technology took different parameters that included product design, process technologies, logistics planning technologies and information exchange technologies. Managerial innovation was measured based on change innovations, strategic networks, virtual corporations and manufacturing of goods. In measuring resource management, raw materials, energy resources and operating supplies were considered. For distribution chain, foreign intermediaries, foreign direct investment, channel innovations, alliances, foreign affiliates, joint ventures, international marketing and coordination were considered. Competition considered adoption of new technologies, exploration of new markets, creation of competitive advantage through cost leadership, reduction of production costs and product differentiation. The measurement of variables is as shown on Table 3.3.



**Table 3.3: Measurement of Variables**

<b>Variable</b>	<b>Conceptual Definition (Measurement Parameters)</b>	<b>Operational Definition</b>	<b>Measur- ent Scale</b>	<b>Data Type</b>
Adoption of Technology	<ul style="list-style-type: none"> <li>- Product Design Technologies (PDT)</li> <li>- Process Technologies (PT)</li> <li>- Logistics Planning Technologies (LPT)</li> <li>- Information Exchange Technologies (IET)</li> </ul>	Responses given in Likert Scale of 1-5 to assess whether adoption of appropriate technology has a relationship with globalization	Ordinal Scale (non-dichotomous type)	Quantitative and qualitative
Managerial Innovation	<ul style="list-style-type: none"> <li>- Change innovations</li> <li>- Strategic networks</li> <li>- Virtual corporations</li> <li>- Manufacture of goods</li> </ul>	Responses given in Likert Scale of 1-5 to assess whether managerial innovation has an association with globalization	Ordinal Scale (non-dichotomous type)	Quantitative and qualitative
Resource Management	<ul style="list-style-type: none"> <li>- Raw materials</li> <li>- Energy resources</li> <li>- Operating Supplies</li> </ul>	Responses given in Likert Scale of 1-5 to assess whether firms' management of resources can be linked to globalization	Ordinal Scale (non-dichotomous type)	Quantitative and qualitative
Distribution Chain	<ul style="list-style-type: none"> <li>- Foreign intermediaries</li> <li>- Foreign direct investments</li> <li>- Channel motivations</li> <li>- Alliances</li> <li>- Foreign affiliates</li> <li>- Joint Ventures</li> <li>- International Marketing and Coordination</li> </ul>	Responses given in Likert Scale of 1-5 to assess whether firms' distribution chain systems has an influence to with globalization	Ordinal Scale (non-dichotomous type)	Quantitative and qualitative
Competition	<ul style="list-style-type: none"> <li>- Adoption of new technologies</li> <li>- Exploration of new markets</li> <li>- Creation of competitive advantage through cost leadership, reduction of production costs and product differentiation</li> </ul>	Responses given in Likert Scale of 1-5 to assess whether firms' distribution chain systems has an influence to with globalization	Ordinal Scale (non-dichotomous type)	Quantitative and qualitative
Globalization	<ul style="list-style-type: none"> <li>- Acceptance of development of globalization</li> <li>- Perception to Globalization</li> <li>- Impact of Globalization</li> <li>- Response to Globalization</li> </ul>	Responses given in Likert Scale of 1-5 to assess whether firms' response to globalization	Ordinal Scale (non-dichotomous type)	Quantitative and qualitative

### 3.11 Operationalization of Variables

The dependent variable is globalization, which was assessed through five independent variables namely: adoption of technology; managerial innovation; resource management, distribution chain systems and competition. The study assessed the response of manufacturing firms' to globalization. The measurement parameters for the study variables are as shown on Table 2.1.

**Table 3.4:** Operationalization of Variables

Variable	Conceptual Definition (Measurement Parameters)	Data Type
Adoption of Technology	<ul style="list-style-type: none"> <li>- Product Design Technologies (PDT)</li> <li>- Process Technologies (PT)</li> <li>- Logistics Planning Technologies (LPT)</li> <li>- Information Exchange Technologies (IET)</li> </ul>	Quantitative and qualitative
Managerial Innovation	<ul style="list-style-type: none"> <li>- Change innovations</li> <li>- Strategic networks</li> <li>- Virtual corporations</li> <li>- Manufacture of goods</li> </ul>	Quantitative and qualitative
Resource Management	<ul style="list-style-type: none"> <li>- Raw materials</li> <li>- Energy resources</li> <li>- Operating Supplies</li> </ul>	Quantitative and qualitative
Distribution Chain	<ul style="list-style-type: none"> <li>- Foreign intermediaries</li> <li>- Foreign direct investments</li> <li>- Channel motivations</li> <li>- Alliances</li> <li>- Foreign affiliates</li> <li>- Joint Ventures</li> <li>- International Marketing &amp; Coordination</li> </ul>	Quantitative and qualitative
Competition	<ul style="list-style-type: none"> <li>- Adoption of new technologies</li> <li>- Exploration of new markets</li> <li>- Creation of competitive advantage through cost leadership, reduction of production costs and product differentiation</li> </ul>	Quantitative and qualitative
Globalization	<ul style="list-style-type: none"> <li>- Acceptance of development of globalization</li> <li>- Perception to Globalization</li> <li>- Impact of Globalization</li> <li>- Response to Globalization</li> </ul>	Quantitative and qualitative

## **CHAPTER FOUR**

### **RESEARCH FINDINGS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter presents the results and discussion of the study findings. The chapter begins with a presentation of the response rate. Factor analysis was then done on each of the study variables followed by the findings from the descriptive statistics. Inferential statistics including correlation and regression analysis was then done. The chapter ends with the discussion of the study findings.

#### **4.2 Data Management**

##### **4.2.1 Response Rate**

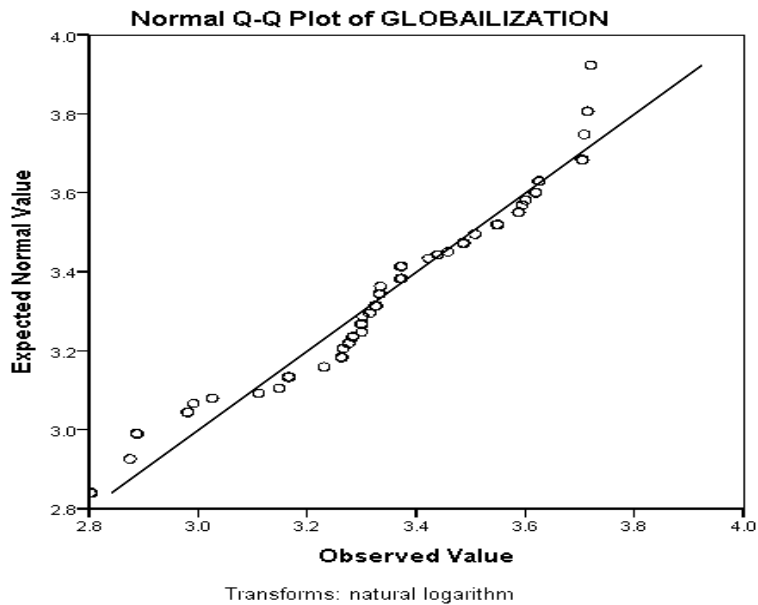
The study targeted a total of 100 firms from different sectors in the economy. Out of which, 80 responded giving a response rate of 80% as indicated on Table 4.1. However, on examining the completeness of the questionnaires, there were five questionnaires that had at least 20% of the overall questionnaire incomplete. A few missing responses in two other questionnaires were found randomly. This may have been due to lack of understanding or reluctant attitude of the respondents to answer a question that they thought was irrelevant to their practices. A maximum likelihood function was used to replace those missing values. From the response rates, different firms in different sectors responded. This gave the study a divergent view of the response strategies to globalization considering the divergent sector. The representation of every sector with the manufacturing firm is an indication of the reliability of the information used for the study. The findings of the study are as presented in the following sub-sections.

**Table 4.1:** Distribution of the firms studied by sector

	<b>Sector</b>	<b>Sample</b>	<b>%</b>
1	Building, mining and construction	3	13
2	Chemical and allied	10	14.28
3	Energy, electrical and electronics	5	15.62
4	Fresh produce	1	100
5	Food and beverage	13	13.4
6	Leather and foot ware	1	16
7	Metal and allied	8	14.5
8	Motor vehicle and accessories	5	16.6
9	Paper and board	7	12.2
10	Pharmaceutical and medical equipment	4	19
11	Plastics and rubber	6	11.32
12	Services and consultancy	9	13.8
13	Textile and apparels	5	14.7
14	Timber, wood and furniture	3	23
	<b>Total</b>	<b>80</b>	<b>100</b>

#### 4.2.2 Normality Test

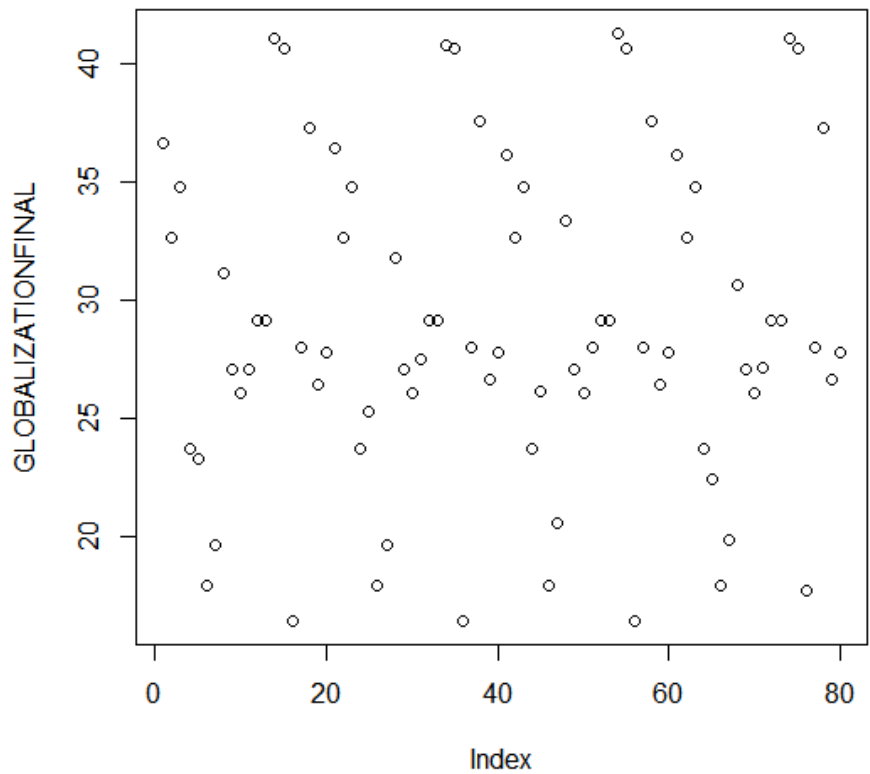
A normality test was done using Q-Q probability plot for all the variables under investigation. This is a graphical technique used to identify substantial departure from the normality. Figure 4.1 shows the results of the study. From Figure 4.1, most of the points lie on the diagonal line implying that the data is normal in distribution, which is a standard requirement for linear models.



**Figure 4.1:** Q-Q probability plot

### 4.2.3 Curvilinearity and Heteroscedasticity

Curvilinear relationship was not observed between the independent and dependent variable as shown on figure 4.2. This means that the relationship between the study variables on globalization does not depend on the numerical values each variable takes. The implication of this is that adoption of technology, managerial innovation, resource management, distribution chain, and competition cannot reach levels that diminish globalization to zero.



**Figure 4.2:** Curvilinearity

Breusch Pagan test for heteroscedasticity was conducted as shown on table 4.2. For the null hypothesis, the data was found to be homoscedastic i.e., no heteroscedasticity, while for the alternative hypothesis, the data was found to be heteroscedastic. Since the p-value is greater than 0.05, we fail to reject the null hypothesis and conclude that the data is not heteroscedastic in distribution.

**Table 4.2:** Heteroscedasticity

Breusch-Pagan test		
BP Statistic	df	p-value
10.4891	5	0.06251

### 4.3 Factor Analysis and Results

The study adopted factor analysis in order to reduce the number of indicators or factors under each research variable and retain the indicators capable of explaining

the responses to globalization adopted by manufacturing firms in Kenya. The retained factors had loading values of above 0.4 and were used for further analysis. Hair *et al.* (1998) recommended the use of factors with factor loading above 0.4. This is also supported by Tabachnick and Fidell (2007) using more stringent cut offs going from 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) to 0.71 (excellent).

To measure the reliability of the gathered data, Cronbach's alpha was used. Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability (Zinberg, 2005). An alpha coefficient of 0.70 or higher indicated that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinberg, 2005). The following sub-sections present factor analysis for each of the study indicators.

#### **4.3.1 Adoption of Technology**

Table 4.3 shows Cronbach's alpha of all indicators. Cronbach's alpha results in the component column were computed using the results of all indicators. The results revealed that all the indicators/factors had a loading of more than 0.4. The Cronbach's alpha result of all adoption of technology indicators was 0.840 and the factor loading results were between 0.404 and 0.807. This implies that all the indicators were retained for further analysis. This indicated that data collected using all the adoption of technology indicator values was reliable since the Cronbach's alpha value was above 0.70. The study hence deduced that all the eight adoption of technology indicators were reliable in determining the use of technology as a response to globalization. These indicators were later used for further analysis.

**Table 4.3:** Adoption of technology reliability and factor analysis

	<b>Component</b>	<b>Cronbach alpha</b>
Global economic factors such as trade blocks has widened supply chain network making us adopt logistic technologies	.807	.840
Global social standards has influenced adoption product design technologies	.783	
Development in global communication has contributed to our firm acquiring advanced information exchange technologies	.780	
Regulatory measures has influenced adoption of environmental friendly technologies	.780	
Global social forces influenced by social technological networks has made us embrace communication technologies	.739	
Global economic forces has made our firm to constantly adopt new product design technologies	.648	
Diffusion of technology globally has facilitated our firm adopting information dissemination and communication technologies	.526	
Continued global technological advancement has influenced our firm to embrace superior process technologies	.404	

### **4.3.2 Managerial Innovation**

Table 4.4 shows Cronbach's alpha of all indicators for managerial innovation. Cronbach's alpha results in the component column were computed using results of all indicators. The results showed that all but one of the indicators/factors had a loading of more than 0.4. The Cronbach's alpha result of all managerial innovation indicators was 0.812 and the factor loading results were between 0.368 and 0.844. This implies that seven of the eight indicators were retained for further analysis. Using the retained managerial innovation indicators, the value of Cronbach's alpha was computed again and generated a value of 0.816. This indicated that data collected using all the managerial innovation indicator values were reliable since the Cronbach's alpha value was above 0.70. The study hence deduced that seven out of the eight managerial innovation indicators were reliable in determining managerial



innovation as a response to globalization. These indicators were later used for further analysis.

**Table 4.4:** Managerial innovation reliability and factor analysis

<b>Cronbach's alpha before</b>		<b>Component</b>	<b>Cronbach alpha after</b>
.812	New market needs emanating from global economy has triggered producing products that satisfy customers demand	.844	.816
	Economic factors such as trade blocks has facilitated building of strategic networks and alliances	.788	
	Technological factors has facilitated creating linkages with customers, suppliers and with members of strategic alliances	.741	
	Accessibility to Supply chain management tools and techniques has enabled seeking core competence	.735	
	Continued global technological advancement has enabled management to come up with innovations to respond to customer needs	.657	
	Economic and regulatory factors has prompted outsourcing of some operations	.547	
	Technological factors and socio-economic zones has facilitated networking hence borrowing of ideas	.526	
	Technological factors has enabled developing new process of marketing products through information technology	.368*	

### 4.3.3 Resource Management

Table 4.5 shows Cronbach's alpha of all indicators for resource management. Cronbach's alpha results in the first column were computed using all the indicators and the results in the last column was computed after reduction of indicators/factors with a factor loading of less than 0.4. The Cronbach's alpha result of all resource management indicators was 0.803 and the factor loading results were between 0.013 and 0.820. This implies that nine out of eleven indicators were retained for further analysis. Using the retained managerial resource management, the value of

Cronbach's alpha was computed again and generated a value of 0.846. This indicated that data collected using all the resource management indicator values were reliable since the Cronbach's alpha value was above 0.70. The study hence deduced that nine out of the eleven resource management indicators were reliable in determining the use of resource management strategy as a response to globalization. These indicators were later used for further analysis.

**Table 4.5:** Resource management reliability and factor analysis

Cronbach alpha before	Indicators	Component	Cronbach alpha after
.803	Human capital development has enabled counter changes caused by environmental factors	.820	.846
	Adequate resources has facilitated producing globally attractive products	.754	
	Entrepreneurship	.751	
	Economic and technological factors has demanded more financial resource dedicated to human resource development and talent promotion	.695	
	Due to economic factors energy resource is becoming more costly	.672	
	Human resource and appropriate technology has facilitated efficient resource management approaches	.614	
	Labour	.588	
	New technological advancement has triggered training and skill enhancement to our staff	.579	
	Capital	.537	
	Ability to raise financial resources has enabled investing in technology	.328*	
	Land	.013*	

#### 4.3.4 Distribution Chain

Table 4.6 shows Cronbach's alpha of all indicators for distribution chain. Cronbach's alpha results in the first column were computed using all the indicators and the results in the last column was computed after reduction of indicators/factors with a factor loading of less than 0.4. The Cronbach's alpha result of all distribution chain

indicators was 0.782 and the factor loading results were between 0.198 and 798. This implies that two of the indicators that had a factor loading of below 0.4 were removed and the rest of the indicators were retained for further analysis.

Using the retained distribution chain indicators, the value of Cronbach's alpha was computed again and generated a value of 0.816. This indicated that data collected using the retained distribution chain indicator values were reliable since the Cronbach's alpha value was above 0.70. The study hence deduced that eight out of the ten distribution chain indicators were reliable in determining distribution chain as a response to globalization. These indicators were later used for further analysis.

**Table 4.6:** Distribution chain reliability and factor analysis

<b>Cronbach alpha before</b>	<b>Indicators</b>	<b>Component</b>	<b>Cronbach alpha after</b>
.782	Socio-economic factors have brought out the need for channel motivation to win loyalty of distribution partners	.798	.816
	Legislative measures has caused use of local intermediaries who understand legislative measures	.777	
	Macroeconomic and political stability has facilitated foreign direct investment with opening of foreign warehouses	.764	
	Economic and environmental factors has enhanced formation of mergers	.722	
	Social factors has demanded acknowledging partnering with intermediaries	.715	
	Globalization has required carrying out fundamental strategic change of the firm's management	.564	
	Social-economic factors have enhanced usage of distribution channels to sell globally	.494	
	Social, political and economic factors have lead to starting foreign affiliate activities which facilitate sale of products overseas	.446	
	Economic and technological factors have stimulated formation of alliances to outsource in some areas	.393*	
	Economic factors has demanded direct sales to the customers without involving wholesalers and retailers	.198*	

### 4.3.5 Competition

Table 4.7 shows Cronbach's alpha of all indicators for competition. Cronbach's alpha results in the component column were computed using results of all indicators. The results revealed that all the indicators/factors had a loading of more than 0.4. The Cronbach's alpha result of all competition indicators was 0.834 and the factor loading results were between 0.495 and 879. This implies that all the indicators were retained for further analysis. This indicated that data collected using all the competition indicator values were reliable since the Cronbach's alpha value was above 0.70. The study hence deduced that all the seven competition indicators were reliable in determining competition as a response to globalization. These indicators were later used for further analysis.

**Table 4.7:** Competition reliability and factor analysis

	<b>Component</b>	<b>Cronbach alpha</b>
Focused low cost strategy	.879	.834
Exploring other markets	.864	
Overall low cost provider strategy	.751	
Innovations	.716	
Broad differentiation strategy	.693	
Focused differentiation strategy	.637	
Increasing the range of products produced	.495	

### 4.3.6 Globalization

Table 4.8 shows Cronbach's alpha of all indicators for globalization. Cronbach's alpha results in the first column were computed using all the indicators and the results in the last column was computed after reduction of indicators/factors with a factor loading of less than 0.4. The Cronbach's alpha result of all globalization indicators was 0.874 and the factor loading results were between 0.197 and 0.801. This implies that 11 out of 14 indicators were retained for further analysis. Using the retained globalization indicators, the value of Cronbach's alpha was computed again and generated a value of 0.899. This indicated that data collected using all the retained globalization indicator values were reliable since the Cronbach's alpha value

was above 0.70. The study hence deduced that eleven out of the fourteen-globalization indicators were reliable. These indicators were later used for further analysis.

**Table 4.8:** Globalization reliability and factor analysis

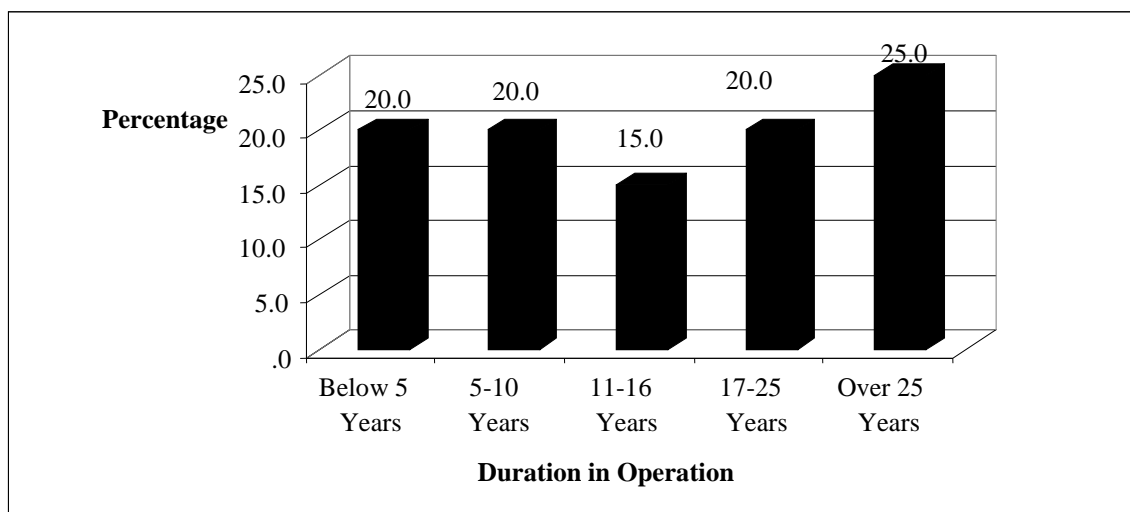
<b>Cronbach alpha before</b>	<b>Indicators</b>	<b>Component</b>	<b>Cronbach alpha after</b>
.874	Scientific and technical progress	.801	.899
	Health	.782	
	Solidarity between countries	.780	
	Quality of public services	.768	
	Employment in the country	.740	
	Economic growth in the country	.716	
	Environment	.697	
	The current regulations in place are sufficient for the development of globalization	.675	
	Democracy at a world-wide level	.672	
	The Kenyan economy is suited to the development of worldwide economy	.642	
	Cultural exchanges between countries	.470	
	Globalization should be encouraged as it challenges firms to grow through adoption to the changing business environment	.303*	
	Globalization presents a good opportunity for firms as it widens market for products	.263*	
	Globalization presents a threat to employment growth of firms in Kenya	.197*	

#### 4.4 Descriptive Statistics

Descriptive statistics were used to describe the basic features of the data in the study. They provide simple summaries of the sample and measures. Descriptive statistics such as frequencies and percentages were used to analyze the data.

#### 4.4.1 Duration in Operation

The respondents were first asked to indicate their duration in operation. The findings of the study were as presented in Figure 4.3. The study found that 25% of the respondents said that they have been in operation for over 25 years. The study also found that 20% of the respondents indicated that they had been in service below 5 years, 5-10 years and 17-25 years respectively, while 15% of the respondents indicated 11-16 years. From the findings of the study, it can be said that most of firms studied had been in operation for a period of over 5 years. The firms therefore have experience in operating in a globally competitive environment. The survival of these firms is therefore attributed to the adoption of different response strategies to the effect of globalization.



**Figure 4.3:** Duration in operation

#### 4.4.2 Cross-tabulation of a Firm's Turnover and Years in Operation

A cross-tabulation between the firm's turnover and years in operation were done. The findings were as presents in Table 4.9. From Table 4.9, 12 (16.7%) of the firms ,which had operated for a period of less than five years had a turnover of less than 50 million per year. On the other hand, the study revealed that 16 (22.2%) of the firms that had operated for a period of more than 25 years had a turnover of 1 billion and over. This is an indication that the duration of operation of a firm determines its turnover in the market.

**Table 4.9:** Cross-tabulation of a firm's turnover and years in operation

Years in operation	Firm's annual turnover					Total	
	Less than 50 million	50 million < 100,000 million	100,000 < 250,000 million	250,000 < 500,000 million	500,000 < 1 billion		
	F	F	F	F	F	F	%
Below 5 years	12	4	0	0	0	16	22.2
5-10 years	0	4	8	4	0	16	22.2
11-16 years	4	4	0	4	0	12	16.7
17-25 years	0	4	0	4	4	12	16.7
Over 25 years	4	8	0	0	4	16	22.2
Total	20	24	8	12	8	72	100

#### 4.4.3 Full Time Employees

The respondents were asked to indicate the number of full time employees in their firms. The study found out that 40% of the respondents indicated that they had between 21-50 full time employees. The study also found that 24% of the respondents indicated that they had between 1-20 full time employees. Only 4% of the firms studied had over 200 full time employees, while 10% of the respondents indicated they have 10-20 full time employees. The findings of the study therefore reveal that most of the firms interviewed (76%) had more than 20 full time employees. This is an indication that most of the firms were large enough considering the number of full time employees as an indicator of the size of the firm and thus were perceived to be affected by globalization. The findings of the study were as presented in Table 4.10.

**Table 4.10: Number of full time employees**

Number of full time employees	Frequency	Percentage
1-20 employees	19	24
21-50 employees	32	40
51-100 employees	14	17
101-200 employees	12	15
Above 200 employees	3	4
<b>Total</b>	<b>80</b>	<b>100</b>

#### 4.4.4 Casual Employees

The respondents were asked to indicate the number of casual employees. The study found that 39% of the respondents indicated that they had above 200 casual employees, 24% indicated that they had 51-100 casual employees, 21% indicated they had between 101-200 casual employees and 35 had between 1-20 casual employees. From the findings of the study, it is evident that 97% of the firms studied had more than 20 casual employees. This is an indication that most of the firms preferred casual to full time employees. This could be one of the strategies for reducing cost resulting from the effects of globalization. The findings of the study were as presented in Table 4.11.

**Table 4.11:** Number of casual employees

Number of casual employees	Frequency	Percentage
1-20 employees	2	3
21-50 employees	11	13
51-100 employees	19	24
101-200 employees	17	21
Above 200 employees	31	39
<b>Total</b>	<b>80</b>	<b>100</b>

#### 4.4.5 Annual turnover and nature of the firm

The findings of the cross-tabulation on Table 4.12 show that all the firms that had a turnover of 1 billion and above were global while majority of the firms with annual turnover of 50-100 million were local. This is an indication that globalization influences a firm's turnover. The turnover on the other hand is perceived to influence the size of the firm.

**Table 4.12:** Cross-tabulation between annual turnover and the nature of the firm

Annual turnover	Global	Local	Total
Less than 50 million	8	12	20
50 Million < 100,000 million	4	20	24
100,000<250,000 million	4	4	8
250, 000 million< 500,000 million	8	4	12
1 billion and over	8	0	8
<b>Total</b>	<b>32</b>	<b>40</b>	<b>72</b>



#### 4.4.6 Age of the firm and access overseas market

The findings from a cross-tabulation between the age of the firm and access to overseas market shows that 16 (20%) of the firms, which indicated that they had overseas market had been in operation for more than 25 years. The findings also show that 16 (20%) of the firms that had been in operation for a period between 17-25 years had overseas market. On the other hand, 8 (10%) that had operated for a period below 5 years were local. From the findings of the study, it can be said that the years of operation by the firms influenced their access to overseas market. The findings were as presented in Table 4.13.

**Table 4.13:** Age of the firm and access overseas market

	Market		Total	
	Overseas	Local	F	%
Below 5 years	8	8	16	20
5-10 years	8	8	16	20
11-16 years	8	4	12	15
17-25 years	16	0	16	20
Over 25 years	16	4	20	25

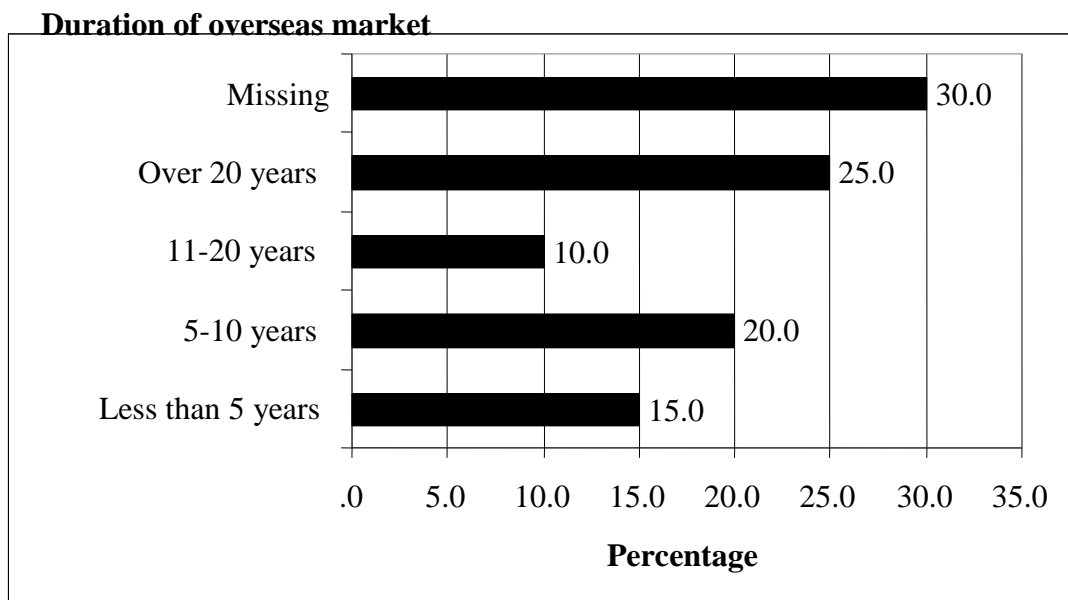
#### 4.4.7 Access to overseas market

The respondents were asked to indicate whether they had been transacting globally. The study found that 55% of the respondents indicated that they transacted globally. Among the reasons given for firms not going global include inadequately satisfying the Kenyan market, firms engaging in small scale business that does not warrant going global, globalization being part of the projected future expansion of firms, some firms import products for resale i.e. they are just a link in the distribution chain, and other firms considered themselves still growing and did not see the need for going global.

#### 4.4.8 Duration of involvement in overseas market

The respondents were asked to indicate the duration they had been transacting globally. The study found that 30% of the respondents did not indicate the duration

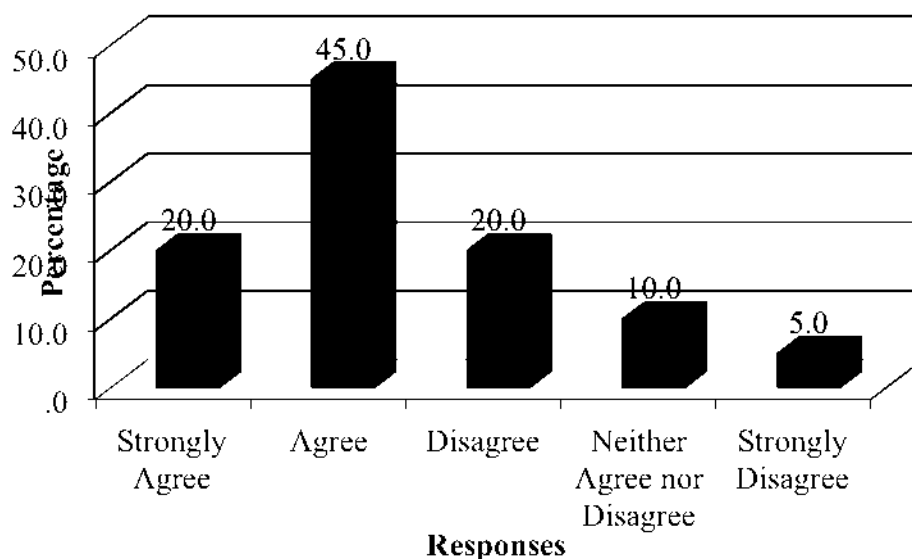
they had transacted globally, 25% indicated that they had been transacting globally for over 20 years, 20% indicated that they had been transacting globally for between 5-10 years, 15% of the respondents indicated that they had been transacting globally for less than 5 years, while 10% of the respondents indicated that they had been transacting globally for between 11-15 years. The findings of the study were as presented in Figure 4.4.



**Figure 4.4:** Duration of overseas market

#### **4.4.9 Effect of multinationals on sales**

The respondents were asked to indicate whether multinationals are becoming a threat. The study found that 45% of the respondents agreed that multinationals were becoming a threat to sales, 20% of the respondents strongly agreed that multinationals were becoming a threat to sales, 20% of the respondents disagreed that multinationals were becoming a threat to sales, 10% of the respondents neither agreed nor disagreed that multinationals were becoming a threat to sales, 5% of the respondents strongly disagreed that multinationals were becoming a threat to sales while 5% of the respondents did not indicate anything. The findings of the study were as presented in Figure 4.5



**Figure 4.5:** Effect of multinationals on sales

#### 4.4.10 Measures to improve competitiveness

The respondents were asked to indicate whether there are measures in their firms to improve competitiveness. The study found out that majority (80%) of the respondents agreed that there were measures their firms had put in place to improve competitiveness while 20% strongly agreed that there are measures their firms had put in place to improve competitiveness. The findings of the study were as presented in Table 4.14

**Table 4.14:** Measures to improve competitiveness

Measures to improve competitiveness	Frequency	Percentage
Strongly agree	16	20
Agree	64	80
<b>Total</b>	<b>80</b>	<b>100</b>

#### 4.4.11 Location of the Firm's customers

The respondents were asked to indicate where most of the firm's customers are. The study found out that majority (75%) of the respondents indicated that most of their firm's customers are in Kenya, while 25% of the respondents indicated most of their

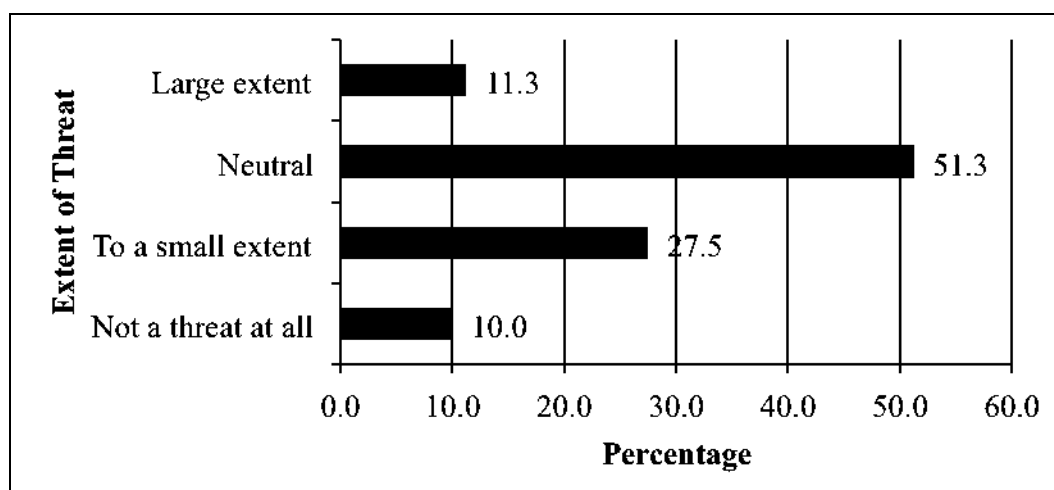
firm's customers are outside Kenya. The findings of the study were as presented in Table 4.15.

**Table 4.15:** Location of the firm's customers

Location of customers	Frequency	Percentage
Outside Kenya	20	25
Kenya	60	75
<b>Total</b>	<b>80</b>	<b>100</b>

#### 4.4.12 The extent to which globalization is a threat to a firm's competitiveness

In determining the extent to which globalization poses a threat on a firm's competitiveness, the study found out that most of the respondents indicated neutral, 51.3% of the respondents indicated that the threat by globalization was neutral, 27.5% of the respondents indicated that globalization posed a threat on the firm's competitiveness to a small extent, 11.3% of the respondents indicated that globalization posed a threat on the firms competitiveness to a large extent and 10% of the respondents indicated that globalization is not a threat at all on the firm's competitiveness. The findings of the study were as presented in Figure 4.6.



**Figure 4.6:** The extent to which globalization posed a threat on the firm's competitiveness

A two-sample test was done to test whether the firms, which perceived globalization as a threat, were the ones, which adopted different globalization response strategies.

This was done with all the study variables and the findings were as presented in Table 4.16. The difference between the two means is insignificant, an indication that there is no significant difference in adoption of technology and perception of globalization as a threat.

**Table 4.16:** Adoption of technology versus globalization as a threat

Group statistics					
	Threat	N	Mean	Std. deviation	Std. error mean
Adoption	Not a threat	8	15.503759	4.8822056	1.7261203
	Threat	31	14.772707	4.3405710	.7795896

Table 4.17 shows that there is no significant difference in adoption of technology between firms which saw globalization as a threat and those which did not at 95% level of confidence.

**Table 4.17:** T-test for equality of means for adoption of technology

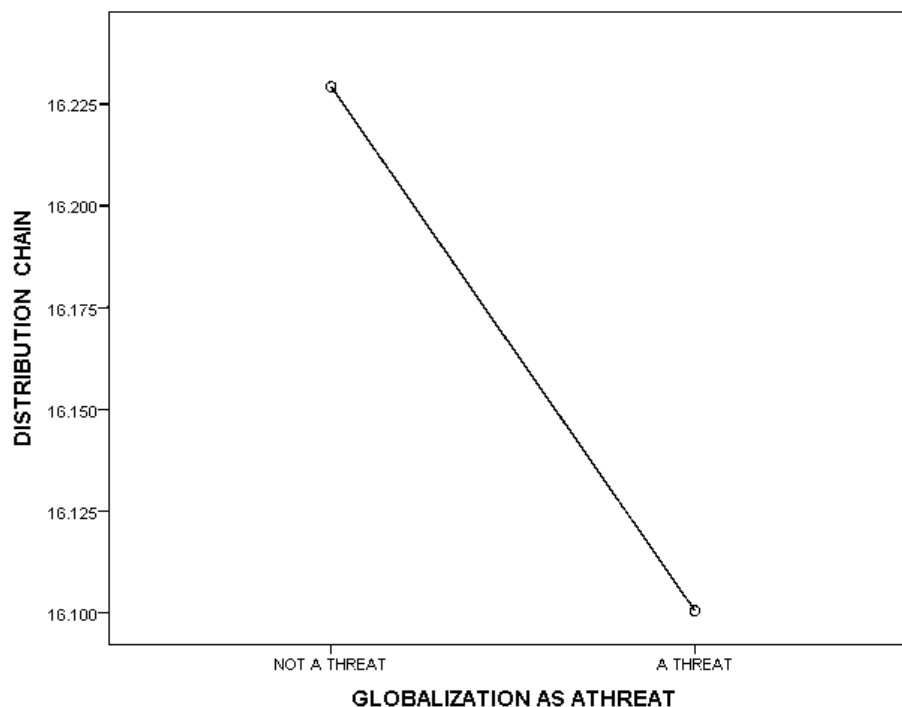
t-test for equality of means								
	T	df	Sig. (2 -tailed)	mean difference	Std. error difference	95% confidence Interval of the difference		
						lower	upper	
Adoption of technology	Equal variances assumed	.414	37	.681	.7310521	1.7639301	-2.8430098	4.3051141
	Equal variances not assumed	.386	10.049	.708	.7310521	1.8940040	-3.4862401	4.9483443

Table 4.18 shows that the difference between the two means is insignificant. The mean for distribution chain being a threat to globalization is 16.2292 while that of not being a threat is 16.1005. This is an indication that there is no significant difference in distribution chain and perception of globalization as a threat.

**Table 4.18:** Distribution chain versus globalization as a threat

Group statistics					
	Threat	N	Mean	Std. deviation	Std. error mean
Distribution chain	Not a threat	8	16.2292	.47003	.16618
	Threat	31	16.1005	5.68153	1.02043

Figure 4.7 shows that firms that had adopted distribution chain strategies, as a response to globalization did not view globalization as a threat. The firms that had not adopted distribution chain as a strategy viewed globalization as a threat. This is an indication that firms use distribution chain strategies to gain competitive advantage in the global market.



**Figure 4.7:** Distribution chain versus globalization as a threat

Table 4.19 shows that there was no significant difference in distribution chain between firms which saw globalization as a threat and those, which did not. The mean difference was found to be 0.12870. The analysis was done at 95% level of confidence.

**Table 4.19:** T-test for equality of means for distribution chain

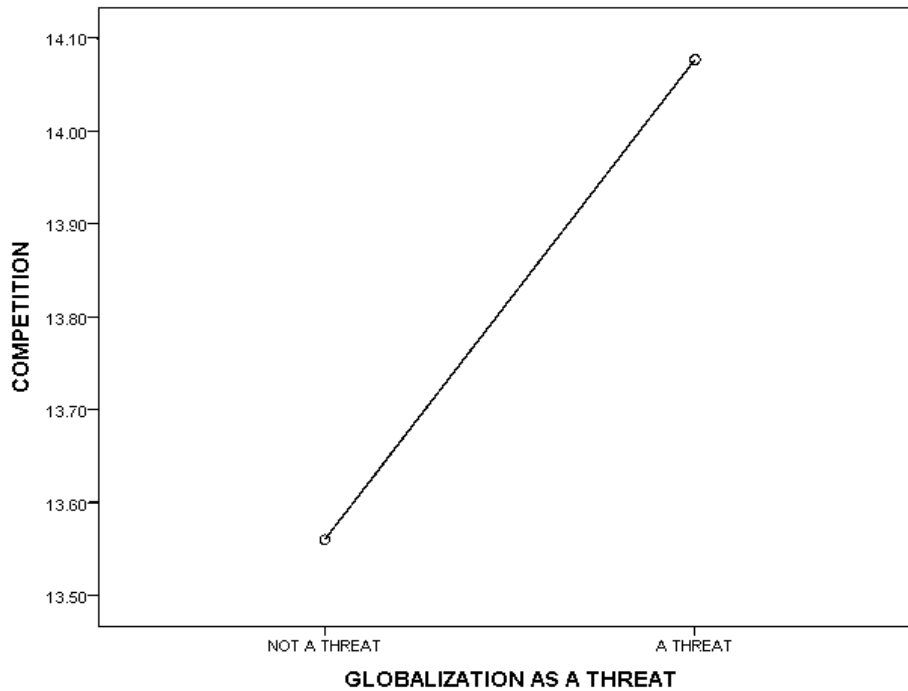
		t-test for equality of means						
		T	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence Interval of the difference	
						Lower	Upper	
Distribution chain	Equal variances assumed	.063	37	.950	.12870	2.03038	-3.98525	4.24265
	Equal variances not assumed	.124	31.517	.902	.12870	1.03388	-1.97850	2.23590

Table 4.20 shows that the difference between the two means is significant. This is an indication that there is significant difference in competition and perception of globalization as a threat. This means that firms in high competition industries view globalization as a threat thus they have adopted competition strategies as a response to globalization.

**Table 4.20:** Competition versus globalization as a threat

		Group statistics				
		Threat	N	Mean	Std. deviation	Std. error mean
Competition	Not a threat		8	13.5603	1.46838	.51915
	Threat		31	14.0768	3.84317	.69025

Figure 4.8 shows a linear relation between competition and globalization. This means that firms that were in highly competitive markets saw globalization as a threat. On the other hand, firms in less competitive markets did not see globalization as a threat.



**Figure 4.8:** Competition versus globalization as a threat

Table 4.21 shows that there is no significant difference in competition between firms that saw globalization as a threat and those, which did not at 95% level of confidence. This means that firms saw globalization as a threat thus they adopted competition as a response strategy to globalization. This is an indication that manufacturing firms have adopted competition as response strategies to the pressure of globalization.

**Table 4.21: Test for equality of means for competition**

		t-test for equality of means							
		t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference		
								Lower	Upper
Competition	Equal variances assumed	-.370	37	.713	-.51656	1.39550	-3.34410	2.31099	
	Equal variances not assumed	-.598	31.012	.554	-.51656	.86369	-2.27804	1.24493	

Table 4.22 shows that the difference between the two means is significant. The mean of globalization as a threat to managerial innovation was found to be 15.3635 while

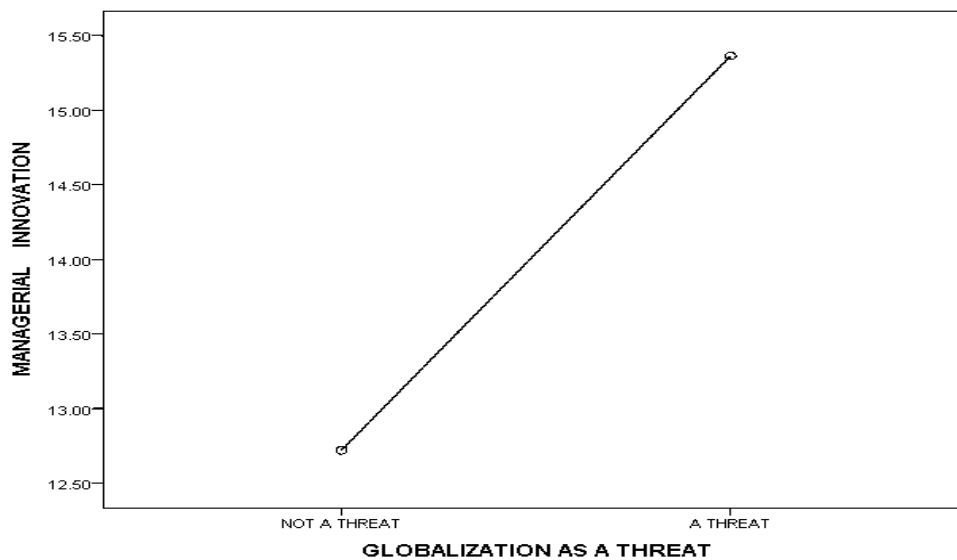


that of not being a threat was found to be 12.7021. This is an indication that there is a significant difference in managerial innovation and perception of globalization as a threat.

**Table 4.22:** Managerial innovation versus globalization as a threat

Group statistics					
	Threat	N	Mean	Std. deviation	Std. error mean
Managerial innovation	Not a threat	8	12.7201	.47269	.16712
	Threat	31	15.3635	5.26894	.94633

Figure 4.9 shows a linear relation between managerial innovation and globalization as a threat. This means that firms that saw globalization as a threat adopted managerial innovation as a response strategy. The firms that did not feel threatened by globalization had not adopted the strategy as a response to globalization.



**Figure 4.9:** Managerial innovation versus globalization as a threat

Table 4.23 shows that there is no significant difference in managerial innovation between firms which saw globalization as a threat and those which did not. The mean difference was found to be -2.64340. The analysis was done at 95% level of confidence.

**Table 4.23:** T-test for equality of means for managerial innovation

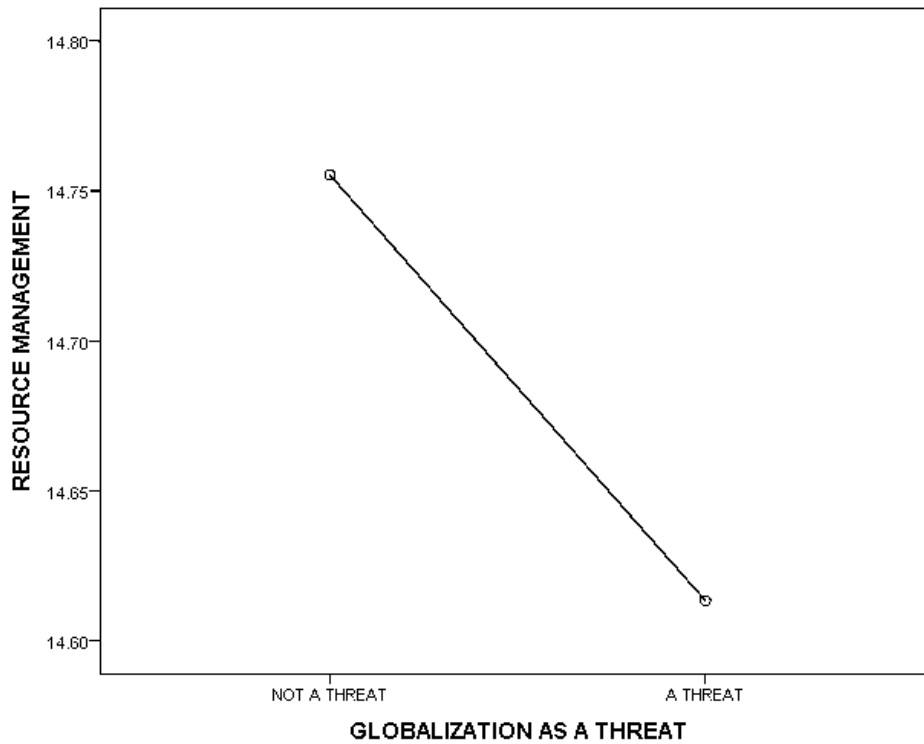
		Independent samples test								
		Levene's test for equality of variances			t-test for equality of means					
		F	Sig.	t	Df	Sig. (2- tailed)	Mean difference	Std. error difference	95% confidence Interval of the difference	
								Lower	Upper	
Managerial innovation	Equal variances assumed	11.716	.002	-1.404	37	.169	-2.64340	1.88320	-6.45913	1.17233
	Equal variances not assumed			-2.751	31.768	.010	-2.64340	.96097	-4.60140	-.68540

Table 4.24 shows that the difference between the two means is insignificant. The mean for globalization being a threat to resource management was found to be 14.6134 while that of not being a threat was found to be 14.7554. This is an indication that there is no significant difference in resource management and perception of globalization as a threat.

**Table 4.24:** Resource management versus globalization as a threat

		Group statistics				
Threat		N	Mean	Std.	Std. error mean	
		deviation				
Resource management	Not a threat	8	14.7554	1.30542	.46154	
	Threat	31	14.6134	2.93972	.52799	

Figure 4.10 shows a decaying linear relationship between resource management and globalization as a threat. This is an indication that firms that viewed globalization as a threat had not adopted resource management strategies. On the other hand, firms that had adopted resource management strategies did not view globalization as a threat.



**Figure 4.10:** Resource management versus globalization as a threat

Table 4.25 shows that there is no significant difference in resource management between firms which saw globalization as a threat and those which did not. The mean difference was found to be 0.14199. The analysis was done at 95% level of confidence.

**Table 4.25:** T-test for equality of means for adoption of technology

		t-test for equality of means							
		t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence Interval of the difference		
								Lower	Upper
Resource management	Equal variances assumed	.132	37	.895	.14199	1.07360	-2.03332	2.31730	
	Equal variances not assumed	.202	26.658	.841	.14199	.70128	-1.29778	1.58176	

#### **4.4.12 Adoption of technology and globalization**

To test on the adoption of technology, the respondents were asked to indicate their level of agreement with different statements on the adoption of technology. The findings of the study were as presented in Table 4.26. The findings on Table 4.26 show that 65% of the respondents strongly agreed that continued global technological advancement has influenced their firms to embrace superior process technologies. The findings suggest that firms are responding to the effects of globalization through innovation and adoption of technology.

The study also found out that 62.5% of the respondents agreed that global social forces influenced social technological networks made them to embrace communication technologies and 55% of the respondents agreed that global economic forces made their firms to constantly adopt new product design technologies. This is an indication that adoption of technology is one of the strategies, which has been adopted as a response to globalization by manufacturing firms in Kenya.

**Table 4.26: Adoption of technology**

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Not applicable</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Total</b>
Continued global technological advancement has influenced the firm to embrace superior process technologies	0.0%	0.0%	0.0%	35.0%	65.0%	100.0%
Global economic forces have made the firm to constantly adopt new products design technologies	0.0%	0.0%	5.0%	55.0%	40.0%	100.0%
Development in global communication has contributed to the firm acquiring advanced information exchange technologies	0.0%	0.0%	5.0%	45.0%	50.0%	100.0%
Diffusion of technology globally has facilitated the firm in adopting information dissemination and communication technologies	1.3%	1.3%	2.5%	53.8%	41.3%	100.0%
Global social forces influenced by social technological networks has made us embrace communication technologies	0.0%	1.3%	5.0%	62.5%	31.3%	100.0%
Regulatory measures have influenced adoption of environmental friendly technologies	0.0%	11.3%	7.5%	47.5%	33.8%	100.0%
Global economic factors such as trade blocks has widened supply chain network making us adopt logistic technologies	0.0%	1.3%	28.8%	43.8%	26.3%	100.0%
Global social standards have influenced adoption product design technologies	0.0%	7.5%	12.5%	35.0%	45.0%	100.0%

#### **4.4.13 Managerial innovation and globalization**

In establishing managerial innovation, the respondents were asked to indicate their level of agreement with different statements. The findings of the study were as presented in Table 4.27. The findings on Table 4.27 show that 67.5% of the respondents agreed that continued global technological advancement has enabled management to come up with innovations to respond to customer needs and economic and regulatory factors has prompted outsourcing some operations, respectively. The study also found that 56.3% of the respondents also agreed that economic factors such as trade blocks facilitated building of strategic networks and alliances, 52.5% of the respondents said that technological factors has facilitated creating linkages with customers, suppliers and with members of strategic alliances, and that 61.3% of the respondents agreed that technological factors and socio-economic zones have facilitated networking hence borrowing of ideas.. Thus, one of the responses of the manufacturing firms to globalization is innovation.

**Table 4.27: Managerial innovation**

	Strongly disagree	Disagree	Not applicable	Agree	Strongly agree	Total
Continued global technological advancement has enabled management come up with innovations to respond to customer needs	0.0%	1.3%	1.3%	67.5%	30.0%	100%
New market needs emanating from global economy has triggered producing products that satisfies to customers demand	0.0%	6.3%	7.5%	41.3%	45.0%	100%
Economic factors such as trade blocks have facilitated building of strategic networks and alliances	0.0%	11.3%	12.5%	56.3%	20.0%	100%
Technological factors have facilitated creating linkages with customers, suppliers and with members of strategic alliances	0.0%	11.3%	5.0%	52.5%	31.3%	100%
Economic and regulatory factors have prompted outsourcing some operations	0.0%	5.0%	7.5%	67.5%	20.0%	100%
Accessibility to Supply chain management tools and techniques has enabled seeking core competence	0.0%	10.0%	11.3%	47.5%	31.3%	100%
Technological factors have enabled developing new process of marketing our products through information technology	0.0%	0.0%	5.0%	48.8%	46.3%	100%
Technological factors and socio economic zones have facilitated networking hence borrowing of ideas	0.0%	1.3%	3.8%	33.8%	61.3%	100%

#### 4.4.14 Resource management and globalization

In establishing affiliation between resource management and globalization in manufacturing firms in Kenya, the respondents were asked to rank the resources. The findings of the study were as presented in Table 4.28. From Table 4.28, 63.8% of the respondents indicated capital to be very important, 56.3% of the respondents

indicated labour to be very important while 40% of the respondents indicated entrepreneurship to be important.

**Table 4.28:** Ranks of resources

	Not important at all	Less important	Neutral	Important	Very important	Total
Labour	5.0%	0.0%	7.5%	31.3%	56.3%	100.0%
Capital	0.0%	0.0%	0.0%	36.3%	63.8%	100.0%
Entrepreneurship	0.0%	5.0%	15.0%	41.3%	38.8%	100.0%

#### **4.4.15 Resource management**

In determining the role of resource management in enhancing competitiveness of manufacturing firms in Kenya, the respondents were given different statements on resource management. The findings of the study were as presented in Table 4.29. From Table 4.29, 62.5% of the respondents strongly agreed that due to economic factors energy resource is becoming more costly, 57.5% strongly agreed that new technological advancement has triggered training and skill enhancement to the staff while 55% agreed that human resource and appropriate technology has facilitated efficient resource management approaches. From the findings of the study, it can be said that human resource management strategies such as skill development, technological transfers and talent promotion have been adopted by manufacturing firms as a response strategy to globalization.



**Table 4.29: Resource management**

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Not applicable</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Total</b>
New technological advancement has triggered training and skill enhancement to our staff	0.0%	0.0%	10.0%	32.5%	57.5%	100.0%
Economic and technological factors have demanded more financial resource dedicated to human resource development and talent promotion	0.0%	10.0%	10.0%	40.0%	40.0%	100.0%
Adequate resources have facilitated producing globally attractive products	0.0%	10.0%	10.0%	45.0%	35.0%	100.0%
Human resource and appropriate technology has facilitated efficient resource management approaches	0.0%	0.0%	0.0%	55.0%	45.0%	100.0%
Human capital development has enabled counter changes caused by environmental factors	0.0%	5.0%	20.0%	35.0%	40.0%	100.0%
Due to economic factors energy resource is becoming more costly	5.0%	0.0%	5.0%	27.5%	62.5%	100.0%

#### **4.4.16 Distribution chain and globalization**

Regarding the relationship between distribution chain and globalization in manufacturing firms in Kenya, the respondents were asked to indicate their level of agreement with different statements. The findings of the study were as presented in Table 4.30. The findings on Table 4.30 show that 55% of the respondents agreed that legislative measures have caused the use of local intermediaries who understand legislative measures while 50% strongly agreed that social and economic factors have enhanced usage of distribution channels to sell globally. From the findings of the study, it can be said that distribution chain is one of the response strategies that has been adopted by manufacturing firms in Kenya.

**Table 4.30: Distribution chain**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Not applicable</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Total</b>
Social factors have demanded acknowledging partnering with intermediaries	0.0%	10.0%	20.0%	30.0%	40.0%	100.0%
Social-economic factors have brought out the need for exercising channel motivation to win loyalty of distribution partners	0.0%	0.0%	25.0%	45.0%	30.0%	100.0%
Globalization has required carrying out fundamental strategic change of a firms management	0.0%	5.0%	20.0%	40.0%	35.0%	100.0%
Macroeconomic and political stability has facilitated foreign direct investment with opening of foreign warehouses	0.0%	15.0%	25.0%	25.0%	35.0%	100.0%
Social, political and economic factors have lead to starting foreign affiliate activities which facilitate sale of products overseas	0.0%	5.0%	15.0%	55.0%	25.0%	100.0%
Social and economic factors have enhanced usage of distribution channels to sell globally	0.0%	0.0%	20.0%	30.0%	50.0%	100.0%
Legislative measures have caused use of local intermediaries who understand legislative measures	5.0%	5.0%	15.0%	55.0%	20.0%	100.0%
Economic and environmental factors have enhanced formation of mergers	5.0%	0.0%	41.3%	31.3%	22.5%	100.0%
Economic and technological factors have stimulated formation of alliances to outsource in some areas	0.0%	10.0%	25.0%	32.5%	32.5%	100.0%

#### **4.4.17. Competition and globalization**

To test on the relationship between competition and globalization in manufacturing firms in Kenya, the respondents were given different statements on the competitive strategies used by manufacturing firms. The findings of the study were as presented in Table 4.31. The findings on Table 4.31 shows that 60% of the respondents indicated to a large extent exploring other markets is a competitive strategy of

responding to globalization, 55% of the respondents indicated that to a large extent increasing the range of products produced is a competitive strategy of responding to globalization, 40% of the respondents indicated that to a very large extent innovations are competitive strategies of responding to globalization. From these findings, it is evident that one of the responses to globalization that has been adopted by manufacturing firms in Kenya is competition.

The respondents were further asked to mention other strategies adopted by manufacturing firms in Kenya to respond to globalization. The following were mentioned: upgraded website, corporate partnership with distributors around the globe and branches in other African economies; infrastructure; information technology; social media marketing and branding; marketing segmentation; pricing strategies; market skimming; coming up with ISO friendly products; and quality of goods. This is an indication that there are other responses to globalization other than adoption of technology, managerial innovation, resource management, distribution chain and competition that were not tested in this study.

**Table 4.31: Competition**

	No extent at all	Small extent	Neutral	Large extent	Very large extent	Total
Exploring other markets	0.0%	0.0%	10.0%	60.0%	30.0%	100.0%
Innovations	0.0%	5.0%	25.0%	30.0%	40.0%	100.0%
Focused low cost strategy	0.0%	10.0%	30.0%	30.0%	30.0%	100.0%
Increasing the range of products produced	5.0%	0.0%	5.0%	55.0%	35.0%	100.0%
Overall low cost provider strategy	5.0%	10.0%	15.0%	40.0%	30.0%	100.0%
Focused differentiation strategy	0.0%	5.0%	30.0%	23.8%	41.3%	100.0%
Broad differentiation strategy	0.0%	10.0%	35.0%	15.0%	40.0%	100.0%

#### 4.4.18 Globalization

The respondents were asked to define globalization. The following were mentioned: integration of countries and communities; trading and enhancing international practices. It is a process of international integration; worldwide market; it is the company of all the economies around the world in forms of trade; this is where people work worldwide as a single community (one community); competitiveness and wider market; opening new markets to our products; globalization is where operations of a company goes worldwide; and it opens doors for bench-marking and provides capacity to penetrate new markets. Regarding globalization, the findings of the study were as presented in Table 4.32. From Table 4.32, 46.3% of the respondents strongly agreed that the Kenyan economy is suited to the development of worldwide economy while 41.3% agreed that the current regulations in place are sufficient for the development. This is an indication that manufacturing firms in Kenya have embraced globalization and are therefore looking for strategies to respond to its effects in the market to remain relevant.

**Table 4.32:** Globalization

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Not applicable</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Total</b>
The Kenyan economy is suited to the development of worldwide economy	5.0%	0.0%	10.0%	38.8%	46.3%	100.0%
The current regulations in place are sufficient for the development of globalization	0.0%	26.3%	11.3%	41.3%	21.3%	100.0%

#### 4.4.19 Effects of globalization on different domains

In establishing the effects of globalization on different domains, the respondents were asked to indicate the extent of the effects of globalization on different domains. The findings of the study were as presented in Table 4.33. The findings on Table

4.33 show that 55% of the respondents indicated that globalization affects Economic growth in the country to a large extent, 50% indicated that globalization affects solidarity between countries to a large extent and 35% indicated that globalization affects cultural exchanges between countries to a very large extent. It can therefore be concluded that globalization affects the operation of manufacturing firms and thus necessitating their adjustment through responses that will make them competitive.

**Table 4.33:** Effects of globalization on different domains

Statement	No extent at all	Small extent	Neutral	Large extent	Very large extent	Total
Economic growth in the country	0.0%	5.0%	2.5%	55.0%	37.5%	100.0%
Cultural exchanges between countries	0.0%	15.0%	15.0%	35.0%	35.0%	100.0%
Solidarity between countries	5.0%	5.0%	10.0%	50.0%	30.0%	100.0%
Scientific and technical progress	5.0%	10.0%	11.3%	40.0%	33.8%	100.0%
Democracy at a worldwide level	10.0%	10.0%	21.3%	36.3%	22.5%	100.0%
Quality of public services	10.0%	10.0%	25.0%	25.0%	30.0%	100.0%
Employment in the country	5.0%	10.0%	0.0%	57.5%	27.5%	100.0%
Environment	3.8%	20.0%	11.3%	27.5%	37.5%	100.0%
Health	5.0%	10.0%	10.0%	42.5%	32.5%	100.0%

#### 4.4.20 Influence of development in the global market on manufacturing firms

The respondents were asked to indicate whether developments in the global market influence manufacturing firms approach in building their competitive capabilities. The findings of the study were as presented in Table 4.34. The findings on Table 4.34 show that majority (90%) of the respondents indicated that global market influence manufacturing firms approach in building their competitive capabilities while 10% indicated that it does not influence manufacturing firms in any way. According to Mamman (2009) one of the benefits of globalization is that it helps in

the transfer of good management and business practices as well as flow of foreign direct investment.

The respondents were further asked to explain their answers. The following were mentioned: standards have to be met and acceptable globally; line of production not being competitive globally; changes which affect the market orientation through creating new trends; there are efforts being made but the political environment has made this difficult and expensive; by adopting cultural, democracy and quality between countries; by forcing them to employ new technologies; by adopting the internal standard of operation certification; firms aim to be more wide spread as opposed to before where the aim was to conquer the local market; there is more growth without embracing changes around and globalization is real; to remain competitive in the global market manufacturing firms have to embrace the changes and dynamism occurring in the global market to remain competitive; global innovations and improved machinery have been picked up and thus used as value addition to compete.

**Table 4.34:** Influence of development in the global market on manufacturing firms

Influence of development of global market	Frequency	Percentage
No	8	10
Yes	72	90
<b>Total</b>	<b>80</b>	<b>100</b>

#### 4.5 Correlation Analysis

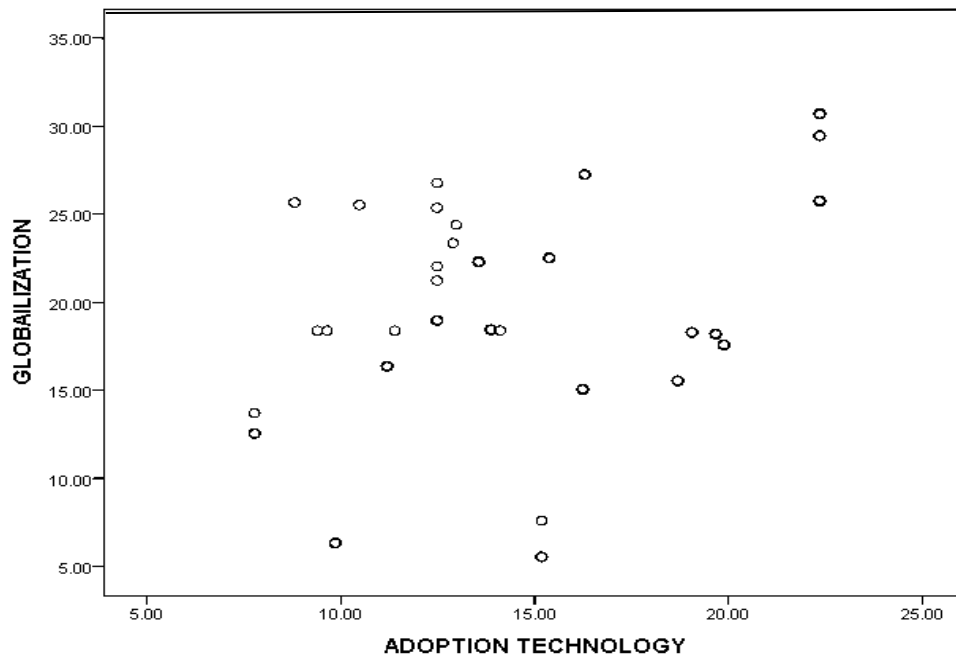
This study conducted correlation analysis to test on the strength of the association or relationship between the study variables. Correlation is a measure of the relationship or association between two continuous numeric variables. It indicates both the direction and degree to which they vary with one another from case to case without implying that one is causing the other. Correlation analysis results give a correlation coefficient that measures the linear association between two variables (Crossman, 2013).

Values of the correlation coefficient range between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly positively related linearly. A correlation of -1 indicates that two variables are negatively linearly related and a correlation coefficient of 0 indicates that there is no linear relationship between two variables (Wond, 2012). To clearly show the correlation analysis results, the study used scatter plot diagrams. A scatter plot diagram is a graph that shows the relationship between two quantitative variables. Scatter plots are used to investigate the possible relationship between two variables. When a straight line is drawn or curve through the data so that it fits as well as possible, the more points cluster closely around the line of best fit, the stronger the relationship that exists between two variables (Rumsey, 2012). When interpreting the scatter diagram, the issues to be considered include:

- a. If the points scatter in a band running from lower left to upper, there is a positive correlation (if X increases, Y increases).
- b. If the points cluster in a band from upper left to lower right, there is a negative correlation (if X decreases, Y increases).

#### **4.5.1 Adoption of technology correlation analysis results**

To establish whether adoption of technology was one of the responses to globalization, a scatter plot diagram of the correlation of adoption of technology and globalization was plotted. Figure 4.9 shows a scatter plot diagram of correlation of adoption of technology versus globalization. From Figure 4.11, all points tend to concentrate in the centre of the diagram. These findings imply that there is a positive correlation between adoption of technology and globalization.



**Figure 4.11:** Adoption of technology correlations analysis

The symmetric matrix with Pearson correlation given in Table 4.35 shows that the Pearson correlation coefficient was 0.475 and this demonstrates that adoption of technology has a moderate positive correlation with globalization. This implies that as adoption of technology increases, globalization also increases. This can be attributed to the fact that adoption of technology introduces new ways in which firms can relate e.g. in terms of communication. Technology also contributes to product differentiation that plays a role in globalization. Adoption of production technologies, for example, can also lead to economies of production of different products for different markets.

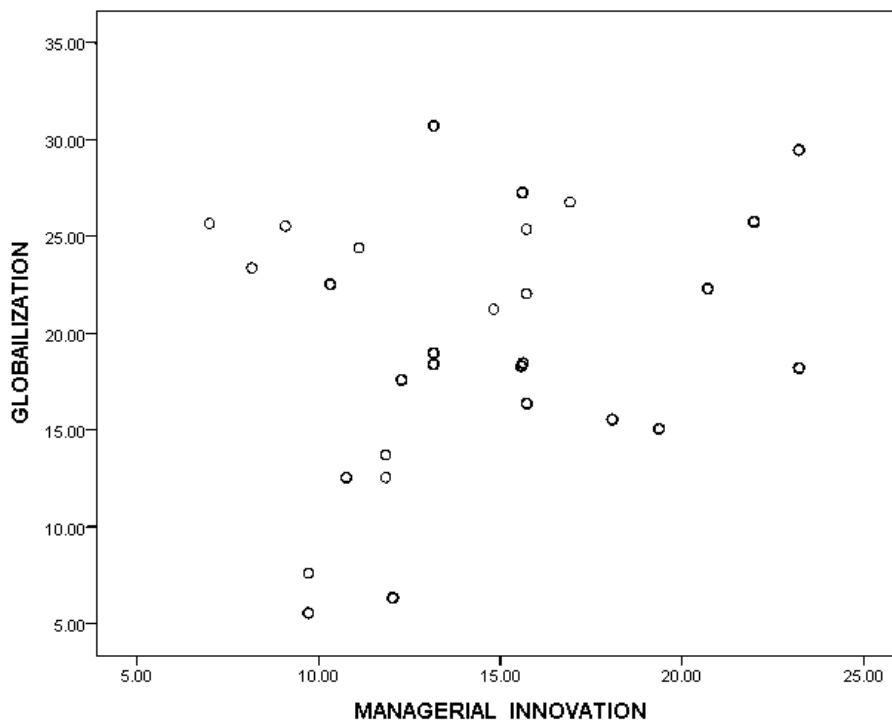
**Table 4.35:** Adoption of technology correlation analysis

Correlations			
		Globalization	Adoption of technology
Globalization	Pearson correlation	1	.475**
	Sig. (2-tailed)		.000
	N	80	80
Adoption of technology	Pearson correlation	.475**	1
	Sig. (2-tailed)	.000	
	N	80	80



#### 4.5.2 Managerial innovation

To establish whether managerial innovation was one of the responses to globalization, a scatter plot diagram of the correlation of adoption of technology and globalization was plotted. Figure 4.12 shows a scatter plot diagram of correlation of managerial innovation versus globalization. From the figure, all points tend to concentrate from the left to the upper part of the diagram. These findings imply that there is a positive correlation between managerial innovation and globalization.



**Figure 4.12:** Managerial innovation correlation analysis

The correlation coefficient was found to be 0.322 as indicated in Table 4.36. This demonstrates that managerial innovation has a moderate positive correlation with globalization. Managerial innovation is more pronounced in making correct strategic decisions.

Thus, the more strategic decisions a firm makes, the more it is likely to spread globally. However, the managerial innovation alone may not necessarily lead to globalization. Therefore, a combination with other factors like availability of resources (technology, financial and human resources) and political goodwill (stability) can lead to more globalization.

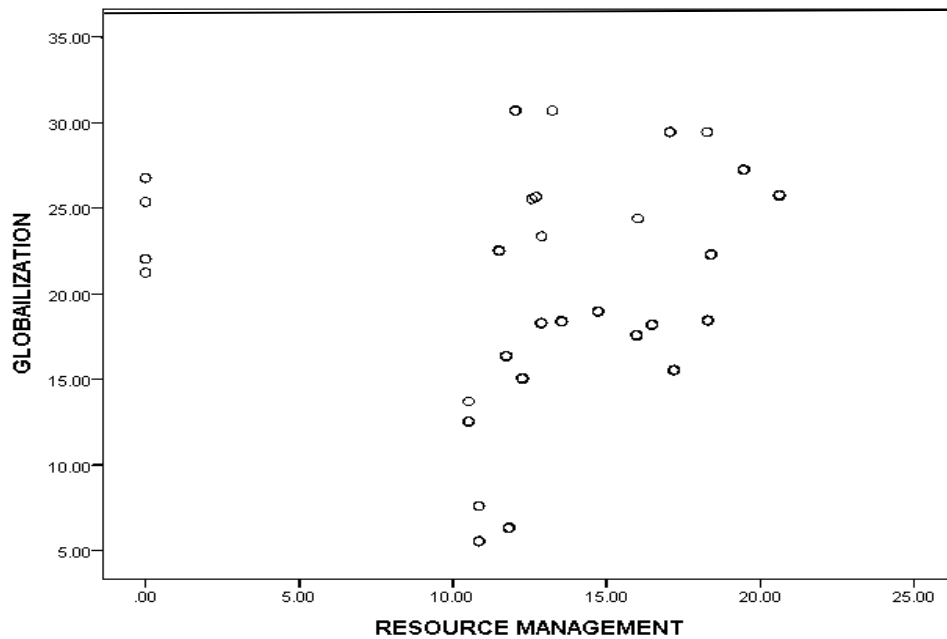
**Table 4.36:** Managerial innovation correlations

		<b>Correlations</b>	
		Globalization	Managerial innovation
Globalization	Pearson Correlation	1	.322**
	Sig. (2-tailed)		.004
	N	80	80
Managerial innovation	Pearson Correlation	.322**	1
	Sig. (2-tailed)	.004	
	N	80	80

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

### 4.5.3 Resource management

To establish whether resource management was one of the responses to globalization, a scatter plot diagram of the correlation of resource management and globalization was plotted. Figure 4.13 shows a scatter plot diagram of correlation of managerial innovation versus globalization. As can be observed in the figure, all the points tend to concentrate from the left to the upper part of the diagram. These findings imply that there is a positive correlation between resource management and globalization.



**Figure 4.13:** Resource management

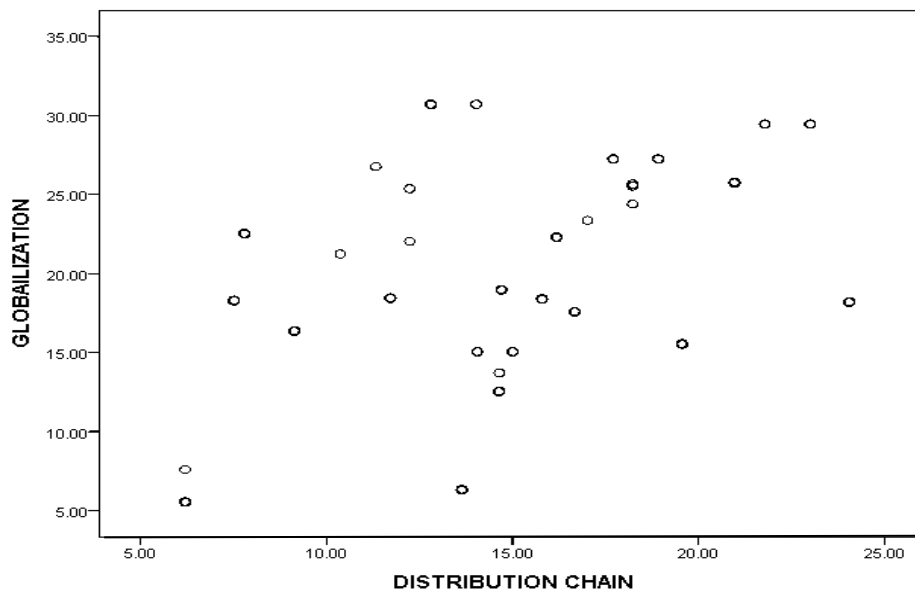
From Tables 4.37, the Pearson correlation coefficient was found to be 0.220. This demonstrates that resource management has a weak positive correlation with globalization. This implies that for globalization to be effective there is need for proper management of resources.

**Table 4.37:** Resource management correlations

Correlations			
		Globalization	Resource management
Globalization	Pearson Correlation	1	.220
	Sig. (2-tailed)		.050
	N	80	80
Resource management	Pearson Correlation	.220	1
	Sig. (2-tailed)	.050	
	N	80	80

#### 4.5.4 Distribution chain

To establish whether distribution chain was one of the responses to globalization, a scatter plot diagram of the correlation of distribution chain and globalization was plotted. Figure 4.14 shows a scatter plot diagram of correlation of distribution chain versus globalization. As can be observed in the figure, all the points tend to concentrate from the left to the upper part of the diagram. These findings imply that there is a positive correlation between distribution chain and globalization.



**Figure 4.14:** Distribution chain

From Table 4.38, the Pearson correlation coefficient was found to be 0.375. This demonstrates that distribution chain has a moderate positive correlation with globalization. Globalization permits a firm to spread to different regions and markets. Distribution of products to those regions and markets is dependent on the distribution chain. Thus, to effectively satisfy the demands of the new markets and regions, the distribution chain adopted is critical since, for instance, it determines whether products can be availed in different markets and regions within the expected time durations.

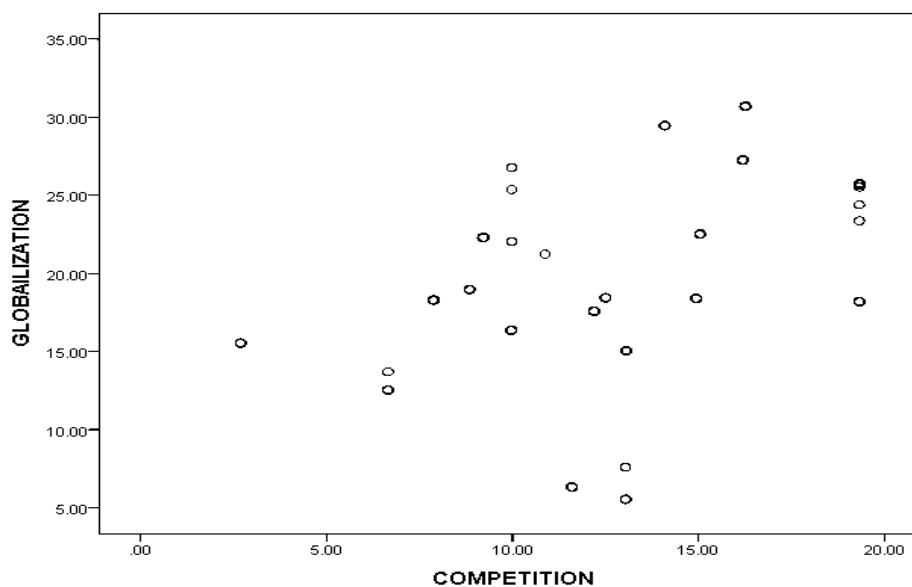
**Table 4.38:** Distribution chain correlations

		Correlations	
		Globalization	Distribution chain
Globalization	Pearson	1	.375**
	Correlation		
	Sig. (2-tailed)		.001
	N	80	80
Distribution chain	Pearson	.375**	1
	Correlation		
	Sig. (2-tailed)	.001	
	N	80	80

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

### 4.5.5 Competition

To establish whether competition was one of the responses to globalization, a scatter plot diagram of the correlation of competition and globalization was plotted. Figure 4.15 shows a scatter plot diagram of correlation of competition versus globalization. As can be observed in the figure, all the points tend to concentrate from the left to the upper part of the diagram. These findings imply that there is a positive correlation between competition and globalization.



**Figure 4.15:** Competition

From Table 4.39, the Pearson correlation coefficient was found to be 0.423. This demonstrates that competition has a positive correlation with globalization. Firms go global as a result of competition to gain competitive advantage.

**Table 4.39:** Competition correlations

Correlations			
		Globalization	Competition
Globalization	Pearson	1	.423**
	Correlation		
	Sig. (2-tailed)		.000
	N	80	80
Competition	Pearson	.423**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	80	80

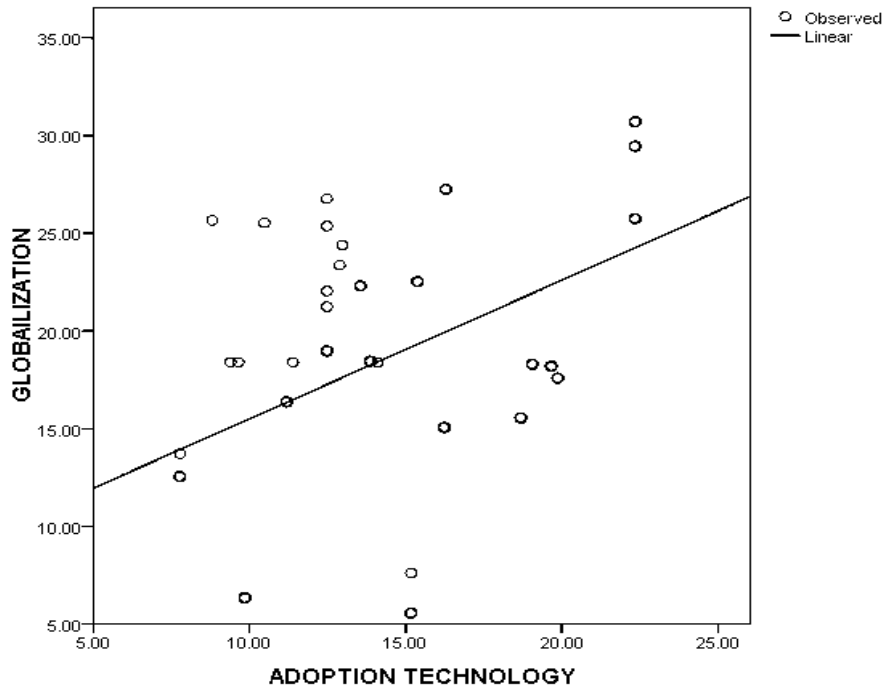
\*\* . Correlation is significant at the 0.01 level (2-tailed).

## 4.6 Regression analysis

Regression analysis was further carried out to establish the statistical significance between the study variables. Regression analysis was presented using regression model summary tables, Analysis of Variance (ANOVA) table and beta coefficient tables.

### 4.6.1 Regression Analysis on adoption of technology and globalization

Regression analysis was done to determine the relationship between adoption of technology and globalization. The representation of regression analysis on adoption of technology is as shown on Figure 4.16. From the figure the analysis shows a linear relationship.



**Figure 4.16:** Regression analysis on adoption of technology and globalization

Table 4.40 shows that the coefficient of determination R square is 0.226 and R is 0.475 at 0.05 significant level. The coefficient of determination indicates that 22.6% of the variation in the response to globalization is explained by adoption to technology. Different factors contribute to globalization. Thus, besides technology adoption, factors like acceptability of the adopted technology, international marketing and relations, political goodwill and international diplomacy, play a part in globalization.

**Table 4.40:** Regression Analysis on adoption of technology and globalization

<b>Model summary</b>				
Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.475a	.226	.216	5.79974

a. Predictors: (Constant), Adoption of Technology

Table 4.41 presents the results of the Analysis of Variance (ANOVA) on the adoption of technology versus globalization. The ANOVA results for regression

coefficient indicates that the significance of F is 0.000 which is less than 0.05 hence implying that there is a positive significant relationship between adoption of technology and globalization. These findings are in line with Dahlman (2006) findings that technology is an increasingly important element of globalization and that the acceleration in the rate of technological change is making it more difficult for many developing countries to compete.

**Table 4.41:** ANOVA on adoption of technology and globalization

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
	Regression	764.000	1	764.000	22.713	.000 <sup>b</sup>
1	Residual	2623.681	78	33.637		
	Total	3387.680	79			

a. Dependent Variable: Globalization

b. Predictors: (Constant), Adoption of Technology

Further analysis determined beta coefficients of adoption of technology versus globalization. Table 4.42 shows that there is significant relationship between adoption of technology and globalization. Since the coefficient of adoption of technology is 0.709 which is statistically greater than zero. The statistic is 4.766, which is greater than zero. This demonstrates that adoption of technology has a positive influence on globalization. The alternative hypothesis that there is significant relationship between adoption of technology and globalization is therefore accepted (P. value is 0.000). Thus, adoption of technology is used as a response to globalization.

**Table 4.42:** Analysis on adoption of technology and globalization coefficients

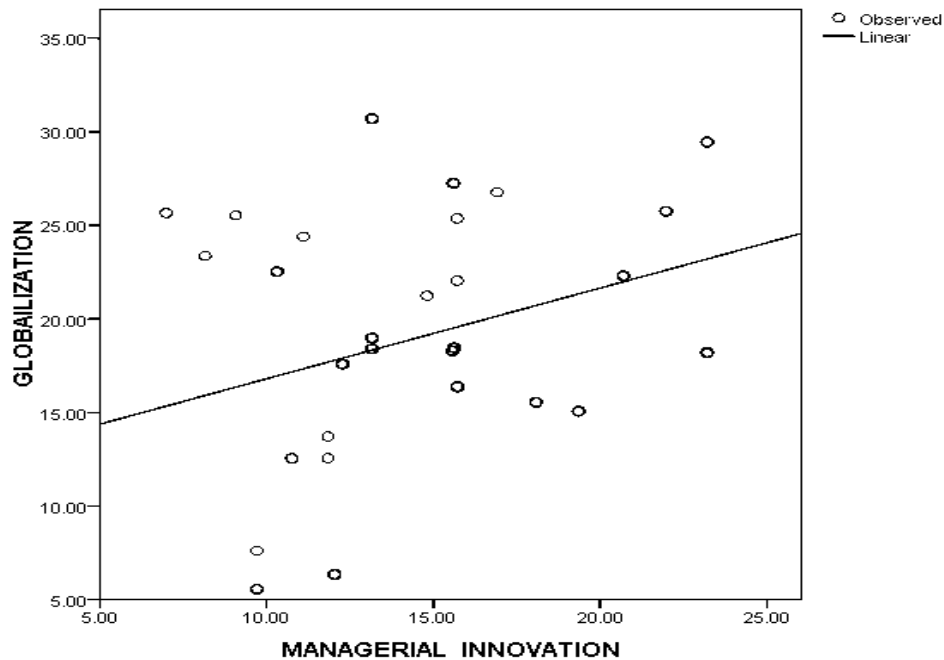
Coefficients						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	8.402	2.404		3.496	.001
1	Adoption of technology	.709	.149	.475	4.766	.000

a. Dependent variable: Globalization



#### 4.6.2 Regression analysis on managerial innovation and globalization

Regression analysis was done to determine the relationship between managerial innovation and globalization. The regression analysis on managerial innovation and globalization is as presented on Figure 4.17. The analysis shows a linear relationship.



**Figure 4.17:** Regression analysis on managerial innovation and globalization

Table 4.43 shows that the coefficient of determination R square is 0.104 and R is 0.322 at 0.05 significant level. The coefficient of determination indicates that 10.4% of the variation in the response to globalization is explained by managerial innovation. Managerial innovation alone may not necessarily lead to globalization. Therefore, a combination with other factors like availability of resources (technology, financial and human resources) and political goodwill (stability) can lead to more globalization.

**Table 4.43:** Regression analysis on managerial innovation and globalization

Model summary				
Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.322 <sup>a</sup>	.104	.092	6.23875

a. Predictors: (Constant), Managerial Innovation

Table 4.44 presents the results of the Analysis of Variance (ANOVA) on managerial innovation versus globalization. The ANOVA results for regression coefficients indicate that the significance of F is 0.04, which is less than 0.05. This implies there is a positive significant relationship between managerial innovation and globalization.

**Table 4.44:** ANOVA on managerial innovation and globalization

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
	Regression	351.767	1	351.767	9.038	.004b
1	Residual	3035.913	78	38.922		
	Total	3387.680	79			

a. Dependent variable: Globalization

b. Predictors: (Constant), Managerial Innovation

Further analysis determined beta coefficients of managerial innovation versus globalization. Table 4.45 shows that, there is significant relationship between managerial innovation and globalization. Since the coefficient of managerial innovation is 0.485 which is statistically greater than zero. The statistic is 3.006, which is greater than zero. This demonstrates that managerial innovation has a positive influence on globalization. The alternative hypothesis that there is significant relationship between managerial innovation and globalization is therefore accepted (P. value is 0.004). Thus, managerial innovation is used as a response to globalization.

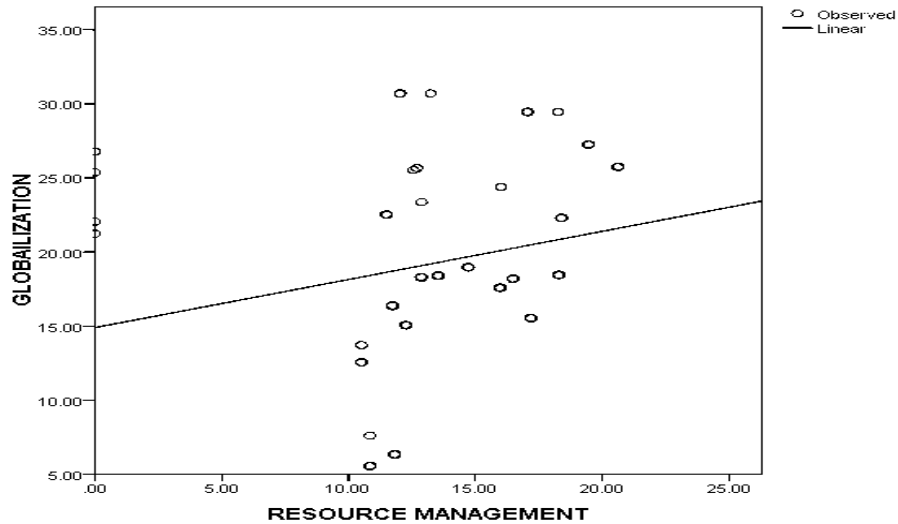
**Table 4.45:** Analysis on managerial innovation and globalization coefficients

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	(Constant)	11.945	2.586		4.619	.000
1	Managerial innovation	.485	.161	.322	3.006	.004

a. Dependent Variable: Globalization

### 4.6.3 Regression analysis on resource management and globalization

Regression analysis was done to determine the relationship between resource management and globalization. Regression analysis on resource management and globalization is as shown on Figure 4.18. The analysis depicts a linear relationship on resource management and globalization.



**Figure 4.18:** Regression analysis on resource management and globalization

Table 4.46 shows that the coefficient of determination R square is 0.048 and R is 0.220 at 0.05 significant level. The coefficient of determination indicates that 4.8% of the variation in the response to globalization is explained by resource management. Clearly, as much as resource management has a positive influence on globalization, it accounts for less than 5% of the variation. Thus, if combined with other factors that influence globalization, then it may have more effect on globalization. Though, for globalization to be effective there is need for proper management of resources.

**Table 4.46:** Regression analysis on resource management and globalization

Model summary				
Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.220 <sup>a</sup>	.048	.036	6.42909

a. Predictors: (Constant), Resource Management

Table 4.47 presents the results of the Analysis of Variance (ANOVA) on resource management versus globalization. The ANOVA results for regression coefficient indicate that the significance of F is 0.05, which is equal to 0.05. This implies that there is a positive significant relationship between resource management and globalization.

**Table 4.47:** ANOVA on resource management and globalization

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
	Regression	163.686	1	163.686	3.960	.050 <sup>b</sup>
1	Residual	3223.994	78	41.333		
	Total	3387.680	79			

a. Dependent variable: Globalization

b. Predictors: (Constant), Resource Management

Further analysis determined beta coefficients of resource management versus globalization. Table 4.48 shows that there is significant relationship between resource management and globalization. Since the coefficient of resource management is 0.325, which is statistically greater than zero. The statistic is 1.990, which is greater than zero. This demonstrates that resource management has a positive influence on globalization. The alternative hypothesis that there is significant relationship between resource management and globalization is therefore accepted (P. value is 0.050). Thus, resource management is used as a response to globalization.

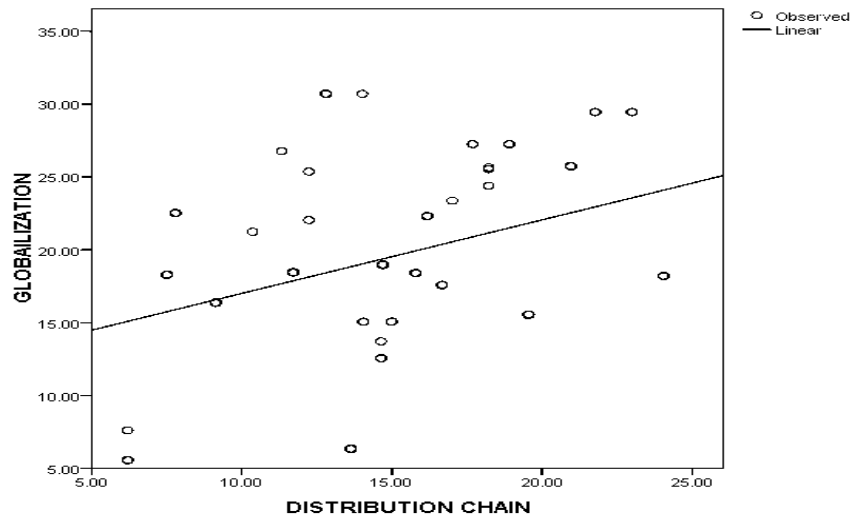
**Table 4.48:** Analysis on resource management and globalization coefficients

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. error	Beta		
	(Constant)	14.894	2.391		6.228	.000
1	Resource management	.325	.163	.220	1.990	.050

a. Dependent variable: Globalization

#### 4.6.4 Regression analysis on distribution chain and globalization

Regression analysis was done to determine the relationship between distribution chain and globalization. Regression analysis on distribution chain and globalization is as shown on Figure 4.19. The analysis depicts a linear relationship for distribution chain and globalization.



**Figure 4.19:** Regression analysis on distribution chain and globalization

Table 4.49 shows that the coefficient of determination R square is 0.140 and R is 0.375 at 0.05 significant level. The coefficient of determination indicates that 14% of the variation in the response to globalization is explained by distribution chain. This is the case since the distribution chain adapted depends on the technology adopted, the strategic decisions made and the amount of resources availed for the distribution process.

**Table 4.49:** Regression analysis on distribution chain and globalization

Model summary				
Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.375 <sup>a</sup>	.140	.129	6.11018

a. Predictors: (Constant), Distribution Chain

Table 4.50 presents the results of the Analysis of Variance (ANOVA) on distribution chain versus globalization. The ANOVA results for regression coefficients indicate that the significance of F is 0.01 which is less than 0.05. This implies that there is a positive significant relationship between distribution chain and globalization.

**Table 4.50:** ANOVA on distribution chain and globalization

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	475.601	1	475.601	12.739	.001 <sup>b</sup>
	Residual	2912.079	78	37.334		
	Total	3387.680	79			

a. Dependent variable: Globalization

b. Predictors: (Constant), Distribution Chain

Further analysis determined beta coefficients of distribution chain versus globalization. Table 4.51 shows that there is significant relationship between distribution chain and globalization. Since the coefficient of distribution chain is 0.504 which is statistically greater than zero. The statistic is 3.569 which is greater than zero. This demonstrates that distribution chain has a positive influence on globalization. The alternative hypothesis that there is significant relationship between distribution chain and globalization is therefore accepted (P. value is 0.000). Thus, distribution chain is used as a response to globalization.

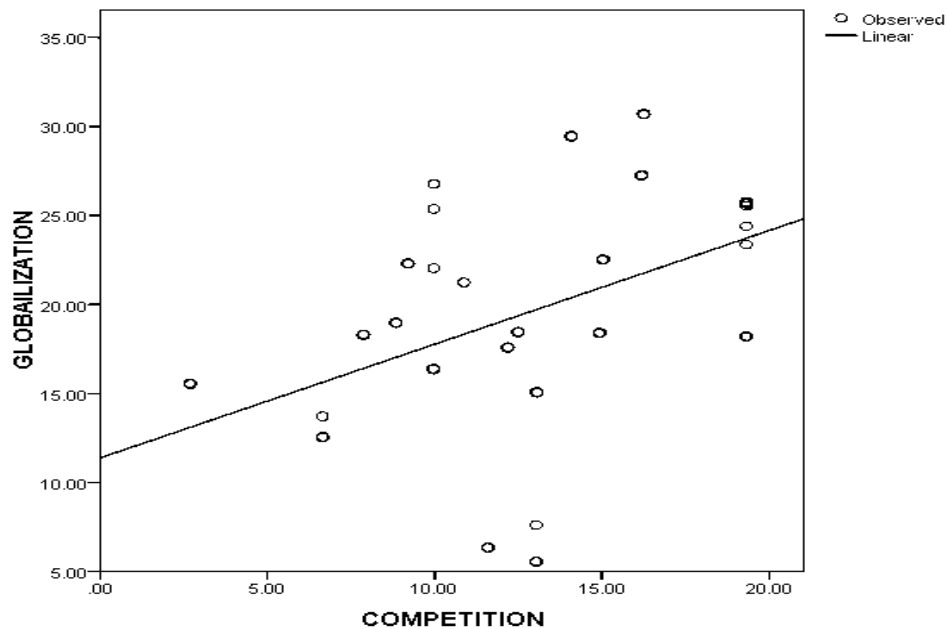
**Table 4.51:** Analysis on distribution chain and globalization coefficients

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	11.958	2.203		5.429	.000
	Distribution Chain	.504	.141	.375	3.569	.001

a. Dependent variable: Globalization

#### 4.6.5 Regression Analysis on Competition and Globalization

Regression analysis was done to determine the relationship between competition and globalization. The regression analysis on competition and globalization is as shown on Figure 4.20. The analysis depicts a linear relationship for competition and globalization.



**Figure 4.20:** Regression analysis on competition and globalization

Table 4.52 shows that the coefficient of determination R square is 0.179. The value for R was found to be 0.423 at 0.05 significant level. The coefficient of determination indicates that 17.9% of the variation in the response to globalization is explained by competition.

**Table 4.52:** Regression Analysis on Competition and Globalization

Model summary				
Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.423 <sup>a</sup>	.179	.169	5.97093

a. Predictors: (Constant), Competition

Table 4.53 presents the results of the Analysis of Variance (ANOVA) on competition versus globalization. The ANOVA results for regression coefficient indicate that the significance of F is 0.00, which is less than 0.05. This implies that there is a positive significant relationship between competition and globalization.

**Table 4.53:** ANOVA on Competition and Globalization

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	606.821	1	606.821	17.021	.000 <sup>b</sup>
	Residual	2780.859	78	35.652		
	Total	3387.680	79			

a. Dependent variable: Globalization

b. Predictors: (Constant), Competition

Further analysis determined beta coefficients of competition versus globalization. Table 4.54 shows that there is a significant relationship between competition and globalization. This is the case since the coefficient of competition is 0.639 which is statistically greater than zero. The statistic is 4.126, which is greater than zero. This demonstrates that competition has a positive influence on globalization. The alternative hypothesis that there is significant relationship between competition and globalization is therefore accepted (P. value is 0.000). Thus, competition is used as a response to globalization.

**Table 4.54:** Analysis on Competition and Globalization coefficients

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized	t	Sig.
		B	Std. error	Beta		
1	(Constant)	11.372	2.065		5.508	.000
	Competition	.639	.155	.423	4.126	.000

a. Dependent variable: Globalization

The regression analysis carried out to establish the statistical significance between the individual study variables and globalization. Adoption of technology accounts for



22.6%, managerial innovation accounts for 10.4%, resource management accounts for 4.8%, distribution chain accounts for 14.0% and competition accounts for 17.9%. The sum of individual R Square is 69.7% (22.6% + 10.4% + 4.8% + 14.0% + 17.9%), which is less than 100% as expected and less than the combined R Square of 97.2% as expected. The advantage is  $97.2\% - 69.7\% = 27.5\%$ . This implies that a combination of different factors results into more globalization.

#### 4.7 Combined effect model

Multiple regression analysis was done to test on the relationship between the variables of the study. The relationship was tested between globalization (dependent variable) and the independent variables such as adoption of technology, managerial innovation, resource management, distribution chain and competition. Multiple regression model presented below was used to test on the relationship between the variables of the study:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where:

Y is the dependent variable (Globalization)

X is the set of five independent variables described in the previous paragraph, i.e.

X<sub>1</sub> - Adoption of technology

X<sub>2</sub> - Managerial innovation

X<sub>3</sub> - Resource management

X<sub>4</sub> - Distribution chain

X<sub>5</sub> - Competition.

$\beta_i$  ( $i=0,1,2,3,4,5$ ) are the parameters associated with the corresponding independent variables that are to be estimated (partial regression coefficients)

$\varepsilon$  is the error variability (error term)

The study carried out an overall regression model to determine the significance of each of the independent variables on the dependent variable. Table 4.55 thus presents the beta coefficients of all independent variables versus the dependent variable.

Table 4.55: **Coefficients of overall regression model**

Model	Coefficients <sup>a,b</sup>					
	Unstandardized coefficients		Standardized coefficients	t	Sig.	
	B	Std. error	Beta			
1	Adoption technology	.536	.106	.291	5.051	.000
	Managerial innovation	.291	.115	.157	2.531	.013
	Resource management	.314	.103	.155	3.052	.003
	Distribution chain	.361	.110	.189	3.282	.002
	Competition	.499	.087	.224	5.702	.000

a. Dependent variable: Globalization

b. Linear regression through the origin

Using the Y-intercept on Figure 4.19 and the B coefficients on Table 4.54, the fitted model becomes;

$$Y = 0.028 + 0.536X_1 + 0.291X_2 + 0.314X_3 + 0.361X_4 + 0.499X_5$$

The regression model is written as: Globalization = 0.028 + 0.536\*Adoption of technology + 0.291\*Managerial innovation + 0.314\*Resource management + 0.361\*Distribution chain+ 0.499\*Competition

The Beta coefficients in the regression show that all the variables tested: adoption of technology, managerial innovation, resource management, distribution chain and competition have a positive relationship with globalization. The findings show that all the variables tested are statistically significant with p-values less than 0.05. This indicates that we can reject the null hypothesis. In other words the predictor is meaningful addition to the model because changes in the predictor's value are related to changes in the response variable.

### The implication of Beta coefficient

$X_1 = 0.536$ ; one unit increase in the adoption of technology results in 0.536 units increase in response to globalization.

$X_2 = 0.291$ ; one unit increase in managerial innovation results in 0.291 units increase in response to globalization.

$X_3 = 0.314$ ; one unit increase in the resource management results in 0.314 units increase in response to globalization.

$X_4 = 0.361$ ; one unit increase in the distribution chain results in 0.361 units increase in response to globalization.

$X_5 = 0.499$ ; one unit increase in competition results in 0.499 units increase in response to globalization.

As can be observed in Table 4.56, R square was 0.972 and R was 0.986 at 0.05 significant levels. The coefficient of determination indicates that 97.2% of the variations on the response to globalization can be explained by the adoption of technology, managerial innovation, resource management, distribution chain and competition. The remaining 2.8% can be explained by other variables not included in the study. R square and adjusted R is very high implying that there is a high variation that can be explained by the model.

**Table 4.56:** Overall model summary

Model summary				
Model	R	R Square <sup>b</sup>	Adjusted R square	Std. error of the estimate
1	.986 <sup>a</sup>	.972	.988	3.28753

Further analysis of ANOVA as shown in Table 4.57 showed that significance of F statistic is 0.000. This is less than 0.05. The value of F (1289.852) is significant at 0.00 confidence level.

**Table 4.57: ANOVA**

ANOVA <sup>a,b</sup>						
Model		Sum of squares	Df	Mean square	f	Sig.
1	Regression	69702.509	5	13940.502	1289.852	.000 <sup>c</sup>
	Residual	810.587	75	10.808		
	Total	70513.096 <sup>d</sup>	80			

The results of the correlation analysis on Table 4.58 shows that globalization is positively related with the adoption of technology with a Pearson's correlation coefficient of  $r = 0.683$  and that at a level of significance of 0.000, it is statistically significant at  $p$  value less than 0.05. The results also show that there is a positive correlation between globalization and managerial innovation with a Pearson's correlation coefficient of  $r = 0.600$  and a level of significance of 0.000 (statistically significant). The results further show that there is a positive correlation between the globalization and resource management with a Pearson's correlation coefficient of  $r = 0.615$  and a level of significance of 0.05 (statistically significant). The results also show that there is a positive correlation between the globalization and distribution chain with a Pearson's Correlation Coefficient of  $r = 0.677$  and a level of significance of 0.001 (statistically significant). The results finally show that globalization has a positive relation with competition with a Pearson's correlation coefficient of 0.531 and 0.000 level of significance. The significance values tell us that the probability of the correlation being a fluke is very low; hence the study can have confidence that the relationship between the variables is genuine. Thus predictor is meaningful addition to the model because changes in the predictor's value are related to changes in the response variable.

**Table 4.58: Correlation Matrix**

		<b>Correlations</b>					
		Globaliz ation	Adoption of technology	Managerial innovation	Resource managemen t	Distribution chain	Compe tition
Globalization	Pearson correlation	1	.683**	.600**	.615**	.677**	.531**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	80	80	80	80	80	80
Adoption technology	Pearson correlation	.683**	1	.531**	.432**	.360**	.297**
	Sig. (2-tailed)	.000		.000	.000	.001	.007
	N	80	80	80	80	80	80
Managerial innovation	Pearson correlation	.600**	.531**	1	.431**	.602**	.077
	Sig. (2-tailed)	.000	.000		.000	.000	.499
	N	80	80	80	80	80	80
Resource management	Pearson correlation	.615**	.432**	.431**	1	.554**	.223*
	Sig. (2-tailed)	.000	.000	.000		.000	.047
	N	80	80	80	80	80	80
Distribution chain	Pearson correlation	.677**	.360**	.602**	.554**	1	.314**
	Sig. (2-tailed)	.000	.001	.000	.000		.005
	N	80	80	80	80	80	80
Competition	Pearson correlation	.531**	.297**	.077	.223*	.314**	1
	Sig. (2-tailed)	.000	.007	.499	.047	.005	
	N	80	80	80	80	80	80

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

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

## **4.8 Discussion**

### **4.8.1 Adoption of technology**

The factor analysis results on adoption of technology had a Cronbach's alpha of 0.840. The study therefore deduced that all the adoption of technology indicators were reliable in assessing the adoption of technology as a response to globalization in manufacturing firms in Kenya. All the adoption of technology factors such as technological advancement, diffusion of technology, global economic forces, global social forces and global communication were later used for further analysis.

Descriptive statistics results showed that adoption of technology is one of the responses by manufacturing firms to globalization. This is evidenced by 65% of the respondents strongly agreeing that continued global technological advancement has influenced their firms to embrace superior process technologies. Buckley and Ghauri (2004) did a study to examine globalization in terms of conflicts between markets and economic management and found that the major challenge to manufacturing firms is brought about by fast and unstoppable advances in information technologies, market deregulation and large reductions in transport costs, which together constitute what is commonly called globalization. These aspects put together define a new and more intensely competitive scenario and, in this way, globalization has become one of the phenomena that better explains the recent competition among manufacturing firms.

The study further found that 62.5% of the respondents agreed that global social forces have influenced social technological networks that have made firms embrace communication technologies. According to Castells (1999), the ability to move into the information age depends on the capacity of the whole society to be educated, and to be able to assimilate and process complex information. This starts with the education system. This as well relates to the overall process of cultural development, including the level of functional literacy, the content of the media, and the diffusion of information within the population as a whole. Archibugi and Pietrobelli (2002) in their study to explore the impact of the different forms of globalization of technology

on developing countries found that through travelling, media, scientific and technical workshops, Internet and many other communication channels, globalization allows the transmission of knowledge at a much greater pace than in the past. Thus the social technological networks are used as a strategy to get information on technological products and even in the exploration of the new markets.

The study also found that 55% of the respondents agreed that global economic forces have made their firms to constantly adopt new product design technologies. This finding is supported by a study by Dahlman (2006) who found technology as an increasingly important element of globalization and of competitiveness and that the acceleration in the rate of technological change and the pre-requisites necessary to participate effectively in globalization are making it more difficult for many developing countries to compete. From the findings of the study, it can be said that adoption of technology is one of the strategies, which has been adopted as a response to globalization by manufacturing firms in Kenya.

Pearson correlation analysis of adoption of technology results gave a correlation of 0.475, which demonstrates that adoption of technology has a positive correlation with globalization. Regression model of adoption of technology versus globalization gave a coefficient of determination of R Square of 0.226 and R as 0.475 at 0.05 significant levels. The coefficient of determination indicated that 22.6% of the response to globalization is explained by adoption of technology. This implies that there exists a positive relationship between adoption of technology and response to globalization.

#### **4.8.2 Managerial innovation**

The factor analysis result on managerial innovation was 0.812 and the factor loading results were between 0.368 and 0.844. Using the retained managerial innovation indicators, the value of Cronbach's alpha was computed again and generated a value of 0.816. The study therefore deduced that seven out of eight indicators of managerial innovation indicators were reliable in assessing managerial innovation as a response to globalization in manufacturing firms in Kenya. Managerial innovation

indicators such as accessibility to supply chain management tools and techniques, economic factors, new markets and continued global technological advancement were later used for further analysis.

Descriptive statistics results revealed that 67.5% of the respondents agreed that continued global technological advancement has enabled management come up with innovations to respond to customer needs, and economic and regulatory factors has prompted outsourcing some operations respectively. The study also found that 56.3% of the respondents agreed that economic factors such as trade blocks has facilitated building of strategic networks and alliances and that 52.5% of the respondents technological factors has facilitated creating linkages with customers, suppliers and members of strategic alliances. According to Aghion *et al.* (2005) the effect of competition on firms' or industries' willingness to innovate depends on their level of efficiency (technology). In particular, competition is expected to spur innovation by firms close to the efficient frontier (those with highest efficiency) while it discourages innovation by firms that are far from the frontier. Thus, one of the responses of the manufacturing firms to globalization is innovation.

The study further found that 61.3% of the respondents also agreed that technological factors and socio-economic zones have facilitated networking hence borrowing of ideas. The findings are supported by Gordon (2001) who asserted that a new knowledge-based business culture – so-called “global digital economy” – is transforming “terrestrial” industry structures and business environments into “space” or virtually-extended enterprises (Gordon, 2001). Thus globalization allows for sharing of ideas, which finally promotes networks necessary for globalization enabling manufacturing firms to remain competitive. From the findings of the study, it can be said that managerial innovation is one of the responses to globalization adopted by manufacturing firms in Kenya.

Pearson correlation analysis of managerial innovation results gave a correlation of 0.322, which demonstrated that managerial innovation has a positive correlation with globalization. Regression model of managerial innovation versus globalization gave



a coefficient of determination of R Square as 0.104 and R as 0.322 at 0.05 significant levels. The coefficient of determination indicated that 10.4% of the response to globalization is explained by managerial innovation. This implies that there exists a strong positive relationship between managerial innovation and response to globalization.

#### **4.8.3 Resource management**

The factor analysis results on resource management were 0.803 and the factor loading results were between 0.013 and 0.820. Using the retained resource management indicators, the value of Cronbach's alpha was computed again and generated a value of 0.846. The study therefore deduced that some of the resource management indicators were reliable in assessing resource management as a response to globalization by manufacturing firms in Kenya. Some of the reliable indicators included: human capital development, adequacy of resources, entrepreneurship, economic and technological factors, new technological advancement, capital and labour; these were later used for further analysis.

The findings from descriptive analysis showed that 62.5% of the respondents strongly agreed that due to economic factors energy resource is becoming more costly, 57.5% strongly agreed that new technological advancement has triggered training and skill enhancement to staff while 55% agreed that human resource and appropriate technology has facilitated efficient resource management approaches. According to Buckley and Ghauri (2004) globalization is leading to a relocation of some of the key functions of a firm. Production operations are sliced in smaller pieces and each piece is located in an optimal location or countries with lower labour cost. Manufacturing firms therefore try to lower their production cost in order to remain competitive in the market.

A study done by Gachunga (2008) on the impact of globalization on the human resource management function in public corporations in Kenya, found that globalization has a major impact on the management of human resources in developing countries, including Kenya, in that it has led to homogenization and convergence in organization strategies, structures and processes as well as in

consumer choice. This is an indication that organizations respond to the impact of globalization by improving on their human resource management practices. Gachunga (2008) adds that with accelerating globalization, organizations have had to change and new trends have set in even in the management of human resources.

Pearson correlation analysis of resource management results gave a correlation of 0.220, which demonstrated that resource management has a positive correlation with globalization. Regression model of resource management versus globalization gave a coefficient of determination of R Square as 0.048 and R as 0.220 at 0.05 significant levels. The coefficient of determination indicated that 4.8% of the response to globalization is explained by resource management. This implies that there exists a strong positive relationship between resource management and response to globalization.

#### **4.8.4 Distribution chain**

The factor analysis results on distribution chain were 0.782 and the factor loading results were between 0.198 and 0.798. Using the retained distribution chain indicators, the value of Cronbach's alpha was computed again and generated a value of 0.816. The study therefore deduced that some of the distribution chain indicators were reliable in assessing distribution chain as a response to globalization in manufacturing firms in Kenya. Some of the distribution chain indicators such as legislative measures, microeconomic and political stability, economic and environmental factors and social factors were later used for further analysis.

Descriptive statistics results showed that 55% of the respondents agreed that legislative measures have caused use of local intermediaries who understand legislative measures and 50% of the respondents strongly agreed that social and economic factors have enhanced usage of distribution channels to sell globally. According to Xu *et al.* (2002) companies are trying to connect customer relationship management (CRM) activities and customer insight information with upstream operations in the supply chain. In this way the sales force is connected with the right data in the supply chain; a salesperson is exposed to updated inventory and

production data, so that he/she will be able to offer accurate information to customers. Information shared between supply chain partners can provide upstream partners with comprehensive customer information for them to better plan product development and manufacturing. By integrating CRM with supply chain management (SCM), companies are able to deliver customer-configured products.

The study also found that 50% of the respondents agreed that social and economic factors have brought out the need for exercising channel motivation to win loyalty of distribution partners and 40% of the respondents strongly agreed that social factors have demanded acknowledging partnering with intermediaries. Mitchell (2000) restates the often-heard argument that national brand manufacturers face difficult problems when their retail customers globalize. Their margins are cut due to centralized sourcing and there is a move towards global branding.

Pearson correlation analysis of distribution chain results gave a correlation of 0.375, which demonstrated that distribution chain has a positive correlation with globalization. Regression model of distribution chain versus globalization gave a coefficient of determination of R Square as 0.140 and R as 0.375 at 0.05 significant levels. The coefficient of determination indicated that 14% of the response to globalization is explained by the distribution chain. This implies that there exists a strong positive relationship between distribution chain and response to globalization.

#### **4.8.5 Competition**

The factor analysis results on competition had a Cronbach's alpha of 0.834. The study therefore deduced that all the competition indicators were reliable in assessing competition as a response to globalization in manufacturing firms in Kenya. All the competition indicators such as low cost strategy, exploring other markets, innovations and differentiation strategy were later used for further analysis.

Descriptive statistics results showed that 60% of the respondents indicated to a large extent, and 55% of the respondents indicated that to a large extent increasing the range of products produced is a competitive strategy of responding to globalization;

40% of the respondents indicated that to a very large extent, innovations are competitive strategies of responding to globalization. According to Friedman (2006) globalization leads to increased competition due to the introduction of products from countries all around the globe with the ever-increasing lower prices. It used to be that firms would only compete against firms that were geographical close and of similar size. Now with globalization, firms are competing against other firms all around the globe and of all different sizes. From these findings, it is evident that one of the responses to globalization, which has been adopted by manufacturing firms in Kenya, is competition.

Other strategies adopted by manufacturing firms in Kenya to respond to globalization include: more pronounced web visibility i.e. ecommerce; corporate partnership with distributors around the globe and branches in other African economies; infrastructure; information technology; social media marketing and branding; marketing segmentation; pricing strategies; market skimming; coming up with ISO friendly products; and quality of goods. These findings are in line with the findings of a study done by Hannah and Camilla (2008) who found that MNCs use either a product brand strategy or a corporate brand strategy to gain competitive advantage. However, there may be mixtures of the two types, but emphasis is typically on one of them. A product brand strategy is characteristically used when a company offers multiple products within different business segments, and when there are several different target groups. With a corporate brand strategy, the corporate name and the brand are the same. There is typically a master brand which has the same name as the corporation, and which may have additional sub-brands. It was found that the factors determining the branding strategy in international markets are stakeholder interests, corporate image and reputation, market complexity, as well as marketing costs.

Pearson correlation analysis of competition results gave a correlation of 0.423, which demonstrated that competition has a positive correlation with globalization. Regression model of competition versus globalization gave a coefficient of determination of R Square as 0.179 and R as 0.423 at 0.05 significant levels. The coefficient of determination indicated that 17.9% of the response to globalization is

explained by competition. This implies that there exists a strong positive relationship between competition and response to globalization, which implies that, as firms respond to globalization competition, emerges between the firms.

#### **4.8.6 Globalization**

The study found that 46.3% of the respondents strongly agreed that the Kenyan economy is suited to the development of worldwide economy while 41.3% agreed that the current regulations in place are sufficient for the development. This is an indication that manufacturing firms in Kenya have embraced globalization and are therefore looking for strategies to respond to its effects in the market to remain relevant. According to Cochrane and Pain (2004) globalization is indeed quite a dynamic and complex phenomenon, and it wields significant influence at the local, national, and international arena. This occurs through the continued interconnectedness between countries, institutions and people. Consequently, such interconnectedness does result in important changes of economic, environmental, political, social and cultural nature. Thus firms have no alternative but to accept globalization and innovate on better ways to cope.

The study also found that 55% of the respondents indicated that globalization affects economic growth in the country to a large extent. According to Srinivasan (2002) globalization is a benevolent force that creates opportunities for rapid growth and faster poverty alleviation, in the economies that are ready for it, that is, in those economies in which domestic economic, political and social environment is conducive to underpinning the globalization processes. Thus, the active participation of economy in these processes comprises the creation of such environment, which then increases the possibilities for higher economic growth and welfare.

The study further found that 55% of the respondents indicated that globalization affects economic growth in the country to a large extent, 50% indicated that globalization affects solidarity between countries to a large extent, and 35% indicated that globalization affects cultural exchanges between countries to a very large extent. According to Prakash and Hart (2000) globalization has brought out

new challenges as well as opportunities, which has shaped both institutional and individual responses to this phenomenon. Stiglitz (2006) provides that in capitalist economies globalization has demanded countries competing to increase labour market flexibility, lower minimum wage and weaken workers protections. It can therefore be concluded that globalization affects the operation of manufacturing firms and thus necessitates their adjustment through responses that will make them competitive.

The regression model of responses to globalization coefficient of determination R Square was 0.972 and R was 0.986 at 0.05 significant levels. The coefficient of determination indicates that 97.2% of the variation on the response to globalization can be explained by the adoption of technology, managerial innovation, resource management, distribution chain and competition. The remaining 2.8% of the responses to globalization is explained by variables, which were not included in the model.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter presents the summary of the findings, conclusions, recommendations and areas for further research. The summary of the findings are presented based on the specific objectives of the study; establishing the relationship between adopting technology and globalization, examining the link between managerial innovation and globalization, determining the affiliation between resource management and globalization, establishing the relationship between distribution chain and globalization, examining the relationship between competition and globalization in manufacturing firms in Kenya. The chapter also presents the conclusions and areas for further research.

#### **5.2 Summary of findings**

##### **5.2.1 To establish the relationship between adopting technology and globalization in manufacturing firms in Kenya**

Adoption of technology was found to be one of the response strategies to globalization used by manufacturing firms in Kenya. The findings of the study revealed that most of the respondents strongly agreed that continued global technological advancement has influenced their firms to embrace superior process technologies. The study also found out that more than a half of the respondents agreed that global social forces influenced social technological networks and made them to embrace communication technologies and half of the respondents agreed that global economic forces has made the firms to constantly adopt new product design technologies. These findings are indications that as a result of globalization, different technological response strategies have been developed.

These findings are corroborated with the findings by Dahlman (2006) who found that technology is an increasingly important element of globalization and of competitiveness and that the acceleration in the rate of technological change and the

pre-requisites necessary to participate effectively in globalization are making it more difficult for many developing countries to compete. As a result, manufacturing firms are adopting technology to respond to the threats by globalization.

The findings from the correlation analysis revealed that globalization is positively related with the adoption of technology with a Pearson's correlation coefficient of  $r = 0.683$  and at a level of significance of 0.000, an indication that technology is statistically significant with p value less than 0.05. The alternative hypothesis that there is significant relationship between adoption of technology and globalization is therefore accepted (P. value is 0.000). Thus, adoption of technology is used as a response to globalization. The findings are in line with the findings by (Mussa, 2000) who found that globalization has led to the opening up of national boundaries due to tastes, technology and public policy, which interact in important ways. Mussa presented political, economic and social factors as key drivers of globalization such that social factors such as tastes of people attract economic benefits to those who respond to such tastes through using appropriate technology to either produce or supply to such tastes.

### **5.2.2 To examine the link between managerial innovation and globalization in manufacturing firms in Kenya**

The study found out that majority of the respondents agreed that continued global technological advancement has enabled management to come up with innovations to respond to customer needs and economic and regulatory factors which has prompted outsourcing some operations. This finding is based on the fact that managerial innovations focus on adjusting of new solutions that meet new requirements, inarticulate needs or existing market needs. In line with these findings, Bloom, Draca and Van-Reenen (2008) document a relationship between changes in the trading environment and firm innovation and skill upgrading, but on the import competition side. Firms in European industries most exposed to increased import competition from China respond by increasing their innovation and information technology



intensity (Bernard *et al.*, 2006). Their findings are also in agreement with the study findings that managerial innovation is one of the response strategies to globalization.

The study also found that slightly more than a half of the respondents agreed that economic factors such as trade blocks have facilitated building of strategic networks and alliances, half of the respondents said technological factors have facilitated creating linkages with customers, suppliers and members of strategic alliances and more than half of the respondents agreed that technological factors and socio-economic zones have facilitated networking hence borrowing of ideas. The findings are in line with that of Aghion *et al.* (2005) who found that predictions arise from a Schumpeterian model where incumbent firms that are closer to the frontier have an incentive to innovate when faced with potential (foreign) entrant in order to retain their market. Firms that are far from the frontier cannot compete with the more efficient entrant and competition simply reduces their expected benefits from innovation. The results of the correlation analysis showed that there is a positive correlation between the globalization and managerial innovation with a Pearson's correlation coefficient of  $r = 0.350$  and a level of significance of 0.000 which is an indication that managerial innovation is statistically significant. The alternative hypothesis that there is significant relationship between managerial innovation and globalization is therefore accepted (P. value is 0.004). Thus, managerial innovation is used as a response to globalization. Daniel *et al.* (2008) did a study on adoption of managerial innovations and the effect of adoption rationales on the adoption process. They found that there was a relationship or pattern between the rationales and that a rational justification for adoption of the managerial innovation was identified.

### **5.2.3 To determine the affiliation between resource management and globalization in manufacturing firms in Kenya**

In establishing relationship between resource management and globalization in manufacturing firms in Kenya, the study found that more than half of the respondents strongly agreed that due to economic factors energy resource is becoming more costly, half of the respondents strongly agreed that new technological advancement

has triggered training and skill enhancement to the staff while a half agreed that human resource and appropriate technology has facilitated efficient resource management approaches. Mohammed (2012) found that most contracting companies considered the main obstacles in using computer in construction resources management as shortage of user-friendly computer programs and lack of understanding of the importance of computer programs. This is an indication that resource management is one of the key strategies in responding to globalization.

The results from the correlation analysis showed that there is a positive correlation between globalization and resource management with a Pearson's correlation coefficient of  $r = 0.270$  and a level of significance of 0.002; an indication that it is statistically significant. The alternative hypothesis that there is significant relationship between resource management and globalization is therefore accepted (P. value is 0.050). Thus, resource management is used as a response to globalization. The findings are in line with Bloom, Draca and Van-Reenen (2008) findings that there is a relationship between changes in the trading environment and firm innovation and skill upgrading, but on the import competition side.

#### **5.2.4 To establish the relationship between distribution chain and globalization in manufacturing firms in Kenya**

Regarding the relationship between distribution chain and globalization in manufacturing firms in Kenya, the study found that half of the respondents agreed that legislative measures has caused the use of local intermediaries who understand legislative measures while half strongly agreed that social and economic factors have enhanced usage of distribution channels to sell globally. The findings are in line with that of Anderson (2002) who found that globalization of manufacturing firms is often concerned with specialization of production resources and activities to spatially dispersed locations, and since, speed and flexibility are of great importance, it is obvious that globalization of distribution and globalization of manufacturing are closely interlinked. He added that globalization of manufacturing firms will no doubt

require substantial re-organization of the firms' distribution activities and its links to complementary distribution specialists.

The results from the correlation analysis showed that there is a positive correlation between globalization and distribution chain with a Pearson's correlation coefficient of  $r = 0.350$  and a level of significance of 0.000 which is an indication that distribution chain is statistically significant. The alternative hypothesis that there is significant relationship between distribution chain and globalization is therefore accepted (P. value is 0.000). Thus, distribution chain is used as a response to globalization. The findings of the study corroborate with that of Ruiz (2000) who found that if a retailer coordinates its purchasing and assortment across markets, then the suppliers of goods to such retailers will be influenced, either in terms of conditions for supply to markets where it already sells or is given the opportunity to sell in new markets, or, it risks being out-competed by alternative suppliers to the new markets. Mitchell (2000) restates the often-heard argument that national brand manufacturers face difficult problems when their retail customers globalize. Their margins are cut due to centralized sourcing and there is a move towards global branding.

#### **5.2.5 To examine the relationship between competition and globalization in manufacturing firms in Kenya**

On the relationship between competition and globalization in manufacturing firms in Kenya, the study found that majority of the respondents indicated to a large extent exploring other markets is a competitive strategy of responding to globalization, of those respondents half indicated that to a large extent increasing the range of products produced is a competitive strategy of responding to globalization, while less than half of the respondents indicated that to a very large extent innovations are competitive strategies of responding to globalization. The findings are in line with the findings by Friedman (2006) that globalization leads to increased competition due to the introduction of products from countries all around the globe with the ever-increasing lower prices. He added that in the past, firms would only compete against

firms that were geographically close and of similar size. Now with globalization, firms are competing against other firms all around the globe and of all different sizes.

The findings from the correlation analysis showed that globalization has a positive relation with competition with a Pearson's correlation coefficient of 0.558 and 0.021 level of coefficient. The alternative hypothesis that there is significant relationship between competition and globalization is therefore accepted (P. value is 0.000). Thus, competition is used as a response to globalization. These findings are in line with the findings by Aghion *et al.* (2005) who found that competition is expected to spur innovation by firms close to the efficient frontier (those with highest efficiency) while it discourages innovation by firms that are far from the frontier. Their predictions arose from the Schumpeterian model where incumbent firms that are closer to the frontier have an incentive to innovate when faced with potential (foreign) entrant in order to retain their market. Firms that are far from the frontier cannot compete with the more efficient entrant and competition simply reduces their expected benefits from innovation. Competition thus provides incentives for innovation for the more efficient domestic firms and a disincentive for the less efficient ones.

### **5.3 Conclusions**

Based on the findings of the study, adoption of technology was found to be one of the key response strategies to globalization. Due to the continued global technological advancement, manufacturing firms in Kenya have embraced superior process technologies aimed at reducing the cost of production while maximizing profits. Technological factors adopted as response strategies to globalization include: technological advancement, diffusion of technology and global communication strategies. The study thus concludes that adoption of technology is a key response strategy to globalization adopted by manufacturing firms in Kenya. Other scholars, who found that the major challenge to manufacturing firms is brought about by fast and unstoppable advances in information technologies, also drew this conclusion.

The finding thus justifies the adoption of technology as a key response strategy to globalization.

Managerial innovation was also found to be one of the strategies adopted by manufacturing firms as a response strategy to globalization. This is evidenced by the fact that continued global technological advancement has enabled management to come up with innovations to respond to customer needs and that economic and regulatory factors have prompted outsourcing some operations. According to other scholars, competition has spurred managerial innovation by firms close to the efficient frontier (those with highest efficiency) while it discourages innovation by firms that are far from the frontier. The study thus concludes that managerial innovation is a response strategy to globalization adopted by manufacturing firms in Kenya.

Resource management was also found to be one of the key response strategies to globalization. This was evidenced by the fact that technological advancement has triggered the need for training and skill enhancement among the staff in manufacturing firms in Kenya. Globalization was also found to have influenced the adoption of efficient resource management approaches. Studies by other scholars also reveal that globalization has led to the relocation of some of the key functions of a firm. Production operations are sliced in smaller pieces and each piece is located in an optimal location or countries with lower labour cost. Manufacturing firms therefore try to lower their production cost in order to remain competitive in the market. Other studies have also concluded that globalization has a major impact on the management of human resources in developing countries including Kenya in that it has led to homogenization and convergence in organization strategies, structures and processes as well as in consumer choice. The study thus concludes that managerial innovation is a response strategy to globalization by manufacturing firms. Distribution chain was also found to be one of the response strategies to globalization adopted by manufacturing firms in Kenya. This was evidenced by the fact that manufacturing firms in Kenya have adopted legislative measures through local intermediaries and that social and economic factors have enhanced the usage of

distribution channels by manufacturing firms to sell globally. The findings further revealed that social and economic factors have brought out the need for exercising channel motivation to win loyalty of distribution partners and that social factors have demanded acknowledging partnering with intermediaries. Conclusions by other scholars also reveal that national brand manufacturers face difficult problems when their retail customers globalize. The study thus concludes that distribution chain is one of the response strategies adopted by manufacturing firms in Kenya.

Finally, competition has been found to be one of the key response strategies to globalization used by manufacturing firms in Kenya. Some aspects of competition strategies adopted by manufacturing firms in Kenya include: low cost strategy, exploring other markets, innovations and differentiation strategies. The findings of the study revealed that manufacturing firms in Kenya increase the range of products produced as a competitive response strategy to globalization. In line with these conclusions, the findings by other scholars reveal that globalization has led to increased competition due to the introduction of products from countries all around the globe with the ever increasing lowering of prices. It used to be that firms would only compete against firms that were geographical close and of similar size. Now with globalization, firms are competing against other firms all around the globe and of all different sizes. The study thus concludes that competition is a key response strategy adopted by manufacturing firms in Kenya.

## **5.4 Recommendations**

### **5.4.1 Adopting of technology and globalization**

The study recommends that manufacturing firms in Kenya should keep abreast with new technologies and encourage employee knowledge and skill development ranging from low to highly specialized besides the development of hard infrastructure. Manufacturing firms should therefore adopt the new changes in the market and absorb into the technological trend. Thus, they should remain flexible and stay focused to the day-to-day changes of globalization strategies. This is based on the fact that even though most manufacturing firms in Kenya have adopted the use of technology as a response strategy to globalization, a lot still needs to be done

The Kenyan government should get into pact with developed countries to negotiate for quotas for the local manufacturers to get preferential access to the global market. This will allow the Kenyan manufacturers to have competitive advantage in the global market. The government should change the policy of setting minimum wage. This will help in reducing the cost of production thus giving firms an upper hand in the market by offering products at lower prices. This will give manufacturing firms a competitive edge, as goods will be produced at lower costs thus attracting a wider market share and opening up global markets.

#### **5.4.2 Managerial Innovation and Globalization**

Manufacturing firms in Kenya should work closely with institutions of higher learning, sponsor research and enhance their research departments so as to embrace innovation as a response to globalization. Even though manufacturing firms in Kenya use both managerial and technological innovation, more needs to be done to ensure that they remain competitive in the market. These innovations should be patented to minimize copyright infringement thus giving the firms competitive edge in the market. Manufacturing firms should get certification from accredited institutions as a mark of quality for their products, mergers and acquisitions. This will help in improving the quality of the products so that they can remain competitive in the world market.

#### **5.4.3 Resource Management and Globalization**

Kenyan manufacturers should improve on their resource management strategies. This can be done by improving on the local human resource skills and gaining access to foreign human resource skills. This can be done by opening branches in other countries and recruiting the available highly skilled human resources in those countries who can staff its global services operations and move seamlessly around the world. Kenyan manufacturing firms should therefore develop human capital of enterprise that will help them produce managers and professionals who see

themselves as global professionals and global citizens able to move effortlessly around the world and do business effectively in a wide range of national context.

Manufacturing firms should reduce the direct cost such as energy while improving the market share. This can be done through innovation and outsourcing of functions which will be expensive to maintain within the firm. This will help in reducing the operation cost giving the firms a competitive edge in the market. Manufacturing firms in Kenya should adopt any of the following four strategic postures to compete internationally: global standardization, internal strategy, localization strategy and transnational strategy.

#### **5.4.4 Distribution Chain and Globalization**

The Kenyan manufacturers should become globally integrated enterprises. Locating their work and operations anywhere in the world based on economics, expertise and the right business environment can do this. They should integrate their operations horizontally and globally and have one global supply chain. Thus, instead of looking at their resources in terms of countries and regions, they should manage and deploy them as a global asset. Kenya manufacturing firms should also adopt their own distribution and sales strategies that are responsive to the economic and political demands imposed by host country governments that include local testing, registration procedures, pricing and local content rules.

The global standardization strategy should be adopted by firms that focus on increasing profitability and profit growth by reaping the cost reductions that come from economies of scale, learning effects and location economies. Localization strategy should be adopted by focusing on increasing profitability by customizing the firm's goods and services so that they provide a good match to the tastes and preferences in different national markets. Transnational strategy should be pursued by firms that are trying to simultaneously achieve low cost through location economies, economies of scale and learning effects: differentiate their product offering across geographic markets to account for local differences. Finally, an



international strategy is pursued by firms who take products first in their domestic market and selling them internationally with only a minimal local customization.

Manufacturing firms should also participate in trade fairs and exhibitions. This will permit them to market their products and reach out to more potential customers. This will also open them to opportunities for partnerships and joint ventures with other global firms.

#### **5.4.5 Competition and globalization**

The government should create a vibrant network of supporting industries that will supply inputs to Kenyan manufacturers and ensure that most of the inputs are made locally. This will save manufacturers from transport, storage costs, import duties and the long lead times that come with imported raw materials used in manufacturing. This will help in boosting productivity of Kenyan manufacturers giving them a cost advantage that goes beyond low wages.

The government should come up with policies aimed at improving transport infrastructure. This will ease transportation of raw materials for the manufacturing firms. This will reduce pilferage and transportation costs thus reducing the cost of production. The government should further reduce the production costs for manufactured goods by reducing energy costs by sourcing for cheap electricity. Investing heavily on hydropower and other energy sources to add to the current grid can do this.

The government should come up with policies on tax incentives such as tax holidays and subsidized loans with low interest rates on capital goods. This will increase capital expenditure in the short run and eventually reduce the production costs thus serving as an incentive to encourage those companies exporting to Kenya to relocate and produce goods in Kenya. This will attract potential investors in the manufacturing industry.

By attracting the foreign investors, local firms will benefit from technological transfer. This will in turn promote the adoption of technology, which is one of the responses to globalization.

The government should tighten import points controls to ensure that illegal and cheap imports do not enter the country. Manufacturing companies have closed down after grappling with unrelenting competition from low-cost imports and also adopted new strategic plans meant to see the firms change their business models from manufacturing to more commercial-oriented outfit that trades. This will in turn increase profit margins of Kenyan manufactures and allow them to invest more on technology.

### **5.5 Areas for Further Research**

This study was not specific on any industry technology. Further research should be done to find out the relationship between specific industry technologies and globalization. Industry technologies face different challenges. Further research can also be done to bring out the technology specific challenges. This study established that managerial innovation is among the key responses to globalization. Further research should be done to determine different managerial innovations that can stimulate firms to respond more effectively to globalization. Also, different firms will adopt varied managerial innovations. This should also be studied to aid manufacturing firms know the different managerial innovations that are specific to their response to innovation. This study found out that energy resource is more costly. The study did not explore the reasons as to why this is the case. Further research should be done to establish the reasons as to why energy resource is more costly to manufacturing firms.

Also, the study found out that legislative measures caused manufacturing to use local intermediaries in their distribution chain. Further research can be done to find out ways in which legislative measures can be harmonized globally to ease the distribution processes. Further research should be done to establish the reasons as to why firms are not receptive to academic studies focusing on their respective sectors.

Finally, this study focused on inter-firm competition. Further research, should be done focusing on intra-firm competition.

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## **APPENDICES**

### **APPENDIX 1: Introduction letter**

**To:** Whom it may concern

**From:** Researcher

**Date:** 25 July 2012

### **RE: QUESTIONNAIRE**

I am a PhD student at Jomo Kenyatta University of Agriculture and Technology. I am doing a study on the “Response by Kenyan manufacturing firms to globalization” as one of the requirements to my fulfillment of the award of the degree. I am required to collect accurate data from manufacturing firms concerning my topic to enable me come up with conclusions that will benefit the society as a whole. You have been chosen as a participant in this study by way of answering the attached questionnaire to the best of your knowledge. Please note that confidentiality together with ethical requirements will be observed to the highest level. Please respond to the questions attached with the highest accuracy possible. Be informed that the study will only be used for academic purposes. A copy of the study may be provided to you on request. In case of further communication, please use the attached contact to reach the researcher.

Thank you for your participation.

Solomon Kinyanjui

[kinyanjuisolomon@gmail.com](mailto:kinyanjuisolomon@gmail.com)



## **APPENDIX 2: Questionnaire**

### **SECTION A: BACKGROUND INFORMATION**

1. How long has your firm been in operation?

- Below 5 years
- 5-10 years
- 11-16 years
- 17-25 years
- Over 25 years (Specify please) .....

2. How many full time employees does your firm have?

- 1-20
- 21-50
- 51-100
- 101-200
- Above 200

3. How many casual employees on average does your firm have per day?

- 1-20
- 21-50
- 51-100
- 101-200
- Above 200

4. What is the annual turnover of your firm (in Kenya shillings)

- Less than 50 million
- 50 million < 100,000 million
- 100,000 million < 250,000 million
- 250,000 million < 500,000 million
- 500,000 million < 1 billion
- 1 billion and Over

5. Is your firm global?

Yes

No

a) Does your firm have overseas market for its products?

Yes

No

b) If 'Yes', for how long has your firm been transacting globally?

Less than 5 years

5-10 years

11-20 years

Over 20 years

c) If 'No', what are some of the main reasons why you have not gone global?  
(Please specify)

.....  
.....  
.....

6. Are multinational firms becoming a threat to your sales?

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

7. Are there measures your firm has put in place to improve competitiveness?

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

8. Where are most of the firm's customers?

Kenya

Outside Kenya

9. To what extent does globalization pose a threat on your firm's competitiveness?

Not a threat at all

To a small extent

Neutral

Large extent

Very large extent

## SECTION B: RESPONSE OF MANUFACTURING FIRMS

### a) Adoption of technology

The following opinions are geared towards understanding response of manufacturing firms on adoption of technologies to build their competitive capabilities. On a scale of [SA-Strongly agree; A-Agree; N/A-Not applicable; D-Disagree; SD-Strongly disagree]give your opinion.

	<b>Adoption of technology</b>	SA	A	N/A	D	SD
i	Continued global technological advancement has influenced our firm to embrace superior process technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii	Global economic forces has made our firm to constantly adopt new product design technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii	Development in global communication has contributed to our firm acquiring advanced information exchange technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

iv	Diffusion of technology globally has facilitated our firm adopting information dissemination and communication technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v	Global social forces influenced by social technological networks has made us embrace communication technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi	Regulatory measures has influenced adoption of environmental friendly technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii	Global economic factors such as trade blocks has widened supply chain network making us adopt logistic technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Viii	Global social standards has influenced adoption product design technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**b) Managerial innovation**

This section is to examine the contribution of managerial innovation in building competitive capability in the manufacturing firms in Kenya. On a scale of [SA-Strongly Agree|A-Agree| N/A-Not applicable| D-Disagree|SD-Strongly Disagree.] Give your opinion.

	<b>Managerial Innovation</b>	SA	A	N/A	D	SD
i.	Continued global technological advancement has enabled management come up with innovations to respond to customer needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii.	New market needs emanating from global economy has triggered producing products that satisfies to customers demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii	Economic factors such as trade blocks has facilitated building of strategic networks and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	alliances					
Iv	Technological factors has facilitated creating linkages with customers, suppliers and with members of strategic alliances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
V	Economic and regulatory factors has prompted outsourcing some operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi	Accessibility to Supply chain management tools and techniques has enabled seeking core competence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii	Technological factors has enabled developing new process of marketing our products through information technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Viii	Technological factors and socio economic zones has facilitated networking hence borrowing of ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**c) Resource management**

The following section is to determine the role of resource management in enhancing competitiveness of manufacturing firms in Kenya.

Ranking on a scale of one to five (from the most important to the least important), which resource has been most utilized for competitiveness?

**1: Very important**

**2: Important**

**3: Neutral**

**4: Less important**

**5: Not important at all**

		1	2	3	4	5
i	Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii	Labour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii	Capital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv	Entrepreneurship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

On a scale of [SA - Strongly Agree | A - Agree | N/A - Not applicable | D-Disagree | SD - Strongly Disagree] give your opinion.

		SA	A	N/A	D	SD
i	New technological advancement has triggered training and skill enhancement to our staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii	Economic and technological factors has demanded more financial resource dedicated to human resource development and talent promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii	Ability to raise financial resources, has enabled investing in technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv	Adequate resources has facilitated producing globally attractive products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v	Human resource and appropriate technology has facilitated efficient resource management approaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi	Human capital development has enabled counter changes caused by environmental factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii	Due to economic factors energy resource is becoming more costly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### d) Distribution Chain

This section is to explore distribution chains systems put in place by manufacturing firms in Kenya as a way of responding to globalization. On a scale of [SA - Strongly Agree | A - Agree | N/A - Not applicable | D -Disagree | SD - Strongly Disagree], give your opinion.

		SA	A	N/A	D	SD
i	Social factors has demanded acknowledging partnering with intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii	Social and economic factors has brought out need for exercising channel motivation to win loyalty of distribution partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii	Globalization has required carrying out fundamental strategic change of company management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv	Macroeconomic and political stability has facilitated foreign direct investment with opening of foreign warehouses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
V	Social, political and economic factors has lead to starting foreign affiliate activity who facilitate sale of products overseas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi	Economic factors has demanded direct sales to the customers without involving wholesalers and retailers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vii	Social and economic factors have enhanced usage of distribution channels to sell globally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Viii	Legislative measures has caused use of local intermediaries who understand legislative measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ix	Economic and environmental factors has enhanced formation of mergers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X	Economic and technological factors has stimulated formation of alliances to outsource in some areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**e) Competition**

This section is to explore the competitive strategies used by manufacturing firms in Kenya as a way of responding to globalization. Please indicate the extent to which each strategy has been adopted by firms in Kenya using the scale below.

**1-Very large extent 2-Large extent 3-Neutral 4-Small extent 5-No extent at all**

	<b>Strategies</b>	1	2	3	4	5
i	Exploring other markets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii	Innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii	Focused low cost strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv	Increasing the range of products produced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v	Overall low cost provider strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi	Focused differentiation strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii	Broad differentiation strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are other strategies adopted by manufacturing firms in Kenya to respond to globalization?

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**SECTION C: Globalization**

i. What does globalization mean to you? \_\_\_\_\_

\_\_\_\_\_

*(Globalization is the general opening-up of all economies, which lead to the creation of a truly worldwide market)*



ii. The following are some statement on globalization. On a scale of [**SA-Strongly Agree**] **A-Agree** [**N/A-Not applicable**] **D-Disagree**] **SD-Strongly Disagree**], give your opinion.

	<b>Statement</b>	SA	A	N/A	D	SD
I	Globalization should be encouraged as it challenges organizations to grow through adaptation to the changing business environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ii	The Kenyan economy is suited to the development of worldwide economy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iii	The current regulations in place are sufficient for the development of globalization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iv	Globalization presents a good opportunity for companies as it widens market for products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
V	Globalization presents a threat to employment growth of companies in Kenya	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

iii. In your own opinion, to what extent do you think globalization has affected the following domains?

**1-Very large extent 2-Large extent 3-Neutral 4-Small extent 5-No extent at all**

Domain	1	2	3	4	5
Economic growth in our country	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural exchanges between countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Solidarity between countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scientific and technical progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Democracy at a worldwide level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of public services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment in our country	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

iv. Are developments in the global market influencing manufacturing firms' approach in building their competitive capabilities?

Yes

No

Explain \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What would you suggest to be done by manufacturing firms in Kenya in terms of response to the globalization for their survival?

\_\_\_\_\_

### APPENDIX 3: List of participating firms in Nairobi and Athi River

#	Name of Firm	Sector
1	East African Portland Cement Co. Ltd	Building, mining and construction
2	Impala Glass Industries Ltd	Building, mining and construction
3	Mabati Rolling Mills Limited	Building, mining and construction
4	Savanna cement	Building, mining and construction
5	ASL Ltd	Chemicals and allied
6	Saj Ceramics Ltd	Chemicals and allied
7	Savanna cement	Chemicals and allied
8	Cosmos Limited	Chemicals and allied
9	Flamingo Tiles (Kenya)Limited	Chemicals and allied
10	Decase Chemicals (Ltd)	Chemicals and allied
11	East Africa Spectre Limited	Chemicals and allied
12	Grand Paints Ltd	Chemicals and allied
13	Libya Oil Kenya Limited.(Formerly Mobil)	Chemicals and allied
14	Pantel chemical ltd	Chemicals and allied
15	Chemicals and Solvents (EA) Ltd	Chemicals and allied
16	Carbacid (CO2) Limited	Chemicals and allied
17	Eveready Batteries East Africa Ltd	Energy, Electrical and Electronics
18	Associated Battery Manufacturers (E.A.) Ltd	Energy, Electrical and Electronics
19	Tiga brand	Energy, Electrical and Electronics
20	International Energy Technik Ltd	Energy, Electrical and Electronics
21	Summit Energy Systems	Energy, Electrical and Electronics
22	Lean Energy Solutions Ltd	Energy, Electrical and Electronics
23	African spirit	Food and Beverage
24	Kuguru food complex Ltd	Food and Beverage
25	Kenya Meat Commission	Food and Beverage
26	Kenya Wines Agencies Ltd	Food and Beverage
27	New Kenya Co-Operative Creameries Ltd	Food and Beverage
28	Patco Industries Limited	Food and Beverage
29	C dormans Ltd	Food and Beverage
30	Premier Industries Ltd	Food and Beverage
31	Trufoods Ltd	Food and Beverage
32	Unga Group Ltd	Food and Beverage
33	Unilever Kenya Ltd	Food and Beverage
34	Bakers Corner Ltd	Food and Beverage
35	Edible Oil Products	Food and Beverage
36	Breakfast Cereal Company (K) Ltd	Food and Beverage
37	Farmers Choice Ltd	Food and Beverage
38	Candy Kenya Ltd	Food and Beverage
39	Fresh Produce Exporters Association of Kenya	Fresh Produce
40	Leatherlife (EPZ) Ltd	Leather and Footwear
41	Tarpo industries	Metal and allied
42	Maruti steel ltd	Metal and allied
43	Alloy Steel Castings Ltd	Metal and allied

#	Name of Firm	Sector
44	Apex Steel Ltd - Rolling Mill Division	Metal and allied
45	Canton steel fabricators	Metal and allied
46	Devki Steel Mills Ltd	Metal and allied
47	East Africa chains	Metal and allied
48	East African Foundry Works (K) Ltd	Metal and allied
49	Kens Metal Industries Ltd	Metal and allied
50	Bhachu Industries Ltd	Motor and accessories
51	Choda Fabricators Ltd	Motor and accessories
52	General Motors East Africa Limited	Motor and accessories
53	Toyota Kenya Ltd	Motor and accessories
54	Vehicle and Equipment Leasing Limited	Motor and accessories
55	Kenya Grange Vehicle Industries Ltd	Motor and accessories
56	Metal Crowns Limited	Paper and board
57	Chandaria Industries Limited	Paper and board
58	Colour Packaging Ltd	Paper and board
59	D. L. Patel Press (Kenya) Limited	Paper and board
60	De La Rue	Paper and board
61	Dodhia Packaging Limited	Paper and board
62	Kenafric Industries Limited	Paper and board
63	Paper bags	Paper and board
64	Tetra Pak Ltd	Paper and board
65	Alpha Medical Manufacturers Ltd	Pharmaceuticals and Medical Equipment
66	Bayer East Africa Ltd	Pharmaceuticals and Medical Equipment
67	Biodeal Laboratories Ltd	Pharmaceuticals and Medical Equipment
68	Laboratory & Allied Limited	Pharmaceuticals and Medical Equipment
69	PZ Cussons EA Ltd	Pharmaceuticals and Medical Equipment
70	Afro Plastics (K) Ltd	Plastics and Rubber
71	Eslon Plastics of Kenya Ltd	Plastics and Rubber
72	General Plastics Limited	Plastics and Rubber
73	Laneeb Plastic Industries Ltd	Plastics and Rubber
74	Metro Plastics Kenya Limited	Plastics and Rubber
75	Plastics & Rubber Industries Ltd	Plastics and Rubber
76	Rubber Products Ltd	Plastics and Rubber
77	TreadsettersTyres Ltd	Plastics and Rubber
78	Capital Colors Creative Designers Ltd	Services and Consultancy
79	International Supply Chain Solutions Ltd	Services and Consultancy
80	Institute of Packaging Professionals	Services and Consultancy
81	Commercial Bank of Africa	Services and Consultancy
82	Cooperative Bank of Kenya	Services and Consultancy
83	Corporate Facilities	Services and Consultancy
84	DHL Exel Supply Chain Kenya Ltd	Services and Consultancy
85	East African Development Bank	Services and Consultancy
86	Citigroup Kenya	Services and Consultancy
87	Belat Enterprises	Services and Consultancy
88	Usafi Services Ltd	Services and Consultancy
89	Cempack Solutions Limited	Services and Consultancy
90	Alltex EPZ Ltd	Textiles and apparels

<b>#</b>	<b>Name of Firm</b>	<b>Sector</b>
91	Apex Apparels (EPZ) Ltd	Textiles and apparels
92	Future Garments EPZ Ltd	Textiles and apparels
93	Global Apparels Ltd	Textiles and apparels
94	Kikoy Co. Ltd	Textiles and apparels
95	New Wide Garments Kenya EPZ LTD	Textiles and apparels
96	TSS Spinning And Weaving Ltd	Textiles and apparels
97	Rosewood Furniture Manufacturers Ltd	Timber, wood and furniture
98	Fine Wood Works Ltd	Timber, wood and furniture
99	Panesar's Kenya Ltd	Timber, wood and furniture
100	Shah Timber Mart Ltd	Timber, wood and furniture

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Source (KAM, 2011)