

**CHALLENGES FACED BY KENYAN
MANUFACTURERS IN OUTSOURCING INPUTS FROM
LOW COST INTERNATIONAL MARKETS**

BY

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DECLARATION

This Research Project is my original work and has not been presented for examination in any other University.

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DEDICATION

I wish to dedicate this Project to my dear wife Lillian for her unwavering support, love and understanding through-out my study period.

To my son Jeremy and daughter Jeannette for constantly putting a smile on my face and enduring long periods when daddy was away studying.

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ABSTRACT

Much of the previous research into the international outsourcing manufacturers has been done, however, not much study has focused on local challenges of international outsourcing by manufacturers in Kenya. This study therefore sought to fill the existing research gap by carrying out a survey study on the challenges faced by Kenyan manufacture firms while outsourcing inputs from international Low Cost Country markets. The main purpose of the study was to investigate the underlying challenges and identify opportunities available for Kenyan manufacturers by outsourcing manufacturing inputs. This research was conducted through a survey study. The target population of this study was the management staff working for manufacturing firms who overseeing supply chain and sourcing functions. The study concludes that manufacturing firms in Kenya seek to increases their profits by decreasing the costs of their input through outsourcing from low cost countries thus improving their ability to compete in the global economy. Several manufacturing firms in Kenya are driven towards outsourcing from low cost countries in order to reduce their overall cost of manufactured products in order to make it more affordable and competitive to its target customers. The decision to source material and components domestically or from a low cost country is a complex one. While the direct and indirect product costs represent one major factor, there are many other factors that must be considered and weighed appropriately. Products and components that have extended times between manufacturing changeovers are ideal for low cost country sourcing. A counterexample would be the life cycle for an electronics component, which is typically quite short, and would generally be locally sourced. Savings generally result from low labour and infrastructure costs, as well as capitalizing on the growing and highly competitive marketplaces for subcomponents in these regions. And those savings present compelling reasons for companies to migrate manufacturing operations to low-cost areas. Low labour costs is a primary driver of the substantial savings companies can experience. The daily wage costs for unskilled labour in China and Vietnam for example, are lower than of Kenya. Labour is only one element in the total cost of a component's price and companies have to determine the total cost, including manufactured price plus shipping costs, customs charges and other expenses involved with moving a component from the supply market to Kenya where it is incorporated in the final product. Successful Low Cost Sourcing strategy is not a straightforward proposition. It involves a careful balancing of often competing interests within a company and demands great flexibility. The decision to source material and components domestically or from a low cost country is a complex one. While the direct and indirect product costs represent one major factor, there are many other factors that must be considered and weighed appropriately. Products and components that have extended times between manufacturing changeovers are ideal for low cost country sourcing. A robust process that integrates the low cost country objectives and mitigates the associated risks is necessary to optimize the value stream. The study further concludes that many of these manufacturing who proceed with this outsourcing decision face many challenges related to execution of the outsourcing strategy, key among them being the main challenge of lead time, unreliable logistic providers, government regulations, high tariff barriers, poor Infrastructure, and currency volatility. The global economy is ever changing and the supply management is a key constituent which Kenyan manufacturing firms should maximize the benefits it provides.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGMENTS	iii
DEDICATION.....	iv
ABSTRACT	v
LIST OF FIGURES.....	ix
LIST OF TABLES	x
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Concepts of International Business.....	2
1.1.2 Concepts of International Outsourcing of Inputs	3
1.1.3 Concepts of Low Cost Country Sourcing	4
1.1.4 Manufacturing Industries in Kenya	5
1.2 Research Problem	6
1.3 Research Objectives.....	8
1.4 Value of the study.....	8
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 International Business environment	10
2.3 International Outsourcing.....	11
2.4 Low Cost Outsourcing	11
2.5 Manufacturing Industries in Kenya	13
2.6 Challenges and Concerns for LCC strategy	15

CHAPTER THREE: RESEARCH METHODOLOGY	16
3.1 Introduction	17
3.2 Research Design	17
3.3 Population	17
3.4 Sample Design.....	18
3.5 Data Collection.....	18
3.6 Data Analysis	18
CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSION	20
4.1 Introduction	20
4.2 Respondents' Profiles	20
4.3 Highest Level of Academic attainment.....	21
4.4 Kenyan manufacturing firms.....	21
4.5Regression model summary	31
4.6 Regression Coefficients	32
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	34
5.1 Introduction	34
5.2 Summary	34
5.3 Conclusion.....	36
5.4 Recommendations.....	36
REFERENCES.....	37
APPENDIX I : LETTER OF INTRODUCTION	39
APPENDIX II : QUESTIONNAIRE	40

LIST OF FIGURES

Figure 1: Low Cost Country Variables.....	16
Figure 4.1: Age of Procurement respondent.....	20
Figure 4.2: Highest Level of Academic.....	21

LIST OF TABLES

Table 4.1: Response Rate.....	21
Table 4.2: Outsourcing Response.....	22
Table 4.3: Number of product categories	23
Table 4.4: Outsourcing Categories.....	23
Table 4.5: Annual Spending On Input.....	24
Table 4.6: Length of period of outsourcing	24
Table 4.7: Led to decision of outsourcing	25
Table 4.8: Benefit of Outsourcing	26
Table 4.9: Challenges of outsourcing	27
Table 4.10: Disadvantages of International Outsourcing of Manufactured Inputs into Kenya.....	29
Table 4.11: Perspectives Concerning Low Cost Country Sourcing	30
Table 4.12: Model Summary	31
Table 4.13: Regression Coefficients.....	32

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

All organizations operate within a given environment and the environmental factors influence their operations. All international firms operate in different countries where they make their goods or get access to raw materials and inputs. Multinational firms can get resources from various countries where these materials are available. International firms expand to other countries looking for raw materials. The theory that explains this is the natural advantage theory. Companies also outsource inputs from countries where they have acquired advantage, this advantage can be explained by factor endowment theory. The increased changes in the Global business arena had forced companies to re-look at its business strategies to meet and survive in this dynamic and more frequent unpredictable changes as well as position itself to deliver its objectives.

A global competitive strategy is the strategy a firm uses as it seeks to create or maintain an advantage over its global or international competitors and these can be strategies for creating competitive advantages and those for avoiding competitive disadvantages. Free trade and free markets are essentially about making trade easier by allowing the market to balance needs of supply and demand without external interferences. Therefore International Business refers to all those business activities which involves cross border transactions of goods, services, resources between two or more nations.

Transaction of economic resources includes capital, skills, people to international production of physical goods and services such as finance, banking, insurance, construction. The changing patterns of doing International business is expected to continue getting more competitive both in the service as well as manufacturing sectors. The fuel to sustain the International Business in the storm of changing patterns has been Technological transfers as well as innovations, and companies are now investing heavily in R&D innovation and Renovation. Kenya lowered its protectionist policy for imported during the Structural Adjustment Programme implementation during the 1990s and so apart from the import duty levied, imported goods easily finds its way into the country from Low Cost origins mainly the Asian and Latin America markets like China, Thailand, Brazil.

1.1.1 Concepts of International Business

International business is a term used to collectively describe all commercial transactions that take place between two or more regions, countries and nations beyond their political boundary. It is the exchange of goods and services among individuals and businesses in multiple countries and refers to all business activities which involves cross border transactions of goods, services, resources between two or more nations. A particular country is not self-sufficient in producing goods and services, and therefore, one country depends on another for such goods and services while another country depends on another for meeting demand. This interdependence creates international business activities involving movement of goods, services capital personnel, or transfer of technology across borders.

The absolute advantage theory was given by Smith (1776); according to the absolute advantage theory each country always finds some absolute advantage over another country in the production of a particular good or service. Some countries have natural advantage of cheap labour, skilled labour, mineral resources, fertile land etc these countries are able to produce specific type of commodities at cheaper prices compared to others leading to specialization in the production of the particular commodity which they have an advantage. For example, China finds absolute advantage in the production of the cotton fabrics due to the availability of skilled workers in the field, so China can easily export cotton yarns to the other nations and import those goods in which other countries find absolute advantages.

Factor-Proportions Theory, developed by Heckscher (1919) and Ohlin (1933), holds that differences in a country's relative endowments of land, labor and capital explains the differences in the cost of its production factors .A country will tend to export products that utilize relatively abundant factors of production because they are relatively cheaper than scarce factors; For example, countries with rich and abundant land tend to be large exporters of agricultural products, whereas countries with capital-intensive production lines tend to be large exporters of manufactured goods. Production factors are not homogenous, and variations particularly in labour have led to international specialization by task; e.g., countries with less skilled and lower paid workers tend to export products that embody a higher intensity of labour.

1.1.2 Concepts of International Outsourcing of Inputs

International outsourcing of input is viewed as the contracting out of a business service of product to suppliers outside the nation, this is sometimes referred to as

offshore outsourcing and is the movement of a business process done at a company in one country to the same or another company in different country. External procurement of components as input to manufactured goods and outsourcing of services has become common practice among an increasing number of Kenyan manufacturing firms that are under competitive pressures. International or regional providers that are specialized and thus can deliver goods and services at a lower unit cost accelerates the outsourcing activities.

1.1.3 Concepts of Low Cost Country Sourcing

Low-cost country sourcing is a process of international outsourcing in which a company procures materials and inputs from countries with lower labour and production costs , Aberdeen Group (2005) . The accelerating trend toward increased sourcing of materials and components from outside home markets is being fuelled chiefly by the relentless competitive pressures that are driving companies in a wide range of industries to figure out ways to continue to reduce costs. Since most manufacturing companies spend much more than half of their revenues on purchases of parts and materials, low-cost-country sourcing plainly makes sense. Successful LCCS is not a straightforward proposition. It involves a careful balancing of often competing interests within a company and demands great flexibility. By finding companies that operate on leaner budgets than domestic operations, a company may be able to reduce operational expenses. Low-cost-country sourcing (LCCS) is a key strategy that companies use to reduce costs, Timmermans (2004). However, LCCS bring not only opportunities but also challenges and risks for supply management. The major low cost countries include, China, Thailand, Vietnam, India and lately Brazil. Low cost is not only an advantage to companies seeking cost leadership; it is

advantageous to all companies, regardless of market factors, since decreased cost increases value and releases capital that can be used for better value-adding activities, such as marketing and R&D, ultimately yielding a higher return on investment.

1.1.4 Manufacturing Industries in Kenya

Manufacturing is the act of making a product from raw materials especially in large quantities and by means of industrial machines. It is the process of converting raw materials into a finished product that can be traded or sold. This processing can be typically done by mechanical, physical or chemical means in plants, factories or mills that use power-driven machinery and equipment. Generally manufacturing companies in Kenya spend more than half their operating costs on inputs of direct materials, indirect materials and services, with some typically spending ranges between of 50 and 70 percent of revenue on direct purchases, Aberdeen Group (2005) .In many markets, customers expect prices to remain flat or drop while product quality or capability increases. Investors expect EPS (earnings per share) to continue increasing while prices remain flat and the salaries steadily increase. With all these pressures, often the only way to improve the bottom-line is to reduce spending on sourced intermediates and inputs. In order to reduce costs and thus satisfy internal customer demands, an important corporate strategy is to source input goods and services in a way that yields reduction in the total costs while delivering value. One of the most effective ways employed is sourcing such goods from countries of comparatively lower price, called Low cost countries LCC.

In Kenya the major manufacturing firms that outsource inputs include broader industry players like chemical manufacturers, pharmaceutical and packing firms. The chemical industry comprises companies that produce industrial chemicals or converts raw chemicals inputs into different products .They include manufacturers of household consumer Industries examples with firms like Unilever, PZ Cussons, Interconsumer, P &G BDF .The industrial and specialty chemicals firms include fertilizers companies, Bayer East Africa, Resins, Inks & Paint manufacturing, and Chemical manufacturing Company. Pharmaceutical companies are firms manufacturing chemical substances intended for use in the medical diagnosis, cure, treatment, or prevention of disease .Examples, GlaxoSmithKline, Elly's Welcome Coopers, Beta Health Care amongst others. Food and Beverage specializes in the making of and distribution of foods , examples include Coca Cola, Unilever ,Cadbury, Nestle, Kapa oil refineries and Bidco among others. Textile manufacturing is mainly involved in the conversion of fibre into yarn, fabric, then textiles. Packaging Pulp and paper industries manufactures printed materials while Plastic Industry for the packaging materials used by various industries. There is an accelerating trend by manufacturing firms toward increased sourcing of materials and components from the LCC supply markets. This pattern is fuelled chiefly by the relentless competitive pressures to reduce or contain rising costs and increasing shareholder value

1.2 Research Problem

Manufacturers are striving to be more innovative, compete globally, expand and widen market penetration for their products. Intense pressure to reduce costs have pushed manufacturers to shift their input to international supply sources well beyond their home grounds. Outsourcing is a strategy firms are using to obtain cheap

manufacturing inputs. Many Kenyan companies especially the small and mid-size enterprises are ill-prepared and face many challenges due to limited capability to assess foreign supply markets.

There are many organizations and government agencies advocating for Kenyan industries to increase bilateral trades with Asian economies such as China, Malaysia and Iran trade Office. Kenya has increased its close ties with China, high profile visits by the Asian Tiger countries, several workshops and trade exhibition have been organized in collaboration with Ministry of Trade, agencies like Comesa and KAM. While the positive side is being brought to light little has been said of the negative implication and the challenges or risks importers face when they embark on LCC strategies. The primary motivator for and the benefit of LCCS is cost reduction. Business executives view LCCS as one of the most effective alternatives to combat rising energy, transportation prices and inflationary pressures in traditional and more established supply markets. However, the notable challenges in international outsourcing is that such initiatives often lack strategy and are largely reactionary to customers' or competitors' moves. In some cases the full logistics cost is never apparent from desk calculation and most players do not conduct complete analysis of total costs which takes into account trade regulations tariffs, lead time implications or legal complications that add hidden costs and frustrate any positive opportunities.

Some projects that use LCCS inputs are poorly planned and are often wrought with budget overruns caused by underestimated transportation costs, additional inventory costs, uncertain lead times and long order cycle times, bad data, and fluctuating demands. In the long run sourcing from LCC countries has proved to be a nightmare

for many manufacturers in Kenya and the much publicized benefits have not been realized. Many writers have written on the outsourcing, but very few studies have been done on input outsourcing by Kenyan manufacturing firms and the risks or challenges experienced while sourcing from Low cost country suppliers. This poses a knowledge gap which this study sought to bridge. The study sought to answer the question, what challenges face Kenyan manufacturers in outsourcing from Low Cost country markets? Are Kenyan manufacturers getting the benefits expected from Low Cost Country sourcing strategy?

1.3 Research Objectives

The objective of this study was to determine the challenges faced by Kenyan manufacturers while internationally sourcing of their manufacturing inputs from Low Cost Country sources.

1.4 Value of the study

The study sought to identify opportunities where Kenyan Manufacturing firms can optimize sourcing strategies of inputs from low-cost countries by minimizing risks to get the best results. It aimed at challenging Companies to first balance the tremendous opportunity that low cost country sourcing presents with the risk it can create in order to reap the envisaged benefits.

This study is useful for policy makers, company executives and strategy managers, supply chain and procurement professional in the manufacturing sector as well as other importers of inputs, goods and services from Low cost countries. It also excites a balanced consideration in the approach by international trade agencies advocating

for Kenya industries to embrace low cost country option and increase of bilateral trades with Asian economies such as China, Malaysia and Iran trade Office. This study is also useful to the academia as contribution to knowledge whereby scholars studying outsourcing by Kenya manufacturers in Low cost countries can refer.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter seeks to explore and review work already done on International Business, global outsourcing, the overview manufacturing Industry in Kenya as well as challenges and concerns for LCC strategy. Moneckza (1995) indicated that offering low cost prices as a result of being a low cost producer is one of the most important competitive advantage to a firm especially in the aftermath of recession increased poverty levels and steeply raised local and international competition. Zenz (1994) defines sourcing as the strategic philosophy of electing vendors in a manner that makes them an integral part of the buying firm for a particular component or part they are to supply. Graham (2006) indicates 60% of manufacturers now source from China as part of their low-cost sourcing strategies, and almost half of their Low Cost Country Sourcing spending is for manufacturing inputs.

2.2 International Business environment

Competitive advantage is superiority gained by an organization when it can provide the same value as its competitors but at a lower price, or can charge higher prices by providing greater value through differentiation. Competitive advantage results from matching core competencies to the opportunities. The principle of absolute advantage refers to the ability of a firm, or country to produce more of a good or service than competitors, using the same amount of resources. Smith (1776), first described the principle of absolute advantage in the context of international trade, using labour as the only input. Since absolute advantage is determined by a simple comparison of labour productivity, it is possible for a party to have no absolute advantage in

anything; in that case, according to the theory of absolute advantage, no trade will occur with the other party. It can be contrasted with the concept of comparative advantage which refers to the ability to produce a particular good at a lower opportunity cost, Porter (1990).

2.3 International Outsourcing

Global sourcing is an International Outsourcing term used to describe a strategy for buying goods and services from countries other than your own so that you can access specific benefits. International sourcing can be defined as “the acquisition of raw materials components and subassemblies from international sources regardless of whether the import source is internal or external to the company” Kotabe and Omura (1989).The characteristic differences between ‘global sourcing’ and ‘international sourcing’ are employed to differentiate sourcing strategies Murphy and Daley (1994), Liu and McGoldrick (1996), Narasimhan and Das (2000) and Ettlíe and Sethuraman (2002) .According to PricewaterhouseCoopers(2006) manufacturing survey, Kenya has a large manufacturing sector serving both the local market and exports to the East African region. The manufacturing sector, which is dominated by subsidiaries of multi-national corporations, contributed approximately 13% of the Gross Domestic Product (GDP) in 2004.

2.4 Low Cost Outsourcing

Low Cost Country Sourcing (LCCs) is the procurement strategy in which a company uses foreign companies with lower total cost of production to produce resources for manufacturing. By finding companies that operate on leaner budgets than domestic operations, a company may be able to reduce operational expenses Fisher,(1997). The

LCC Sourcing is a concept that has gathered momentum in the industry circles due to realignment of economies across the globe. In a dynamic scenario, the winning formula lies in the hands of companies who are most flexible and open for changes. LCC Sourcing is a smart way of sourcing items not only at the lowest cost but also (at times) at better quality. The manufacturing, resource, technological and other benefits give some countries unassailable lead over the others in terms of producing items better, faster and cheaper than other countries, Mane (2006).

The current global competitive scenario is dominated by improved communication technologies and opening of global economies. These factors have paved the way for introduction of new players in traditionally insulated markets across industries. These new entrants with improved business and operational methodologies are exerting immense pressure on companies across the globe to cope up with the dynamics of modern day operations. New equations on the diplomatic levels, realignment of relations between economies, emergence of developing countries as regional hubs of trade and commerce are increasingly adding new dimensions to business processes. Driven by competitive market pressures, many organizations are investing significant time and resources in sourcing and supply management initiatives that enable them to manage total costs and reduce business risk Ariba (2004). India provides fantastic opportunities for services sourcing while China tends to be more goods oriented. India has been enjoying significant growth in recent years as services outsourcing/offshoring has been growing, Manufacturing Economist, (January 2007).

The main driver for global sourcing and manufacturing has been the labour cost differential across countries, as Slack and Lewis (2002) point out. The global

deployment holds huge opportunities for procurement and companies can benefit from lower costs, faster times-to-market and access to a massive pool of skilled resources, resulting in substantial value to the bottom line. Aberdeen research (2005) results reveal that enterprises in which LCCS represents more than 20% of the total spend realize a significantly higher percentage of savings from procured goods/services, inventory reduction, and logistics costs. They refer to the cost of resources such as labour, transportation and energy, as the reasons that organizations move their location.

2.5 Manufacturing Industries in Kenya

At present many Kenyan manufacturing industry consider the hot' low-cost regions as China for manufactured materials, and India for services. The move to China to outsource inputs is transforming their entire supply chains and when executed properly, low cost country sourcing has proved to be an effective means of driving costs out of the value chain. An evolutionary change has taken place in the pricing of products and services and businesses can no longer operate using the pricing rules of the past, when rising costs simply were passed through the supply chain to the end user. Today, end users expect the prices they pay to decline each year, even if energy costs and other costs are rising. Enterprises must therefore continuously find ways to reduce costs year after year. The shift to low-cost country sources is impacting entire supply chains in all regions, with manufacturers pushing suppliers to match prices from low-cost nations such as China, India, Vietnam and Malaysia.

Improved power supply, increased supply of agricultural products for agro processing, favourable tax reforms and tax incentives, more vigorous export promotion and liberal

trade incentives to take advantage of the expanded market outlets through AGOA, COMESA and East African Community (EAC) arrangements, have all resulted in a modest expansion in the sector of 1.4 % per cent in 2004 as compared to 1.2% in 2003 Price Water house Coopers (2010).The rising levels of poverty coupled with the general slowdown of the economy has continued to inhibit growth in the demand of locally manufactured goods, as effective demand continues to shift more in favour of relatively cheaper imported manufactured items.

In addition, the high cost of inputs as a result of poor infrastructure has led to high prices of locally manufactured products thereby limiting their competitiveness in the regional markets and hampering the sector's capacity utilization. However, the recent introduction of the EAC Customs Union provides Kenya's manufacturing sector, the most developed within the region, a greater opportunity for growth by taking advantage of the enlarged market size, economies of scale, and increased intraregional trade. Aberdeen et al (2006) outlines the benefit of LCCS as one of the most effective alternatives to combat rising energy, transportation prices and inflationary pressures in traditional and more established supply markets. According to McGraw-Hill Publishing (2006),increased global competition is driving many firms, particularly those in durable and fashion industries, to identify and establish relationships with suppliers in low cost countries. There are a number of justifications for such sourcing initiatives. First, sourcing from countries with low wage rates typically reduces manufacturing cost. While such strategies can reduce manufacturing cost, some firms have not considered the total cost impact of international sourcing particularly with respect to the logistics cost components of transportation and inventory. Second, the

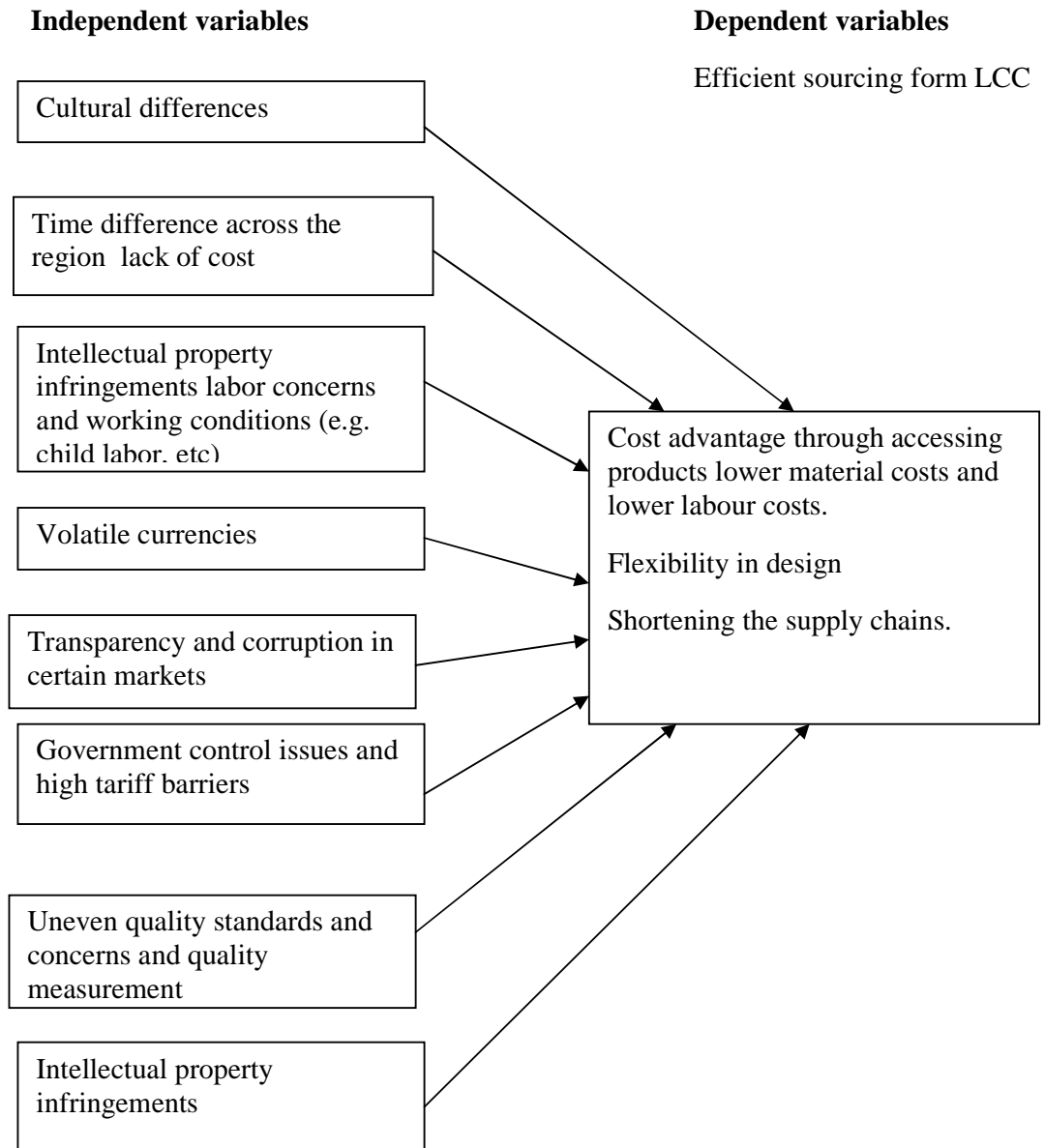
material or factors of production (power, water, etc) may be less costly due to less developed markets.

Third, seeking out suppliers in low cost countries can also increase competition among existing suppliers, thus reducing material cost. Fourth, low cost country sourcing can increase a company's exposure to state-of-the-art product and process technologies. Without pressure from global suppliers, there may be reluctance on the part of local suppliers to investigate or invest in new technologies because they have significant assets in older technologies. Conversely, global suppliers may place significant focus on new technologies to establish a competitive position in foreign markets. A final justification for low cost country sourcing is to establish a local presence to facilitate sales in a new country. Due to political or legal constraints, it is often necessary for a firm to have relationships and production operations to be allowed to sell their product internationally, particularly in developing countries.

2.6 Challenges and Concerns for LCC strategy

The potential advantages make a strong case for outsourcing inputs from a low cost country; however, with the increased visibility and interest, it is also necessary to also consider the challenges. Despite the obvious advantages of lower labour costs, there are considerable risks involved. These include currency and political risk, customs and trade policies, as well as legal issues with regard to the ownership of the manufacturing facilities Ariba (2005). Therefore LCCS projects, especially those that are poorly planned, are often wrought with budget overruns caused by underestimated transportation costs, additional inventory costs due to uncertain lead times and long order cycle times, bad data, and fluctuating demands.

Figure 2.1: Low Cost Country Variables



Source Ariba (2005)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this research was to gain understanding of the challenges faced by Kenya's manufacturing firms in international outsourcing of their inputs from Low Cost Countries

3.2 Research Design

This was a survey research design which sought to establish the challenges of outsourcing inputs from International sources by manufacturing firms in Kenya. The survey questionnaire had importance questions, where the respondents were asked to rate the importance of a particular outsourcing issue, as well as Likert questions where respondent were asked to ascertain how strongly they agree or disagree with particular Outsourcing statement. The limitation of this study was that it can be time consuming because specific industry individuals who are experts in their field will be involved.

3.3 Population

The population frame was selected to ensure that the researcher captured firms who have had long- established procedures for managing sourcing and logistics activities and were considered successful in LCC sourcing activities. The population selections of the firms were large firms of annual turnover exceeding Kshs 500,000 who have been in Kenya for over 10 years as per records in Kenya Association of Manufacturers. The industries were narrowed down to established names in the industry and are located around Nairobi for ease of access. The population sample

size involved interviewing at least 30-40 Procurement professional in manufacturing industries packaging industry, Plastic converting industries.

3.4 Sample Design

Non-random sampling is used to select the respondents of the survey targeting experts of the proposed purchasing of outsourced inputs. The Respondents that were sampled were representative of corporate purchasing who are associated with the Input Outsourcing decision making process .Such respondents were included supply chain managers, commodity buyer, senior buyers, sourcing managers and import officers who have a general view strategic buying and are deemed to have expert experience.

3.5 Data Collection

The two categories of information to be captured in this research study was both primary and secondary data. Primary data was gathered and represented directly from its source using a questionnaire while secondary data were gathered from existing data through, Internet, literature or procurement books journals, books and articles Holme & Solvang (1997). The empirical study was conducted using a self-administrated paper and online questionnaire. The questionnaire contained both closed and open ended questions that sought to establish the degree of firm's involvement on International Outsourcing, as well as relevant sourcing markets. These questions also sought to answer the opinions on Product ranges sourced from LCC markets, supplier characteristics and their technical capabilities.

3.6 Data Analysis

Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it and analyzed to establish key information on

International Outsourcing. The data was entered into an excel software and analyzed using descriptive statistics to establish the interest Kenyan firms have on International input Outsourcing, satisfaction, concerns and risks associated with Low cost country sourcing. The data was summarized to support arguments made using charts and graphs, and presented in a clear logical pattern.

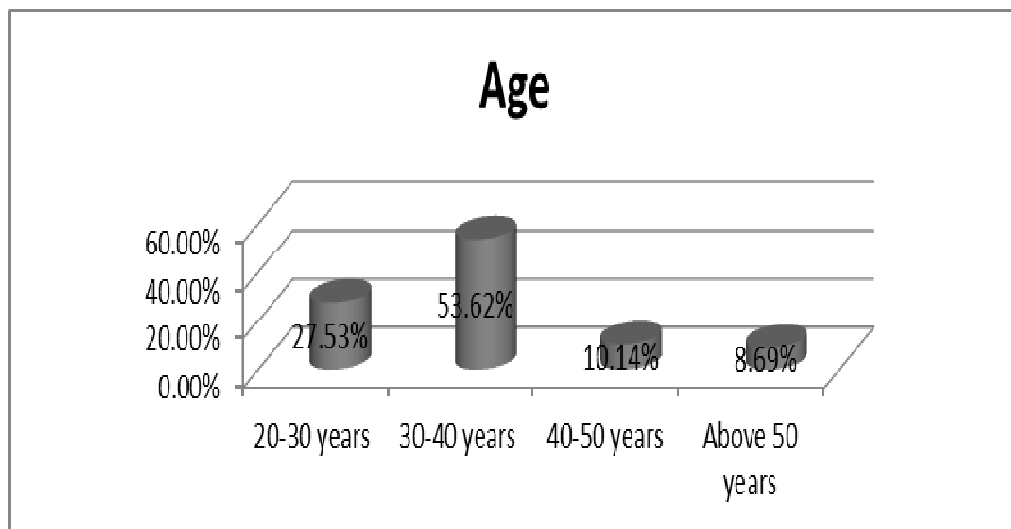
CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the interpretation and presentation of the findings of the challenges of international outsourcing of input by Kenyan manufactures firms from low cost countries. The researcher made use of, mean, standard deviation, frequency tables and percentages to present data.

4.2 Respondents' Profiles

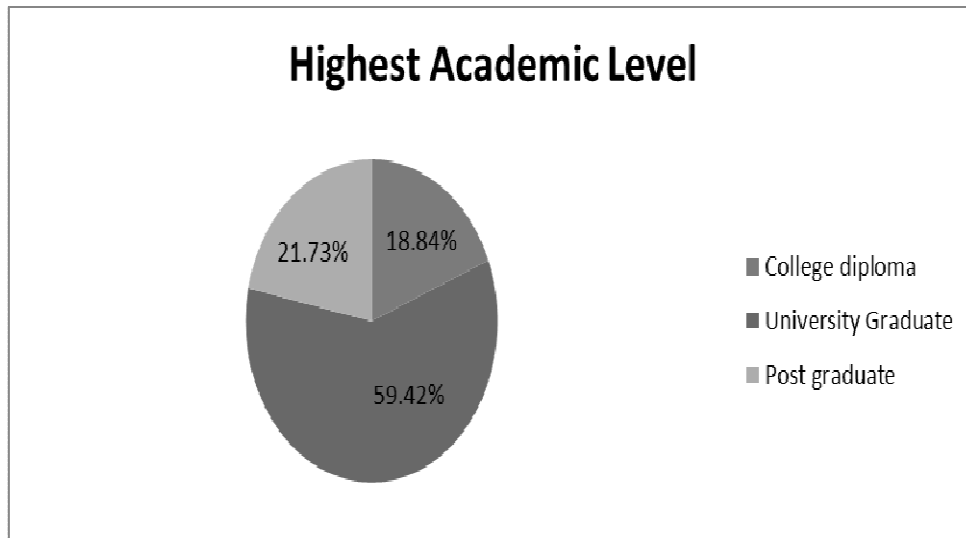
Figure 4.1: Age of Procurement Respondent



The study sought to establish the age of the respondents, majority of the respondents 53.62% were of age between 30-40 years. The study further established that other respondents were of age between 20-30 years, 40-50 years and above 50 years each age group was represented by 27.53%, 10.14%, and 8.69% respectively.

4.3 Highest Level of Academic Attainment

Figure 4.2: Highest Level of Academic



The study established that majority of the respondents 59.42%, were university graduate, 21.73% were post graduate and 18.84% of the respondents held college diploma.

4.4 Kenyan Manufacturing Firms

Table 4.1: Response Rate

	Frequency	% Response Rate
Non response	6	12%
Actual respondents	44	88%
Targeted respondents	100	100%

In the table above the response rate for Kenyan manufactures firms procurement managers were 88% this was found to be satisfactory for analysis to draw a valued

conclusion. This was also consistent with widely held rule of thumb that a sample of 50% respondents and above is adequate for application of statistical tools proposed for this study. This complied with Mugenda and Mugenda (2003) who suggested that for generalization a response rate of 50% is adequate for analysis and reporting, 60% is good and a response rate of 70% and over is excellent. This commendable response rate was actualized after the researcher made personalized calls to explain the importance of participating in the study and visited the respondents to fill in the interview guide.

Table 4.2: Outsourcing Response

Number of employees	Frequency	Percentage
0-50	9	22.72
50-100	19	43.18
100-200	10	20.45
200-500	5	11.36
Over 500	1	2.27
Total	44	100

The study found that majority of the manufacturing companies that outsource the inputs 43.18%, had a range of between 50-100 employees in the firms. The respondents further indicated that the number of employees in other manufacturing firms which outsource their input as follows; between 0-50 employees were 22.72%, between 100-200 employees were 20.45%, between 200-500 employees were 11.36%, while Over 500 100-200 employees were 2.27%.

Table 4.3: Number of Product Categories

Number of products	Frequency	Percentage
0-5	33	75.0
5-10	6	13.63
11-20	5	11.36
Total	44	100

The researcher further established that majority of the manufacturing firms that outsource the inputs 75.0% had product categories of between 0-5 products in the market. Other manufacturing firms that outsource the inputs had product categories of between 5-10 and 11-20 products in the market each was represented by 13.63% and 11.36% respectively.

Table 4.4: Outsourcing Categories

Outsourcing	Frequency	Percentage
Yes	38	86.36
No	6	13.63
Total	44	100

The researcher investigated whether the manufacturing firms were currently sourcing from low cost countries; 86.36% were outsourcing from low cost countries; while 13.63% of the manufacturing companies were not outsourcing currently from low cost countries.

Table 4.5: Annual Spending On Input

Annual spending	Frequency	Percentage
Ksh 0-20 m	3	6.81
Ksh 21-40 m	5	11.36
Ksh 31-49 m	10	22.72
Over Ksh 50 m	25	56.81
Total	44	100

The study sought to know the current annual spending on manufacturing inputs, majority of them spend over 50 million on inputs, while only a few 6.81% spend between 0-20 million on inputs.

Table 4.6: Length of Period of Outsourcing

	Frequency	Percentage
1year	7	15.90%
2-5year	12	27.27%
5-10 years	18	40.90%
10-19 years	4	9.09%
over 20 years	3	6.81%
Total	44	100%

The study sought to know for how long the manufacturing companies have been outsourcing their inputs from low cost countries. The results finding indicate that majority of the manufacturing firms have been outsourcing their inputs for between 5-10 years which was represented by 40.90% of the respondents.

Table 4.7: Led to Decision of Outsourcing

	Frequency	Percentage
Did not have local sources available in Kenya	6	13.63%
Was more cost effective	20	45.45%
Quality from local sources is inferior	12	27.27%
We had to respond to external factors	6	13.63%
Total	44	100%

The study sought to now what led manufacturing firms to make the decision of outsourcing their inputs; majority of the respondents 45.45% indicated that outsourcing is more cost effective. The respondents further indicated that they make the decision of outsourcing their inputs because of quality from local sources is inferior, lack of local sources available in Kenya, and due to response to external factors; each had a mean score of 27.27%, 13.63% and 13.63% respectively.

Table 4.8: Benefit of Outsourcing

	Frequency	Percentage
cost effectiveness	29	65.90%
better quality of these services	11	25%
Short delivery period	1	2.27%
Availability of capacity	3	6.81%
Total	44	100%

Table 4.9: Challenges of Outsourcing

Immature suppliers	4.440	0.110
Cultural differences	1.960	0.165
Government control issues and high tariff barriers	3.880	0.208
Uneven quality standards and concerns and quality measurement	1.600	0.232
Volatile currencies	3.560	0.152
Transparency and corruption in certain markets	2.800	0.240
Intellectual property infringements	3.440	0.110
Labor concerns and working conditions (e.g. child labor, etc.)	2.680	0.217
Time difference across the region	2.840	0.202
Poor infrastructure	2.880	0.233
Outsourcing Challenge		
Immature suppliers	4.440	0.110
Cultural differences	1.960	0.165
Government control issues and high tariff barriers	3.880	0.208
Uneven quality standards and concerns and quality measurement	1.600	0.232
Volatile currencies	3.560	0.152
Transparency and corruption in certain markets	2.800	0.240
Intellectual property infringements	3.440	0.110
Labor concerns and working conditions (e.g. child labor, etc.)	2.680	0.202
Time differences across the region	2.840	0.233
Poor infrastructure	2.880	

The study sought to know what benefit of outsourcing the manufacturing firms gain by outsourcing their inputs; majority of the respondents 65.90% indicated that outsourcing is cost effectiveness. Thus the main benefit of manufacturing firms of outsourcing their inputs is to reduce their operation cost of their inputs. This means that the local inputs are very expensive and this may be due to the high operation cost of

production of these inputs. The respondents further indicated that they make the benefit by outsourcing their inputs through better quality of these services, short availability of capacity and delivery period; each had a mean score of 25%, 6.81%, and 2.27% respectively.

The study sought to know the various challenges that the manufacturing firm face when they are out source inputs from low cost countries. The main challenges that they face which they rated to very high extent were government control issues and high tariff barriers, poor Infrastructure, and volatile currencies each had a mean score of 3.560, 3.880 and 3.880 respectively. The respondents further rated transparency and corruption in certain markets, uneven quality standards and concerns and quality measurement, and Immature Suppliers to high extent. Each had a mean score of 3.330, 2.910, and 2.700 respectively. The study established that the following factors affect out source inputs from low cost countries to moderate extent; Cultural differences and time difference across the region each had a mean score of 2.037 and 1.840 respectively. The respondent finally rated the following factors to low extent do they affect the manufacturing firm face when they are out source inputs from low cost countries they were intellectual property infringements and labor concerns and working conditions (e.g. child labor, etc.). each had a mean score of 1.440 and 1.180 respectively.

Table 4.10: Disadvantages of International Outsourcing of Manufactured Inputs into Kenya

	Frequency	Percentage
Inferior quality	4	9.09%
It is not cost effective	6	13.63%
Long lead time	17	38.63%
Choosing the right provider	5	11.36%
The risk contract going wrong and being costly to reverse	12	27.27%
Total	44	100%

The study found that the main disadvantages of international outsourcing of manufactured inputs into Kenya was long lead time which 38.63% of the respondents was the main disadvantages of international outsourcing of manufactured inputs into Kenya. The respondents indicated that other disadvantages of international outsourcing of manufactured inputs into Kenya such as the risk contract going wrong and being costly to reverse, it is not cost effective, choosing the right provider and inferior quality which had the following percentages 27.27%, 13.63%, 11.36%, and 9.09% respectively.

Table 4.11: Perspectives Concerning Low Cost Country Sourcing

1	The benefits of outsourcing from Low cost countries outweigh challenges	3.960	0.223
2	Risks and challenges of sourcing from LCCs have been adequately mitigated by our company	3.480	0.259
3	We have plans to increase our spend on Inputs from Low Cost Countries	3.120	0.250

The research sought to know the respondents perspectives concerning low cost country sourcing. The respondents strongly agreed that the benefits of outsourcing from low cost countries outweigh challenges which had a mean score of 3.960. The respondents further agreed that risks and challenges of sourcing from LCCs have been adequately mitigated by our company and they have plans to increase their spending on inputs from low cost countries which had a mean score of 3.480 and 3.120 respectively.

Regression Model

A multivariate regression model was applied to determine the relative importance of each of the four variables in relation to the study which sought to understand the influence of different factors as a result of monetary policies on the bank lending rates. The regression model was as follows:

Equation 5

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y = Effectiveness of outsourcing of manufacturing inputs

β_0 = Constant Term

$\beta_{1,2,3,4}$ = Beta coefficients

X_1 = Lead time

X_2 = Cost

X_3 = Quality

X_4 = Organization capacity

4.5 Regression Model Summery

Table 4.12: Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.884	.781	.702		1.81025

A-Predictors: (Constant), lead time, cost, quality and organization capacity Adjusted R^2 is called the coefficient of determination and tells us effectiveness of outsourcing of manufacturing inputs which depend on lead time, cost, and quality and

organization capacity. From the table above, the value of R2 is 0. 781 this implies that, there was a variation of 78.1% of effectiveness of outsourcing of manufacturing inputs rates which varies with; lead time, cost, quality and organization capacity.

4.6 Regression Coefficients

Table 4.13: Regression Coefficients

	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	1.191	1.367		.871	.000
Lead time	-.149	.176	.109	.675	.003
Cost	-.326	.182	.023	1.345	.004
Quality	.129	.273	.246	1.461	.041
Organization capacity	0.117	.137	.141	1.103	.002

The following regression analysis was obtained:

$$Y = 1.191 - 0.149X_1 - 0.326X_2 + 0.129X_3 + 0.017X_4 \quad p=0.001$$

Whereby Y is the effectiveness of outsourcing of manufacturing inputs, X₁ is Lead time, X₂ is Cost, and X₃ is Quality and X₄ Organization capacity.

The model illustrates that when all variables are held at zero (constant), the effectiveness of outsourcing of manufacturing inputs would be 1.191. However, holding other factors constant, a unit decrease in lead time would lead to a -0.149 increase in the effectiveness of outsourcing of manufacturing inputs, and a unit decrease in cost would lead to a -0.326 increase in the effectiveness of outsourcing of manufacturing inputs. On the other hand, a unit increase in Quality would lead to a 0.129 increase in the effectiveness of outsourcing of manufacturing inputs while a unit increase in Organization capacity would lead to a 0.017 increase in the effectiveness of outsourcing of manufacturing inputs.

This suggests that an increase in Quality and Organization capacity would definitely increase in the effectiveness of outsourcing of manufacturing inputs while a decrease of Lead time and cost would increase in the effectiveness of outsourcing of manufacturing inputs. Moreover, the regression model shows that there is a significant relationship between the effectiveness of outsourcing of manufacturing inputs with the four variables; (Lead time $p=0.003$, Cost $p= 0.004$, Quality $p= 0.041$ and Organization capacity $P=.002$)

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the data findings on challenges that face the manufacturing firms that outsource their inputs from low cost countries, the conclusions and recommendations drawn there to. The chapter is hence structured into summary of findings, conclusions, recommendations and area for further research.

5.2 Summary

Driven by competitive market pressures, many manufacturing firms in Kenya are investing significant time and resources in sourcing and supply management initiatives that enable them to manage total costs and reduce business risk. Among the activities that companies are beginning to explore is low cost country sourcing. When executed properly, low cost country sourcing have been effective means of driving costs out of the supply chain of manufacturing firms in Kenya.

Although outsourcing from low cost countries often seems attractive, it can have pitfalls. Lack of capable service providers was one of the problem of outsourcing identified, which includes inability to provide effective transportation networks, poor transportation tools, old-designed warehousing facilities, lack of qualified staff, and lack of IT capability. Poor transportation and IT infrastructure and local protection regulations are also regarded as major obstacles to outsourcing from low cost countries. In addition, local protection regulations lead to the increase in logistics cost and damage rate, thus reduce company profit margins. They also limit the choices of

companies in selecting their desired suppliers. Poor infrastructure and entrenched regulatory environment are two of the daunting challenges that will hinder the manufacturing firms from outsourcing their inputs from low cost countries.

The study sought to know what led manufacturing firms to make the decision of outsourcing their inputs; majority of the respondents 45.45% indicated that outsourcing is more cost effective. The study sought to know what benefit of outsourcing the manufacturing firms gain by outsourcing their inputs; majority of the respondents 65.90% indicated that outsourcing is cost effectiveness. The main challenges that they face which they rated to very high extent were government control issues and high tariff barriers, poor Infrastructure, and volatile currencies each had a mean score of 3.560, 3.880 and 3.880 respectively. The respondents further rated transparency and corruption in certain markets, uneven quality standards and concerns and quality measurement, and Immature Suppliers to high extent. Each had a mean score of 3.330, 2.910, and 2.700 respectively.

The effectiveness of outsourcing of manufacturing inputs which depend on lead time, cost, and quality and organization capacity. There was a variation of 78.1% of effectiveness of outsourcing of manufacturing inputs rates which varies with; lead time, cost, and quality and organization capacity. An increase in Quality and Organization capacity would definitely increase in the effectiveness of outsourcing of manufacturing inputs while a decrease of lead time and cost would increase in the effectiveness of outsourcing of manufacturing inputs. Moreover, the regression model shows that there is a significant relationship between the effectiveness of outsourcing

of manufacturing inputs with the four variables; lead time, cost, and quality and organization capacity.

5.3 Conclusion

The study concludes that manufacturing firms in Kenya seek to increase their profits by decreasing the costs of their input through outsourcing from low cost countries thus improving their ability to compete in the global economy. Majority of the manufacturing firms in Kenya are outsourcing from low cost countries in order to reduce the cost of their input. The study further concludes that majority of the manufacturing firms in Kenya face many challenges related to outsourcing from low cost countries; the main challenge been lead time, unreliable logistic providers, government regulations, high tariff barriers, poor Infrastructure, and volatile currencies.

5.4 Recommendations

The study recommends that manufacturing firms should outsource their inputs from low cost countries as there is big benefit of reduction of cost of their inputs; which over rides the many challenges they face. The study further recommends that government should intervene so as to facilitate smooth outsourcing of manufacturing inputs from low cost countries. The government can assist in developing better infrastructure, regulating currency volatility, the tariff barriers.

The researcher finally recommends that further research should be done to establish to what extent does outsourcing from low cost countries lead to reduction of cost of input. Also future researchers might do a similar study from a different industries set up to verify the study findings.

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APPENDIX I : LETTER OF INTRODUCTION



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TO WHOM IT MAY CONCERN

The bearer of this letter JULIUS TOGOTH


Registration No. DG1/90127/99

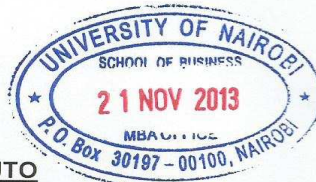
is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

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

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

Thank you.


PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS



APPENDIX II : QUESTIONNAIRE

Section A: Background information

1. What is your age bracket?

20-30 years []

30-40 years []

40-50 years []

Above 50 years []

2. Which is your highest academic level?

Primary certificate []

Secondary certificate []

College diploma []

University Graduate []

Post graduate []

How many employees does your company employ?

0-50 () 50-100 () 100-200 () 200-500 () Over 500 ()

5. How many product categories does your company have in the market?

0-5 () 5-10 () Over 10 ()

6. Are you currently sourcing from low cost countries Yes () No ()

7. What is your current annual spending on manufacturing inputs?

0-5 Ksh m () 5-10 Ksh m () Over 10 Ksh m ()

Section B: Outsourcing Challenge

8: To what extent do you agree with the following statement on influence of top management commitment and policies on the successfulness of partnership between NGOs and government in Kenya? Key: 5 very high extent, 4 high extent, 3 moderately extent, 2 low extent, 1 to no extent 5

	1	2	3	4	5
Cultural differences					
Government control issues and high tariff barriers					
Uneven quality standards and concerns and quality measurement					
Volatile currencies					
transparency and corruption in certain markets					
Intellectual Property Infringements					
Labor concerns and working conditions (e.g. child labor, etc.)					
time difference across the region					
Poor Infrastructure					

Did not have local sources available in Kenya []

Was more cost effective []

Quality from local sources is inferior []

We had to respond to external factors []

Benefit of outsourcing

Cost effectiveness []

Better quality of these services []

Short delivery period []

Availability of capacity []

Disadvantages of International Outsourcing of Manufactured Inputs into Kenya

- Inferior quality []
- It is not cost effective []
- Long lead time []
- Choosing the right provider []
- The risk contract going wrong and being costly to reverse []

Perspectives Concerning Low Cost Country Sourcing

23: To what extent do you agree with the following statement on the influence of effective communication on the successfulness of partnership between NGOs and government in Kenya?

Key: 5 strongly agrees, 4 agree, 3 moderately agree, 2 disagree, 1 strongly agree

	1	2	3	4	5
The benefits of outsourcing from Low cost countries outweigh challenges					
Risks and challenges of sourcing from LCCs have been adequately mitigated by our company					
We have plans to increase our spend on Inputs from Low Cost Countries					