

**INFLUENCE OF MANPOWER OUTSOURCING ON ELECTRICITY
SUPPLY TO CUSTOMERS: A CASE OF KENYA POWER AND LIGHTING
COMPANY, ELDORET WEST SUB COUNTY, KENYA**

**BY
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DECLARATION

This research project is my original work and has not been presented for academic credit at any other university.

Signed Date

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L50/71689/2014

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

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DEDICATION

This project is dedicated to my beloved family for their moral support during the time of writing this project.

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Table of Contents

Declaration	ii
Dedication	iii
Acknowledgements	iv
List Of Tables.....	iii
List Of Figures.....	iv
Abbreviations And Acronyms.....	v
Abstract	vi
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem	4
1.3 Purpose of the Study.....	5
1.4 Research Objectives	5
1.5 Research Questions	6
1.7 Significance of the Study	6
1.8 Delimitations of the Study.....	7
1.9 Limitations of the Study.....	7
1.10 Assumptions of the Study.....	7
1.11 Definition of Significant Terms as Used in the Study.....	8
1.12 Organization of the study	8
CHAPTER TWO.....	10
LITERATURE REVIEW.....	10
2.1 Introduction	10
2.2 Empirical Review	10
2.2.1 The Concept of Outsourcing	10
2.2.2 Outsourcing Decision	12
2.2.3 Supply of Electricity.....	14
2.2.4 Outsourcing for Cost Reduction and Supply of Electricity.....	15
2.2.5 Manpower Knowledge and Skills and Supply of Electricity	18
2.2.6 Outsourcing for Innovativeness and Quality of Supply	23
2.3 Theoretical Framework	28
2.3.1 Resource Dependency Theory.....	28
2.3.2 Diffusion of Innovation theory.....	29

2.3.3 Resource-Based View Theory	30
2.4 Conceptual Framework	31
2.5 Research Gaps	33
2.6 Summary of the chapter	33
CHAPTER THREE	34
RESEARCH METHODOLOGY.....	34
3.1 Introduction	34
3.2 Research Design	34
3.3 Target Population	34
3.4 Sample Size and sampling procedures	35
3.5 Research Instruments	35
3.7 Data collection procedures	37
3.8 Data Analysis Techniques	37
3.9 Ethical considerations.....	38
3.10 Operational Definition of variable	39
3.11 Summary	40
CHAPTER FOUR.....	41
DATA ANALYSIS, PRESENTATION AND INTERPRETATION.....	41
4.1 Introduction	41
4.2 General characteristics of the respondents	41
4.3 Supply of electricity	45
4.4 Effect of Cost Reduction on Supply of Electricity.....	48
4.5 Effect of Knowledge and Skills on Supply of Electricity	52
4.6 Effect of Lead-Time on Supply of Electricity.....	55
4.7 Effect of quality of Supply on Supply of Electricity to Customers.....	57
4.8 Data Analysis of Interview Schedule with Selected Customers and KPLC Managers.....	60
4.9 Correlation Analysis.....	61
4.10 Regression Analysis	63
CHAPTER FIVE.....	67
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.....	67
5.1 Introduction	67
5.2 Summary of Findings	67
5.3 Conclusion of the study	68
5.4 Recommendations of the study	70

5.5 Suggestions for further research.....	71
REFERENCES	72
APPENDICES.....	78
APPENDIX 1: Letter Of Transmittal	78
APPENDIX II: Questionnaire for Contractors.....	79
APPENDIX II: Interview Schedule for Customers.....	84
APPENDIX III: Interview Guide for Managers.....	86

LIST OF TABLES

Table 1 Target population.....	27
Table 2 Operational definition of variable.....	30
Table 4.1 Gender of Respondents * Age of Respondents Cross tabulation.....	40
Table 4.2 Level of Education * Level of Experience Cross tabulation.....	42
Table 4.3 Supply of Electricity.....	44
Table 4.4 Effect of Cost Reduction on Supply of Electricity.....	47
Table 4.5 Effect of Knowledge and skills on Supply of Electricity	50
Table 4.6 Effect of Lead-Time on Supply of Electricity	54
Table 4.7 Effect of Quality of Supply on Supply of Electricity	57
Table 4.8 Correlations.....	61
Table 4.9 Regression Model Summary.....	62
Table 4.10 Regression ANOVA Results.....	63
Table 4.11 Regression Coefficients.....	64

LIST OF FIGURES

Figure 1 conceptual framework.....	23
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ABBREVIATIONS AND ACRONYMS

BPO - Business Process Outsourcing

CARS - Cost Affected Reductions

EWSC – Eldoret West Sub County

HR - Human Resource

I - Innovativeness

IBM - International Business Machines

ICT - Information and Communication Technology

IT - Information Technology

KPLC – Kenya Power and Lighting Company

NPD - New Product Development

RDT - Resource Dependence Theory

ROI - Return on Investment

ABSTRACT

Companies have always sought ways to gain quality service delivery as an improvement of past poor services; one avenue that firms have pursued to improve their service quality position in this new business environment has been to increase the role of outsourcing in their operations, which has been found to provide a competitive advantage and heightened performance to these firms. However, companies industries under the context of increasing use of outsourcing arrangements, as well as the unfamiliar complexity, are unaware of how to effectively utilize this strategy to improve their services. The study therefore purposed to establish the influence of cost reduction on electricity supply to customers; determine the influence of employee competence on electricity supply to customers; determine the influence of lead time on electricity supply to customers; and determine the influence of quality of supply on electricity supply to customers in Eldoret West Sub County. This study employed the Resource-Based View theory and employed descriptive survey research design to target the 120 sub-contractors at Eldoret West Sub County. Simple random sampling was used to get 60 respondents, while purposive sampling was used on KPLC managers and customers. Questionnaires were used to collect data. To test the reliability of the instruments test retest method was used while validity of the instruments was measured by two experts at Nairobi University reviewing the instruments. Data was analyzed using descriptive, correlation and regression analysis then presented in tables. The findings of the study were: Knowledge and skills ($\beta=.393$, $t=5.968$, $p<0.000$), cost reduction($\beta=.193$, $t=2.593$, $p<0.004$), lead-time, ($\beta=.324$, $t=4.383$, $p<0.000$), and quality of supply, ($\beta=.352$, $t=5.129$, $p<0.000$), had a significant influence on connection of electricity to customers in Eldoret West sub county, Kenya. The study therefore recommends: KPLC should employ strategic and well thought out outsourcing to further reduce operating and overhead costs for further firm growth and effective connection of electricity to customers. Further, KPLC and the contractors should offer better terms of service and proper training to help improve employee competence and reduce costs of outsourcing its HR functions for connection of electricity to customers. They should carefully consider the issue of shortened lead-time to ensure that the customers are getting the services on time. KPLC and the contractors should invest in quality connection of electricity tools to give customers a return on their money with quality supply services.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Firms have always sought ways to improve their performance by embarking on quality service delivery; however, with the increased movement towards a single globalized economy, this desire is even more prevalent for companies today. One avenue that firms have pursued to improve their quality services position in this new business environment has been to increase the role of outsourcing in their operations, which has been found to provide a heightened performance to these companies (Monczka and Trent, 2008; Quinn and Hilmer, 2004).

Manpower services that are HR related are among the key elements in the enlarging outsourcing game. Recognizing the fact that senior management needs to get out of mundane day-to-day processing work and focus instead on strategic planning, core competencies, customer satisfaction and decision making, a number of large companies, across globe have begun opting for outsourcing of their HR services (Quinn and Hilmer, 2004). Some of the functions most commonly handed over to outside providers include payroll, benefits administration, background checks, drug testing, recruiting and training. Even small companies that might not get noticed much in big studies of outsourcing trends, turn to outside services to help with such chores.

Dwindling resources and market competitiveness have forced organizations to scrutinize their methods of producing goods and services and make changes in their processes in order to maximize economic returns. To survive and be profitable in

current globalization era, organizations have pursued continuous improvement, leaned up production, reengineered business processes, and integrated supply chains (Brannemo, 2006). Over the past decades there is a growing realization of the important contribution of outsourcing strategy on organizational performance (Cousins et al., 2006).

While many companies have followed the pattern of outsourcing some part of their operations to improve their competitiveness, performance and quality service delivery, others have not, leading many to ask what factors influence the decision to use manpower outsourcing and how such outsourcing improves organizational performance (Merino and Rodriguez, 2007; Nayak, 2007). Manpower outsourcing is a management strategy by which an organization delegates major, non-core manpower functions to specialized and efficient service providers.

In general, outsourcing is considered to be that part of an organization's process, which it sources from outside suppliers, regardless of the type of relation with these suppliers (Mol et al., 2005). As such, every company engages in outsourcing to some degree, be it manufacturing, customer care, logistics, post sales technical support, finance, auditing, staffing, or design. The choice of what functions to outsource and which to keep in-house is based on the need to develop skills, invest in resources, and stay abreast of evolving technology in any areas kept in-house (Harris, 2008).

In studies examining the impact of outsourcing, there have been several key advantages of outsourcing identified, such as cost savings (Bardhan et al., 2006; Nayak, et al., 2007), reduced capital investment within the firm (Gilley and Rasheed, 2000), improved responsiveness to changes in the business environment and improvement on service delivery (Dess et al., 2005), an increased focus on core

competencies (Kotabe and Murray, 2009; Saunders et al., 2007), increased competition among suppliers ensuring higher quality goods and services in the future (Kotabe and Murray, 2009), and a reduced risk of changing technology (Quinn, 2000).

The Kenya Power and Lighting Company (KPLC) is one of the companies that undertake outsourcing and particularly manpower outsourcing to ensure electricity and power line connectivity to its customers (KPLC, Annual report, 2014).

Over the last 10 years the country has seen a steady growth in electricity connections both in urban and rural areas. The NARC government demanded that the company accelerate connectivity. This called for a totally new approach in the connectivity model within KPLC (Mutai, 2013). In 2004, a new connection policy was developed to address this new challenge and also take cognisance of the more empowered customer and public. In it, among other things, the cost for connection to customers on low voltage was standardized for single phase and three phase to a minimum of KShs. 32,480 and KShs. 44,080 respectively (between 3 and 8KVA, including connection charges @ KShs. 1000/= per KVA, VAT inclusive, and within 600m of a distribution transformer). This saw an unprecedented increase in connections as shown by the huge jump between FY 2005-2006 and 2006-2007. The increase continued year to year (KPLC, 2014).

In order to accelerate the connectivity rate and achieve annual connections in the range of 1.3 million, it was proposed that a new model be adopted that will help overcome the current bottlenecks in the connectivity pipeline. Part of the strategy was to outsource connectivity to private contractors to improve service delivery, reduce

costs and be strategic (KPLC, 2014). Manpower outsourcing enables the contractors design power lines, survey the lines, sign wayleaves and fix the meters among other connection works (KPLC, 2014)

As noted earlier, a growing trend in work organization is for companies to outsource many activities that had been previously performed in-house. Outsourcing these activities, it is argued, will free up human and capital resources as well as allow for increased flexibility in the way labour is employed. Although the extent of outsourcing and other approaches to flexibility have been well documented in developed countries, little attempt has been made to evaluate such practices in the Kenyan context and specifically in the energy industry to which KPLC is a part. The purpose of this study was to review the existing research and to evaluate the influence of manpower outsourcing on connection of electricity to customers by KPLC in Eldoret West Sub County.

1.2 Statement of the Problem

The world has embraced the phenomenon of outsourcing and companies have adopted its principles to help them expand and provide better services based on the high demand for such services (Bender 2009). Strategic management of outsourcing is perhaps the most powerful tool in management, and outsourcing of innovation is its frontier (Quinn 2000). The current and most economical practice at present is to construct almost all distribution lines using private labour and transport contractors. The calculation of such manpower outsourcing is thus based on using them to implement the connection project. The KPLC (2014) report noted that the average cost of outsourced construction using these contractors is approximately 67% of the

estimated cost using internal KPLC teams showing that it reduces costs. However, the extent to which such manpower outsourcing, based on the tasks they perform, has influenced supply of electricity to customers remains significantly uninvestigated.

On the basis of organizational estimate of total turnover, practicing managers in the energy industry are attempting to establish the nature and type of manpower outsourcing required to reach goals of higher profitability and higher organizational performance (Uddin, 2005). The concept of outsourcing is one that according to Gilley and Rasheed, (2000) is currently being keenly considered based on the current business environment of high service delivery demands.

However, although the extent of outsourcing and other approaches to flexibility have been well documented in developed countries (Gilley and Rasheed, 2000; Uddin, 2005; Quinn, Doorley and Paquette, 2000), little attempt had been made to evaluate such practices in the Kenyan context, paving way for this study whose focus was specifically in the energy industry and taking special focus of the influence of manpower outsourcing on connection of electricity to customers by KPLC in Eldoret West Sub County.

1.3 Purpose of the Study

The purpose of the study was to establish the influence of manpower outsourcing on electricity supply to customers by KPLC in Eldoret West Sub County.

1.4 Research Objectives

This study sought to:

- 1 Determine the influence of cost reduction on electricity supply to customers in Eldoret West Sub County.
- 2 Establish the influence of manpower knowledge and skills on electricity supply to customers in Eldoret West Sub County.
- 3 Analyze the influence of lead-time on electricity supply to customers in Eldoret West Sub County.
- 4 Determine the influence of quality of supply on electricity supply to customers in Eldoret West Sub County.

1.5 Research Questions

1. To what extent does cost reduction influence electricity supply to customers in Eldoret West Sub County?
- 2 To what extent does manpower knowledge and skills influence electricity supply to customers in Eldoret West Sub County?
- 3 To what extent does lead-time influence electricity supply to customers in Eldoret West Sub County?
- 4 To what extent does quality of supply influence electricity supply to customers in Eldoret West Sub County?

1.7 Significance of the Study

This study could be beneficial to the energy industry particularly KPLC in their bid to fully comprehend the issues that are particularly inherent in manpower outsourcing decisions and this might help them improve on their performance and service delivery. The study may also help outsourcing firms to understand the main drivers of outsourcing decision in the energy industry and how they can then respond to the

available opportunities. Finally the study can be helpful to fellow academicians to add the findings of this study to their body of knowledge.

1.8 Delimitations of the Study

The study focused on the influence of manpower outsourcing on connection of electricity to customers by KPLC in Eldoret West Sub County. It targeted the private contractors and selected customers in Eldoret West Sub County. The study only focused on KPLC at Eldoret West Sub County whereas there are other branches all over Kenya. It was done between the months of April 2015 to June 2015.

1.9 Limitations of the Study

As a working student who needs to balance studies with full time employment, the researcher could not undertake an extensive and exhaustive research limiting the researcher to a small sample and less research. The researcher took leave and also trained research assistants to help carry out the research. The researcher also used ICT by emailing questionnaires to the target respondents.

1.10 Assumptions of the Study

The researcher assumed the following during the study.

KPLC outsourced some of its HR functions.

KPLC had put in place financial and project management procedures to support their manpower outsourcing decisions.

That the information given by the respondents was true facts as per the status in KPLC.

Respondents co-operated and submitted relevant documentations.

1.11 Definition of Significant Terms as Used in the Study

Manpower Outsourcing- This refers to any task, operation, job or process that could be performed by employees within an organization, but is instead contracted to a third party for a significant period of time.

Supply of electricity- this refers to the connection done by skilled workers to make certain customers have electricity in their homes

Cost Reduction- This refers to the lowering or cutting of overhead operating expenses in a company.

Employee Competence- This refers to expertness, practiced ability, facility in doing something, dexterity and tact. Skill encompasses experience and practice, and the long standing fact that one has been doing work in the manufacturing industry for a considerable period of time with expertness and ability.

Innovativeness- This refers to the skill and imagination to create new things. A surprising new product from a company that has never been a wellspring of what has been used as product.

Lead Time- this refers to the time taken by procurement agencies in formulating the procurement plan, delivery of goods from service providers and paying of suppliers.

1.12 Organization of the study

Chapter one addressed the importance of manpower outsourcing as a powerful means of obtaining desirable organizational service in energy companies. The chapter clearly outlined the purpose of the study and the research objectives to guide the study within

the specified geographical and time scope. The chapter explored the objectives of this study and outlined the research hypotheses addressed by the study. The chapter also gave the statement of the problem, the significance and scope of the study.

Chapter two included review of opinions related to the planned study Mugenda and Mungenda (199). It shared with the reader the results of other studies that were closely related to the study being reported (Fraekel and Wallen, 1990). According to Marshall and Rossman, (1989) the study relates the larger ongoing dialogue in the literature about outsourcing, filling gaps and extending prior studies. The chapter also provided a framework for establishing the importance of outsourcing, as well as a benchmark for comparing the results of the study.

Chapter three included the methodology in terms of the research design, target population, sampling size and procedures, data collection instruments, reliability and validity of instruments and data analysis techniques.

Chapter four had the data presentation, analysis, interpretation and discussion of the findings. The chapter is categorized into demographic information, data based on the objectives and the correlation and regression analyses. Chapter five includes the summary of findings, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents reviewed literature on the concept of outsourcing, outsourcing decision and Human resource capabilities. It further reviewed literature on supply of electricity by KPLC through contractors and the works they do. It finally presents both the theoretical and conceptual frameworks.

2.2 Empirical Review

This includes the concept of outsourcing, manpower outsourcing and its decision and supply of electricity, reviews the works done by the contractors and how they affect supply of electricity

2.2.1 The Concept of Outsourcing

In the early 1980s, 'outsourcing' typically referred to the situation while organizations expanded their purchases of manufactured physical inputs, like car companies that purchased window cranks and seat fabrics from outside the firm rather than making them inside (Bhagwati, et al. 2004).

A number of writers have argued that enterprises will improve efficiency by concentrating on their core functions and outsourcing all peripheral activities to firms that specialize in such tasks (Cannon, 2009; Harrison and Kelley, 2003; Sharpe, 2007; Smith, 2001). The increasing use of contractors, for the supply of components and services, has been one of the notable trends in work organization over the past decade

(Mayhew, Quinlan and Bennett, 2006). As Benson and Ieronimo (2006) reported most manufacturing firms surveyed had outsourced at least one activity with most planning further outsourcing within the next three years. This finding is supported by Wooden and Vanden Heuvel (2006) who found that 90 per cent of the 522 workplaces surveyed had used contractors in the past year.

The concept of outsourcing is not new. Firms have been outsourcing since the early 1900s, although under a variety of labels (Cappelli, 1995; Chandler, 2004). The activities outsourced, however, were not generally central to the core objectives of the firm and usually made a low contribution to the value chain. Conventional wisdom was that outsourcing core activities or technologies would threaten the firms' competitive advantage (Bettis, Bradley and Hamel, 2009). The success of companies like Microsoft, Benetton and Nintendo has, however, demonstrated that a competitive advantage can be achieved through outsourcing arrangements. These firms have outsourced many of the traditionally perceived core competencies including product design, software development and distribution. Many of these firms are new and so are free from historical practices and cultural restraints.

According to Quinn (2000) all firms must re-examine their entire value chain and outsource those activities found not to be at a 'world class' standard. Mature firms are now beginning to appreciate that their current organizational arrangements may no longer be suitable for their key competencies. Indeed, significant advantages, such as lower costs, lower production and market times, and improved innovation, may result from market-based relationships (Stalk, 2008). This has led to an increasing number of firms outsourcing their key competencies and capabilities (Piore and Sabel, 2004).

Yet despite these developments little is known about the long-term consequences of mature firms pursuing a flexibility strategy based on outsourcing. Evidence is now emerging which points to higher health and safety risks under an outsourcing strategy (Kochan et al, 2004; Mayhew, Quinlan and Bennett, 2006). Will a similar fate be bestowed on firm performance and will workers be disaffected in the process? These are important questions as unlike many of the other management strategies of the last decade it will be, in many cases, difficult for firms to reverse the process. In part, this is due to the nature of the contracts entered into and, in part due to the loss of the key skills necessary to perform the particular function.

2.2.2 Outsourcing Decision

Research on outsourcing has a long-standing history in economic research. Often, authors argue that cost differences between make and buy are crucial for the outsourcing decision. For example, (Burke and Ng 2006) discuss the outsourcing of HR functions in the context of companies' cost pressures induced by the globalization of companies. Cánez et al. (2000) present a model of outsourcing decisions and ascertain that cost effects are the most important element in the decision.

Walker and Weber (1984) analyze transaction and production cost effects of 60 make-or-buy decisions in the U.S. automobile industry. While volume uncertainty and supplier market competition have a small, but significant effect, production costs are the strongest predictor of make-or-buy decisions in their analyses. Some authors argue that important benefits of outsourcing need to be assessed against an increase in transactional cost and a decrease in flexibility – the benefits being, first, the ability to focus on the core business and strategic issues, second, the utilization of expertise and

economies of scale of the service provider, third, better management of the cost structure.

The general outsourcing model developed by Arnold (2000) illustrates that there are four components which need to be reviewed when making outsourcing decisions: outsourcing subject, outsourcing object, outsourcing partner, and outsourcing design. Initially, organizations should focus on outsourcing the subject, which involves the decision making process to determine if outsourcing is a viable option.

Organizations should then consider which internal activities might be outsourced. Outsourcing objects refers to the activity which might be outsourced and is linked to the degree of manufacturing penetration with respect to organization activities, including core activities, core-close activities, core-distinct activities, and disposable activities. Arnold (2000) states that if the activity is a core competency, highly specific and important for organizational strategy, it makes no sense to outsource these kinds of activities.

Next, organizations should consider an outsourcing partner from all possible outsourcing providers. Finally, when outsourcing internal activities, organizations need to formulate the most appropriate outsourcing design. In addition to this, Arnold (2000) suggests that organizations should focus on three major governance structures when making outsourcing decision. These include the price of external services, management control, and other governances, including contracts or strategic alliances. Despite addressing specific decision making with regard to outsourcing, this model places no regard on employee involvement.

2.2.3 Supply of Electricity

KPLC has a total of 35,000 distribution transformers spread across the country. The transformers were installed for various reasons, i.e., for new customers, reinforcement of existing transformers due to load growth, reinforcement to reduce length of the low voltage lines hence improve transformer protected distances, etc (KPLC, 2014). As such majority of the transformers will be having varied lengths of the low voltage network emanating from them, some of which will be passing in close proximity to ready and potential customers.

Data collected from KPLC regions indicates that the company has potential to connect approximately 472,002 households that are within 600 meters of the transformers through individual service lines (KPLC database, 2014). Of these households, some will be within developed areas, majority of who will be reached by a service cable drop or a pole or two, whereas in the expansive zones in the peri-urban and rural areas, construction of a 600m low voltage line for a single customer will not be an exception. Based on an average of two spans (@ 50m) single phase LV line, 30m service cable drop (10% of the service drops assumed to be three phase), 40km return transport and implementation by labour and transport contractors, the projected cost of connecting all these households is approximately USD 685million (KShs. 58.2Billion) (KPLC database, 2014).

In the financial year 2012/2013, KPLC connected 307,000 customers to the grid after implementing 123,000 maximization projects. In effect each maximization project generated approximately 2.496 customers.

Of these households, some will be within developed areas, majority of who will be reached by a service cable drop or a pole or two, whereas in the expansive zones in

the peri-urban and rural areas, construction of a 600m low voltage line for a single customer will not be an exception. Based on an average of two spans (@ 50m) single phase LV line, 30m service cable drop (10% of the service drops assumed to be three phase), 40km return transport and implementation by labour and transport contractors, the projected cost of connecting all these households is approximately KShs. 41,260,352,805 (KPLC database, 2014). The table below shows the distribution of the potential households and estimated cost of reaching them, per region. (The current and most economical practice at present is to construct almost all distribution lines using private labour and transport contractors. The calculation is thus based on using them to implement the project.

Table 1: Total project cost per region (implementation by L&T contractors)

REGION	Estimated No. of Households within 600M of Transformer	Estimated Number of Customers	Low Voltage of Line length, km
Nairobi North	44,178	110,265	4,418
Nairobi South	54,745	136,640	5,475
Nairobi West	50,333	125,628	5,033
West Kenya	115,979	289,476	11,598
North Rift	54,453	135,911	5,445
Central Rift	35,225	87,919	3,523
Coast Region	20,652	51,546	2,065
Mt. Kenya North	42,423	105,885	4,242
Mt. Kenya South	54,014	134,815	5,401
Total	472,002	1,178,086	47,200

Source: KPLC Database, 2014

2.2.4 Outsourcing for Cost Reduction and Supply of Electricity

Studies from the Resource Based View perspective suggest that firms base their decisions on whether outsourcing reduces costs or builds strategic advantages (Sharpe, 2007). This has generated much research on how using outsourcing to cut

costs or gain strategic advantages affects firm performance. A review of the literature reveals that most empirical research and discussion examine cost cutting and strategic advantages as mutually exclusive motives for outsourcing (Quinn, Doorley, and Pacquette, 2000). Moreover, news releases and the business press often cite both motives as influencing a firm's decision to outsource. In fact, 27.5% of the outsourcing announcements in Sharpe's (2007) study's sample explicitly cite both motives for outsourcing. For example, Unilever announced outsourcing its data network operations to cut overhead and increase efficiency in the short run, while enhancing product development and marketing in the long run (Keller, 1992). Similarly, Kodak announced that it anticipated immediate cost reduction and long-term gain in market share by outsourcing certain components in digital camera manufacturing (McWilliams, 2005).

Further, firms cite specific reasons for how outsourcing motivated by cost reduction can improve short-term performance. As a baseline for assessing advantages, firms equate the cost of outsourcing to the cost of acquiring additional resources to do work internally (Kavan, Saunders, and Nelson, 1999). Leveraging a vendor's ability to reduce clients' operating costs provides a comparable level of service at lower cost. Vendors' relative cost advantages may arise from scale and scope economies, which they achieve, respectively, by aggregating expertise and capacity across a large number of clients and by simultaneously undertaking a variety of projects across which they share or transfer capabilities (Loh and Venkatraman, 2001; McCarthy and Anagnostou, 2004).

Outsourcing can also generate needed cash when firms sell assets or transfer employees to vendors (Juma'h and Wood, 2003). Cost advantages may come from reducing or eliminating new investments or investment renewals (Gilley and Rasheed,

2000; Kakabadse and Kakabadse, 2005). This occurs, for instance, when vendors offer services using technologies that are more efficient than the client's or skills that are unjustifiably costly for client develop in house (Abraham and Taylor, 2006). In addition, outsourcing may reduce internal cost inefficiencies associated with administration, bureaucratic procedures, and politics (Gilley and Rasheed, 2000).

Empirical studies on the relationship between outsourcing to cut costs and its expected impact on a firm's value show mixed results. Farag and Krishnan (2003) tested the anticipated performance effect of outsourcing in which firms announced attempts to cut costs by automating an existing business function. Their findings showed significant negative CARs. In another study, Gallivan, and Kim (2006) found a marginally significant positive relationship between outsourcing motivated by cost cutting and CARs.

Outsourcing is never a fix for poor internal systems, Wright (2001) stressed. You have to fix your own processes within the company first, before outsourcing, or you will have a bigger headache on your hands than when you started.

Dissatisfaction with surprise additional costs was a powerful negative in an outsourcing review of 25 large companies by Deloitte Consulting's (www.deloitte.com) "Calling a Change in the Outsourcing Market Report, 2005". The study looked at both business process and information technology outsourcing: 70% of the companies said they have had significant negative experiences with outsourcing projects – and were dissatisfied with its costs and complexity. Also reported was the need for more senior management attention and skills than anticipated. Additional costs came from unexpected complexity of the outsourcing process and lack of transparency in vendor pricing or cost structures. 57% said they absorbed costs for

services they believed were included in contracts with vendors or outsource providers. Many indicated there were “hidden” costs in managing outsourcing projects, as well.

One reason for the results, according to Ken Landis, a senior strategy principal at Deloitte, may be that vendors and the companies that hire them have “conflicting Objectives.” Another observation: “The structural advantages envisioned do not always translate into cheaper, better, or faster services.” As a result of the findings, he observed, “outsourcing will become less appealing for large companies because it is not delivering the value as promised.”

2.2.5 Manpower Knowledge and Skills and Supply of Electricity

As Greer, Youngblood, and Gray (1999) observe, outsourcing decisions are frequently a response to an overwhelming demand for reduced costs for services. Downsizing and tougher competition mean that the HR function is under increasing pressure to demonstrate value and competence, both in terms of efficiency and effectiveness (Roberts, 2001).

Although some elements of the HR functions may have always been performed by external service providers, Brewster observes that a new dimension “is this finance-driven idea connecting outsourcing to human resource management – the idea that you can save a lot of money by outsourcing in a bid to look for experts” (quoted in Turnbull, 2002, p. 10). In addition, outsourcing is seen as a way of liberating HR professionals within the client organization to perform the more consultative, competent and strategic role of designing and implementing programs aimed at retaining the workforce and enhancing its performance. This rationale is in line with Ulrich’s (1998) influential thesis of the four roles of HR, in which he proposed that

HR should be a strategic partner, an administrative expert, an employee champion, and a change agent.

In a similar vein, Greer et al. (2009) argue that outsourcing for employee competence is consistent with the business partner role that the in-house HR department is attempting to assume. These roles arguably are where HR can add the greatest value to the organization, but they are difficult to measure quantitatively.

Outsourcing for employee competence is also seen as an effective way to bypass organizational politics and improve efficiency.

For example, according to the sales and training manager of United Kitchen, a company that has outsourced for employee competence, the company's aim was to buy an expert who could maintain an objective view, would not get embroiled in office politics, and yet could call on the support of a wide range of other experts in their own organization (Pickard, 2008). In short, the main reasons for outsourcing for employee competence appear to be fairly consistent (Sisson & Storey, 2000). Typical reasons include seeking specialist services and expertise, cost reduction, and enabling HR specialists to take on a more strategic role. In general, most commentators are convinced that outsourcing is seen not only as a cost-cutting exercise but also as a strategic tool. As Oates (2008) suggests, the outsourcing decision is a strategic one and is generally taken at a senior level.

The theme underpinning many of the recent managerial approaches is the development of a more competent and flexible workforce. This search for improved flexibility had, according to Baglioni (2000), become employers' new frontier in the management of labour. The catalyst for the introduction of flexible forms of work was

the introduction of enterprise bargaining in the late 1980s. A centralized wage system could not, it was contended, facilitate the improved competitiveness required by manufacturing enterprises (BCA, 1989). Enterprise bargaining not only allowed a variety of issues to be addressed that were seen as impediments to improved flexibility but hastened the development of a reform culture amongst management.

The term flexibility has been given a variety of meanings (Atkinson, 2007; Brunhes, 2009) although an often used typology breaks the concept into three forms (Harrison and Kelley, 2003). Functional flexibility refers to the ability of the enterprise to re-deploy labour to cover new work tasks or new production methods. The second form is wage flexibility, in which the enterprise attempts to link wage payments to productivity and product demand. Finally, numerical flexibility is the ability to adjust labour inputs to product demand. The introduction of these forms of flexibility has been well documented in Australia (Rimmer and Zappala, 2008; Stewart and Spatz, 2003). Australian enterprises have instituted all three forms of flexibility although the actual mechanisms have, in the main, been limited to multi-skilling, performance-related payment schemes and the greater use of part-time, contract and casual work.

Outsourcing contributes to all forms of flexibility; wage, functional and numerical. Outsourcing involves 'the purchase of goods or services that was previously provided internally' (Lacity and Hirschheim, 2003). Thus, management by outsourcing can achieve considerable flexibility as payment is made only for work undertaken and completed, the tasks undertaken are contract-related and not craft-related, and worker numbers can be adjusted to the requirements of the plant. This last issue is particularly relevant to those firms that experience fluctuations in demand for their major product or service. By outsourcing enterprises are free to direct the released physical, managerial and financial resources to producing a quality product or service at a

competitive price. Outsourcing can thus be a form of strategic flexibility where the firm adopts a different form of workplace organization in an endeavor to improve enterprise performance.

Nevertheless, while outsourcing can improve flexibility, the arguments for adopting this practice have tended to focus on cost considerations (McCune, 2003; Rees and Fielder, 2002). Plunkett (2008) reported that outsourcing is usually implemented to save money rather than forming part of any coherent strategy. Tully (2003) contended, however, that outsourcing 'frees companies to direct scarce capital where they have a competitive advantage'. This raises the question of strategy, although Strassman (2007) concluded that for most companies 'strategy is not driving outsourcing' but rather 'they're in financial trouble'.

Abraham and Taylor (2006) found only limited evidence that the search for lower costs was driving outsourcing, although the outsourcing of lower skilled activities appeared to be motivated by a desire to reduce hourly labour costs. Similarly, Wooden and VandenHeuvel (2006) found accessing specialized skills, coping with peak periods, and the ability to deal with one off tasks were the major reasons workplaces had used contract labour. As Sharpe (2007) argued 'outsourcing enables organizations to gain the benefit of state-of-the-art skills and technologies without investing directly in their development or exposing themselves to more risk than they care to take on'. Abraham and Taylor (2006) found support for this proposition in that smaller enterprises were likely to have outsourced more highly skilled activities.

Outsourcing may also be an impetus and agent for change. Contractors can bring to the organization more specialized and efficient ways of undertaking the given tasks (Bergstrom, 2003; Sharpe, 2007). This is particularly important if the enterprise has

work practices that are no longer relevant or economically sustainable. In addition, outsourcing enables the benchmarking of activities across firms (Sharpe, 2007). Another advantage may be improved industrial relations that result from shifting industrial relations responsibility to a third party. This can be the case where the union representing the employees currently providing the service is militant or where workplace reforms are being resisted (Way, 1993). Unions, for their part, have expressed concern about the shift to market-mediated employment arrangements and as Kusters (2007) pointed out, these practices 'can make enforcement more difficult for requirements like those for minimum wages or overtime pay'. Nevertheless, Harrison and Kelley (2003) found 'no evidence that subcontracting is associated with union-avoidance per se'.

Outsourcing can, however, create problems for the enterprise. Outsourcing decisions tend to be incremental. As Bettis, Bradley and Hamel (1992) concluded, 'a whole series of incremental outsourcing decisions, taken individually, may make economic sense, but collectively they may also represent the surrender of the business's capability to compete'. Core products or technology may be compromised and the firm could become dependent on a large range of suppliers. Furthermore, Teresko (2002) challenged the cost of outsourcing claiming that 'the economics are troubling at best and extremely costly at worst'. This view was shared by Cooper, who believed conventional accounting systems are incapable of providing the relevant cost information on which to base a decision (quoted in Davis, 2002).

In the long-term, McCune (2003) argued that outsourcing may not be the best strategy for every function. As Prahalad and Hamel (1990) argued, 'outsourcing can provide a shortcut to a more competitive product, but it typically contributes little to building the people-embodied skills that are necessary to sustain product leadership'. Deavers

(2007) reject such an argument as there 'is little empirical evidence to support their concern'. An additional problem is the co-ordination and supervision required when a company outsources activities.

2.2.6 Outsourcing for Innovativeness and Quality of Supply

Outsourcing of innovativeness or New Product Development (NPD) or introduction refers to the outsourcing of development activities for developing or extension of new products (goods and/or service), where all or the innovative part of the NPD process is purchased externally according to a contract from organizational units separate from the outsourcing firm (Rundquist, 2006). This definition implies that (A) the activity shall be an innovative (strongly contributing to the newness) part of the NPD process like the new post paid electricity gadgets, (B) the activity shall earlier have been conducted internally, and (C) the activity shall be purchased in a contractual agreement between the organizations.

The focus here is the outsourcing of activities in the NPD process, where an activity is a part of a process, with a limited scope, starting with an input and delivering an output. This can be like the activities done by manpower receiving the KPLC contract to design and survey power lines, fix meters and sign wayleaves. The unit to be outsourced is therefore the effort and competence needed to develop the substance from an input to an output. This is important to understand as most research on outsourcing deals with outsourcing of the production of the products (artifacts).

In the automotive industry 75% of the product development hours for a new Toyota are undertaken by suppliers (The Economist, 2008). Toyota is a multinational company and supplier involvement is a well-known phenomenon. However, not only

in multinationals but also in medium-size firms, as many as 67% outsourced their product development activities (Rundquist 2006).

In the above study of medium-size Swedish firms, the partner was as often a consultancy firm or a university as it was a supplier. It could therefore be appropriate to pinpoint that outsourcing of NPD has a broader meaning than just collaborating with suppliers in the construction phase. The result from the study (67%) is likely to be lower when it comes to development of new products as opposed to minor improvements or re-engineering. For example, Wasti and Liker (1997) indicated that in automotive industry most activities in product development object to outsourcing were smaller designs for manufacturability improvements.

2.2.7 Lead-time and Supply of Electricity

Lead time reduction has long been considered a fundamental objective for overall business improvement (Forrester 1961) and a cornerstone for lean thinking (Ohno 1988a, Shingo 1988). Lead time can be understood as an anticipated time to complete a process. Lead time is sometimes confused with cycle time. Cycle time is the time it actually takes for a job to go from the start to the end of the process. It is the “real” time it takes for a job to go through a process; thus, it may vary from job to job. In construction, there are two main types of lead time, (1) customer and (2) construction lead time. Customer lead time is the time between order placement and fulfillment. Construction lead time is the longest “allowable” cycle time (Hopp and Spearman 2000).

In construction projects, long lead times of product delivery often dictate the pace of the construction project. The delivery lead times have often considerable “slack time”, because there is a tendency to separate design, procurement, construction, and

installation lead times, and then to separately allocate significant “slack time” to each of the “functional” lead times. Design lead time is the time that is reserved for defining and specifying product characteristics. Procurement lead time is the time that is reserved for product acquisition. Construction lead time refers to Hopp and Spearman’s customer lead time, and installation lead time is the time reserved for installing the equipment in the building(Hopp and Spearman 2000).

The advantages of reducing lead times are considerable. According to Karmarkar (1983) long lead times in construction: increase work-in-progress; force schedules to be frozen over long periods, thus increasing the chance of schedule changes; increase safety stocks due to the protection against longer lead times and forecast errors that tend to increase with the forecast horizon; Suboptimize improvement efforts, because increased delay between fabrication and use means a loss of information about quality and satisfaction and erodes competitiveness of a company because of long response times to changing customer needs.

In some cases, these issues are even more significant in the construction industry because of its characteristically high uncertainty and variability (Tavistock Institute 1966, Koskela 1999). Further, due to long lead times, too many design decisions have to be made early and based on vague assumptions, which often leads to suboptimal solutions, quality defects, and rework. In many cases, the feedback loops from the field to the supplier are so long and inefficient that some quality defects continue to repeat throughout production even after problems have been identified.

Strategies to reduce design lead time include overlapping design tasks (Clark and Fujimoto 1991), reduction of process waste, and standardization of components and detailing. Overlapping tasks mean that multiple tasks are worked simultaneously

(Smith and Reinertsen 1998). The main idea is that the upstream task can be performed in chunks; i.e., information can be released in good time

Concurrent engineering (Winner et al. 1988) is based on the idea of overlapping tasks. Smaller batch sizes to the downstream task so that the downstream task can start before the upstream task is completed (Takeuchi and Nonaka 1986). Iansiti (1995) noted that overlapping product development tasks (concept development and implementation) also reduced uncertainty and improved the flexibility to react to market and technology changes. Overlapping requires good communication between the team members (Yazdani and Holmes 1999); therefore, organizational matters must be carefully addressed. Several analytical methods have been developed to analyze the degree and benefits of overlapping (Krishnan et al. 1997, Smith and Eppinger 1997, Steward 1981).

Parallel execution of tasks is the extreme form of overlapping. It requires decoupling of the tasks (Krishnan et al. 1997). In many cases, the decoupling may be difficult to realize, and it may require fundamental rethinking of processes. Nevertheless, the literature recognizes examples of successful parallel execution of design (Ulrich and Eppinger 1999, Sobek et al. 1999, Shingo 1988). In construction, it is common to divide larger buildings into “building blocks” that are developed and constructed relatively independently of and in parallel with each other.

Studies in construction have shown that more than 50% of design is non-value-added time (Freire and Alarcon 2000). Hence, reducing waste, such as waiting and redesign, from the design process may significantly cut the design time. Ballard (2000a) lists a number of techniques to reduce design waste including set-based design and reduced batch size. 45

The design process may also be simplified by standardizing the system design and detailed engineering processes (Wortmann et al. 1997 p. 68, Ulrich and Eppinger 1999). This will significantly cut uncertainty and reduce the number of design iterations and/or speed up the iteration process (Loch and Terwiesch 1998), since the set of solutions is reduced and predefined before the process starts.

Through introduction of a service guarantee, an organization through its existing policy makes a credible promise to its customers. For example, PTT Telecom promise to connect new telephones within three working days and to fix telephone lines within a day and a half. This promise is a credible one in a European context, where shorter lead times are highly desirable by customers (Looy, Gemmel & Dierdonck, 2003). In defining lead time promise, however, a company should be careful not to promise what would be expected anyway. This may negatively signal that service failures are likely to be expected. The presence of a service guarantee by promise of shortened lead time according to Hall (2008) can support the perception of service reliability, which is one of the most critical determinants of customer satisfaction in the public sector.

In developed as well as developing countries, disregarding their economic, social, and political environment, a sound procurement system has accomplish two sets of requirements: management requirements and policy requirements. The procurement management requirements normally include quality, timeliness, cost (more than just the price), minimizing business, financial and technical risks, maximizing competition, and maintaining integrity. The procurement policy requirements normally include economic goals (preferring domestic or local firms), environment protection or green procurement (promoting the use of recycled goods), social goals (assisting minority and woman-owned business concerns), and international trade

agreements. It is very difficult for policy makers and public procurement practitioners to make an optimal decision, as there are always tradeoffs among these goals (Federal Acquisition Institute, 2007; Thai, 2007).

Thai (2007) speaking on timeliness, mentions that if the procurement process can be done faster, the overall performance, whether real or perceived increases. This is supported by Wanyama (2010) who observes that a heightened level of performance in the public offices can be made certain if the procurement process is perceived by service providers as fast enough without unnecessary bottlenecks.

2.3 Theoretical Framework

2.3.1 Resource Dependency Theory

Resource dependence theory (RDT) is the study of how the external resources of organizations affect the behavior of the organization. The procurement of external resources is an important tenet of both the strategic and tactical management of any company. It was first argued by *Pfeffer and Salancik (1978)*.

Resource dependence theory has implications regarding the optimal divisional structure of organizations, recruitment of board members and employees, production strategies, contract structure, external organizational links, and many other aspects of organizational strategy (Deckers, 2000).

The basic argument of resource dependence theory can be summarized as follows:

Organizations depend on resources; 2) These resources ultimately originate from an organization's environment. 3) The environment, to a considerable extent, contains other organizations. 4) The resources one organization needs are thus often in the hand

of other organizations. 5) Resources are a basis of power. 6) Legally independent organizations can therefore depend on each other. 7) Power and resource dependence are directly linked: Organization A's power over organization B is equal to organization B's dependence on organization A's resources. 8) Power is thus relational, situational and potentially mutual (Pfeffer and Salancik, 1978).

Organizations depend on multidimensional resources: labor, capital, raw material, etc. Organizations may not be able to come out with countervailing initiatives for all these multiple resources. Hence organization should move through the principle of criticality and principle of scarcity. Critical resources are those the organization must have to function. For example, a burger outlet can't function without bread. An organization may adopt various countervailing strategies—it may associate with more suppliers, or integrate vertically or horizontally (Kloptick, 2001).

2.3.2 Diffusion of Innovation theory

The diffusion theory, also known as the diffusion of innovations theory, is a theory concerning the spread of innovation, ideas, and technology through a culture or cultures (Rodgers, 1962). Diffusion theory states that there are many qualities in different people that cause them to accept or not to accept an innovation. There are also many qualities of innovations that can cause people to readily accept them or to resist them.

According to diffusion theory, there are five stages to the process of adopting an innovation. The first stage is knowledge, in which an individual becomes aware of an innovation but has no information about it. Next is persuasion, in which the individual becomes actively interested in seeking knowledge about the innovation. In the third

stage, decision, the individual weighs the advantages and disadvantages of the innovation and decides whether or not to adopt it. After the decision comes implementation, in which the individual actually does adopt and use the innovation. Confirmation is the final stage. After making adopting the innovation, the individual makes a final decision about whether or not to continue using it based on his own personal experience with it. These same stages apply, to varying degrees, to groups of people in addition to individuals (Rogers, 1962).

2.3.3 Resource-Based View Theory

This study employed the Resource-Based View theory as argued by Wernerfelt, (1984). The theory argues that a firm has the ability to achieve and sustain competitive advantage and improve service delivery if it possesses resources that are valuable, rare, imperfectly imitable and non-substitutable. Not all resources are strategically relevant within an organization.

The goal of an organization is to ensure it has access to and control of valuable resources by developing and securing all the relevant resources either internally or externally. If a firm possesses critical resources that have strategic value, it is better to retain the activity in-house. On the contrary, if the strategic value of target activities is low and no internal resources are available to perform such activities, it is beneficial for the company to outsource them. For the sustainable service delivery like supplying electricity to customers companies are forced to rely on a multitude of outside suppliers for parts, software, knowhow and sales and in doing so gain access to valuable resources and external capabilities (Langlois 1990). The argument here fits with the need and factors that lead to outsourcing decisions in companies, and particularly when considering the influence of manpower outsourcing in supplying

electricity to customers and specifically looking at the outsourced tasks given to the contractors like designing and surveying power lines, fixing meters and signing wayleaves among others. .

2.4 Conceptual Framework

Figure 2.1, it presents the independent variables that constitute manpower outsourcing. They are designing cost reduction, knowledge and skills, quality of supply and lead time. These variables have a bearing on the dependent variable, namely, Electricity supply to customers.

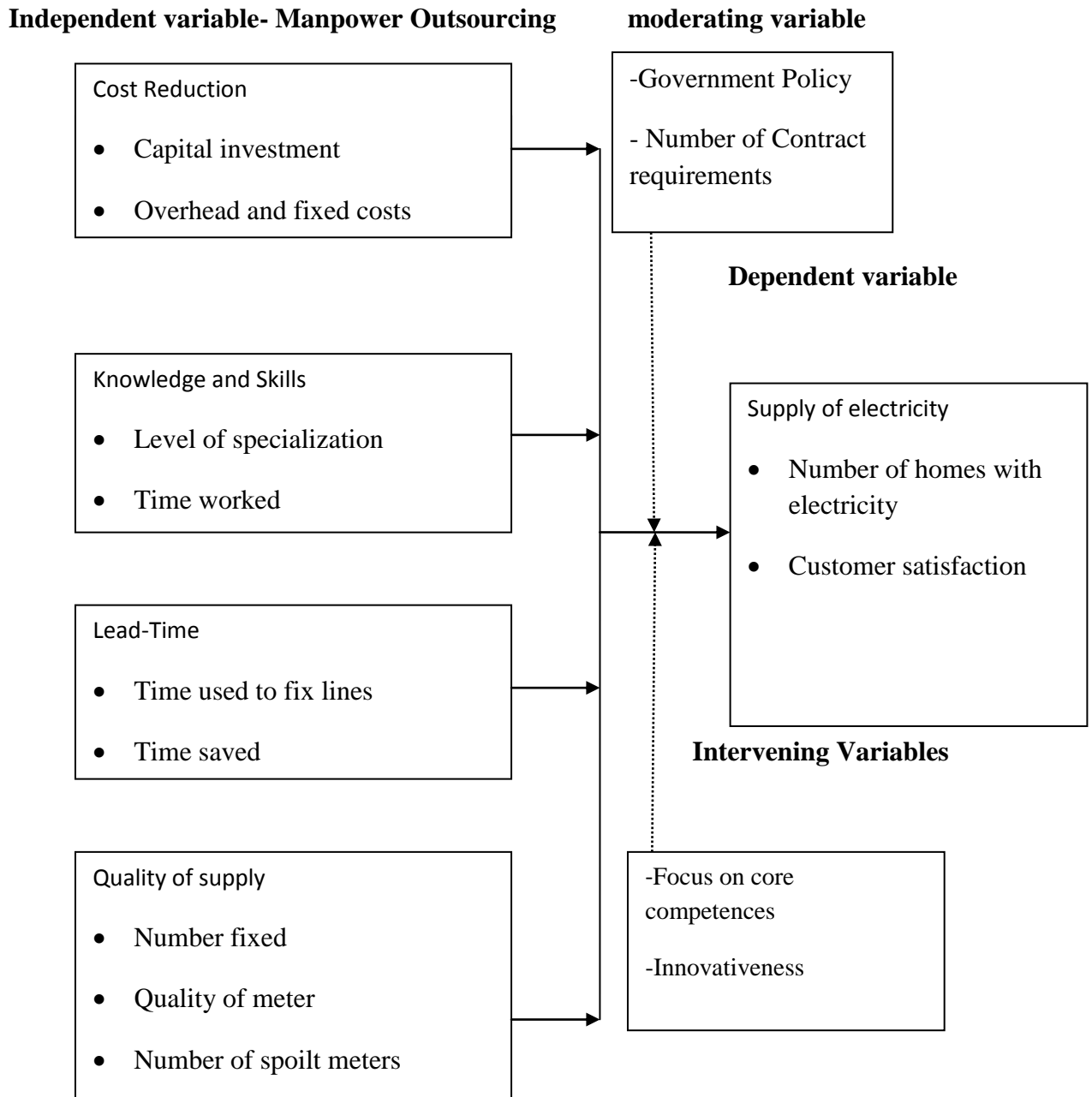


Fig 2.1 Conceptual Framework

Source:- Self

2.5 Research Gaps

Author	Title	Major findings	What is missing
Abraham, K. and Taylor, S. (2006)	'Firms' Use of Outside Contractors: Theory and Evidence'	1. outsourcing is significant for competitive advantage 2. Outsourcing decision is a strategic tool	The interplay between manpower outsourcing and quality service delivery like supply of electricity to customers
Atkinson, J. (2007).	<i>'Flexibility or Fragmentation? The United Kingdom Labour Market in the Eighties'</i>	3. outsourcing allows for strategic flexibility of employees 4. outsourcing has however fragmented the labor market	The influence of manpower flexibility on outsourced activities like cost reduction, quality of supply and how they affect service delivery like supply of electricity
Bender, J. (2009).	Firm resources and sustained competitive advantage	5. strategic resource allocation is the central focus of outsourcing	How such a resource based view can be viewed in the context of service delivery; looking at supply of services like electricity and customer satisfaction
Chiesa et al (2000)	<i>Outsourcing and Offshoring</i>	6. outsourcing works better for international markets where labor and cost of doing business is cheaper	How outsourcing works in local companies like KPLC and how such outsourcing affects service delivery

2.6 Summary of the chapter

This chapter has presented reviewed literature on the concept of outsourcing, outsourcing decision and supply of electricity literature. It further reviewed literature on cost reduction, knowledge and skills and lead-time and how they are empirically conceptualized to influence service delivery to which supply of electricity to customers is a part of. It finally presents both the theoretical and conceptual frameworks.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter examines the methodology that was used in treating the study from research design to target population and sampling. It also lays down the data collection methods, approaches and instruments. The chapter also puts down the validity and reliability tests together with the data analysis tools used and the ethical considerations.

3.2 Research Design

Descriptive research design was used in this study. According to Cooper and Schindler, (2000) explanatory research focuses on why questions. In answering the 'why' questions, the study is involved in developing causal explanations. Causal explanations argue that phenomenon Y (supply of electricity) is affected by factor X (manpower outsourcing). This design was chosen because it applies closely to influence of manpower outsourcing on supply of electricity to customers by KPLC.

3.3 Target Population

Target population is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. Mugenda and Mugenda, (2003), explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The study targeted the 120 private contractors doing outsourcing work for KPLC in

the county of Uasin Gishu. It also targeted selected customers and 3 top managers at the KPLC regional office

3.4 Sample Size and sampling procedures

Ngechu (2004) underscores the importance of selecting a representative sample through making a sampling frame. From the population frame the required number of subjects, respondents, elements or firms was selected in order to make a sample. The sampling frame for any probability sample is a complete list of all the cases in the population from which a sample is drawn (Saunders et al., 2007). A sample is a smaller and more accessible sub set of the population that adequately represents the overall group, thus enabling one to give an accurate (within acceptable limits) picture of the population as a whole, with respect to the particular aspects of interests of the study. For this study simple random sampling was used to select 60 contractors, 50% of the target population while purposive sampling was used to select the senior managers of KPLC and selected customers as they offered judgmental responses that was relevant for the study (Kothari, 2004).

3.5 Research Instruments

Questionnaires was the data collection instruments. Questionnaires were the primary sources of data. The study used both primary and secondary types of data. The data was both quantitative and qualitative data, which is a numerical measurement expressed not by means of a natural language description, but rather in terms of numbers while qualitative data is a categorical measurement expressed not in terms of numbers, but rather by means of a natural language description, respectively.

3.5.1 Questionnaire for contractors

The study employed questionnaires as data collection instrument. The researcher used a five-point likert scale questionnaires to collect the data from the contractors. Questionnaire is a research tool that gathers data over a large sample (Kombo 2006). The questionnaire was the most appropriate research tool as it allowed the researcher to collect information from a large sample with diverse background; the findings remain confidential, saves time and since they are presented in paper format there is no opportunity for bias.

3.5.2 Interview guide for customers

An interview guide to solicit in-depth information about customer satisfaction with the supply of electricity was given to randomly selected customers and the 3 senior KPLC managers. Kombo (2006) argues that an interview schedule is necessary for qualitative measurements that are necessary for a study.

3.6.1 Validity of the Instruments

Validity indicates the degree to which instruments measure what they are supposed to measure (Kothari, 2004). Content validity was most relevant for our present study. This is because it was concerned with how well the content of the instrument sampled the kinds of things about which conclusions were to be drawn. Joppe (2000) further argues that content validity refers to the extent to which a measure represents all facets of a given social construct. To establish content Validity of the instruments, two experts on the topic from Nairobi University examined the content of the instruments and advised the researcher on the content validity. Their feedback were used to revise the instruments.

3.6.2 Reliability of the instruments

Reliability refers to the level to which the measuring instruments provides consistent results (Kothari, 2004). To establish reliability of research instruments the Cronbach's coefficient alpha was used with its figure standing at 0.714. Kothari (2004) argues that any score above 0.7 is reliable. The higher the number of items in the instrument, the higher the chances of obtaining a consistent estimate of the reliability of the data (Kothari, 2004).

3.7 Data collection procedures

The researcher secured a research permit and authorization letter from the National Commission of Science and Innovation in Nairobi and KPLC headquarters before proceeding to the field for data collection. The researcher then personally visited the contractors and administered the questionnaires. The researcher later scrutinized and analyzed any relevant documents to ascertain their credibility.

3.8 Data Analysis Techniques

Quantitative data was analyzed using descriptive analysis in form of percentages and frequencies, means and standard deviations. Qualitative data obtained was transcribed, organized into categories, sub categories and themes as they emerged from the field and presented in prose form and peoples quoted words according to the themes and objectives of the study and analyzed using narrative analysis. Data analyzed descriptively was presented in tables because they give a systematic record of analysis in an easy to understand format. The Social Package for Statistical science (SPSS) software aided in data analysis. Both correlation and

Multiple Regression analyses were used to test for relationship between the independent variables and the dependent variable.

Regression Model

$$y_{od} = \alpha + \beta_1 (K\&S) + \beta_2 (CR) + \beta_3 (LT) + \beta_4 (QS) + e$$

Where the variables are defined as:

y_{od} - Supply of Electricity

KS- Knowledge and Skills

CR – Cost Reduction

LT – Lead-Time

QS – Quality of Supply

e- Error term

3.9 Ethical considerations

The respondents were informed of the purpose of the research, duration, and benefits of the study. Privacy, confidentiality, and anonymity of the data collected was assured to the respondents.

3.10 Operational Definition of variable

Objective	Variables	Measurements	Data Collection Tool	Measuring Scale	Type of Analysis	Tool of Analysis
1. Influence of cost reduction on electricity supply to customers	Employee competence	<ul style="list-style-type: none"> Capital investment Overhead and fixed costs 	Questionnaires	Nominal, ordinal, interval and ratio Scales	Descriptive Analysis. Correlation and regression	SPSS
2. Influence of manpower knowledge and skills on electricity supply to customers	Knowledge and skills	<ul style="list-style-type: none"> Level of specialization Time worked 	Questionnaires	Nominal, ordinal, interval and ratio Scales	Descriptive Analysis and correlation and regression	SPSS
3. Influence of lead-time on electricity supply to customers	Lead-time	<ul style="list-style-type: none"> Time used to fix lines Time saved 	Questionnaires	Nominal, ordinal, interval and ratio Scales	Descriptive Analysis. correlation and regression	SPSS
4. Influence of quality of supply on electricity supply to customers	Quality of Supply	<ul style="list-style-type: none"> Quality of fixed lines, wayleaves and meters Exploring new quality issues 	Questionnaires	Nominal, ordinal, interval and ratio Scales	Descriptive Analysis Correlation and regression	SPSS
5. electricity supply to customers	Electricity supply	<ul style="list-style-type: none"> Number of homes with electricity Cost of supply Customer satisfaction 	Questionnaires Interview Schedule	Nominal, ordinal, interval and ratio Scales	Descriptive Analysis Correlation and regression	SPSS

3.11 Summary

Chapter three describes the nature of the study as explanatory in order to enable the researcher to learn more about the problem. The study chapter also refers to the population of interest. Data collection method will be through questionnaires. Reliability of instruments will be measured using Cronbach coefficient alpha and the data analyzed using descriptive statistics, correlations and regression and presented in on tables, bar charts and line graphs.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter deals with data analysis, presentation, interpretation and discussion of the findings of this study. This chapter is divided into the following sections: General characteristics of the respondents; supply of electricity, effect of cost reduction on supply of electricity, effect of manpower knowledge and skills on supply of electricity, effect of lead time on supply of electricity and effect quality of supply on supply of electricity. It also offers both the regression and correlation analysis.

4.2 Response Rate

There were 60 respondents comprising of contractors. All the targeted respondents gave their responses in all questions asked and so the response rate was 100%

4.3 Demographic Information

The study was informed by key contractors and KPLC managers who are critical in determining the effect of manpower outsourcing on supply of electricity in their respective departments. Respondents were asked to give general information regarding their background.

4.3.1 Gender and Age Distribution of Respondents

The respondents were asked to give their gender and age distribution. The response is as seen in table 4.1.

Table 4.1 Gender of Respondents * Age of Respondents Cross tabulation

		Age of Respondents						
		18-25	26-35	36-45	46-55	Over		
		years	years	years	years	years	Total	
Gender of Respondents	Male	Count	5	24	19	0	0	48
		% within Age of Respondents	100.0%	96.0%	90.5%	.0%	.0%	80.0%
		% of Total	8.3%	40.0%	31.7%	.0%	.0%	80.0%
	Female	Count	0	1	2	5	4	12
	% within Age of Respondents	.0%	4.0%	9.5%	100.0%	100.0%	20.0%	
	% of Total	.0%	1.7%	3.3%	8.3%	6.7%	20.0%	
Total		Count	5	25	21	5	4	60
		% within Age of Respondents	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	8.3%	41.7%	35.0%	8.3%	6.7%	100.0%

Source: Survey Data (2014)

From the table, majority of respondents at 80.0% were male while only 20.0% were female. This implies a male dominated electricity supply contracting at the KPLC sector in the wider western region. This agrees with Arnold (2000) and Barthèlemy, (2004) who asserted that most technical works are still largely done by male workers because of their domination in technical work. On the age of the respondents, majority at 41.7% were aged between 25-35 years followed by 35.0% between 36-45 years, 8.3% for those between 18-25 years and 46-55 years and only 6.7% over 55

years of age. This is an indication that majority of respondents were adequately exposed to issues of outsourcing, having created the impression from their ages that they were mature enough to comprehend the issues of manpower outsourcing.

4.3.2 Level of Education and Work Experience

Education is important for the acquisition of necessary skills and competencies for proper work (Bardhan et al, 2006). Further, the respondents had served for varied number of years at their work stations at varied positions in the company. The result is as seen in Table 4.2.

Table 4.2 Level of Education * Level of Experience Cross tabulation

			Level of Experience				
			Below 5	5-10	10-15	Over 15	Total
			years	years	years	years	
Level of Education	Diploma	Count	0	1	1	3	5
		% within Level of Experience	.0%	11.1%	8.3%	9.7%	8.3%
		% of Total	.0%	1.7%	1.7%	5.0%	8.3%
	Higher dip	Count	0	1	8	24	33
		% within Level of Experience	.0%	11.1%	66.7%	77.4%	55.0%
		% of Total	.0%	1.7%	13.3%	40.0%	55.0%
	Degree	Count	5	7	3	1	16
		% within Level of Experience	62.5%	77.8%	25.0%	3.2%	26.7%
		% of Total	8.3%	11.7%	5.0%	1.7%	26.7%
	Masters	Count	3	0	0	3	6
		% within Level of Experience	37.5%	.0%	.0%	9.7%	10.0%
		% of Total	5.0%	.0%	.0%	5.0%	10.0%
Total	Count	8	9	12	31	60	
	% within Level of Experience	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	13.3%	15.0%	20.0%	51.7%	100.0%	

Source: Survey Data (2014)

From the Table, it is evident that majority at 55.0% were Higher diploma holders, 26.7% were first degree holders, 10.0% were master's degree holders and only 8.3% were Diploma holders. This implies that there had been efforts by the respondents to further their studies. As a result the respondents who had higher diploma and above were more knowledgeable compared to the others. More so, we can infer that the respondents had a quest to further their studies and therefore become more suitable to the changing requirements of the job market. Moreover, the fact that majority of the respondents had degree qualification and above implies that they were qualified to

reliably answer questions about effect of manpower outsourcing on electricity supply in their respective works.

On work experience, it is clear that majority at 51.7% had worked for over 15 years, followed by 20.0% who had worked for between 10-15 years, 15.0% for between 5-10 years and 13.3% for below 5 years. This implies that majority of respondents were fairly experienced. The level of experience indicated above is significant because Chandler, (2004) argues that the credibility of the information gathered in any study is informed by the many years of the respondents' service to the company. The experience proves the validity and reliability of the information obtained. Their skills, knowledge and expertise had been tested for a long period hence their perception on the matter under study had been influenced by their experience. From the table you would notice that the respondents seeking higher education was proportionate with the number of years worked, basically, implying a need to improve on education as years go by.

4.4 Supply of electricity

The study sought to find out the concept of supply of electricity exercised by the contractors. The results are as seen in table 4.3

Table 4.3 Supply of Electricity

	SA		A		N		D		SD		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
I connect electricity to more than 20 customers a month	15	25.0%	23	38.3%	8	13.3%	10	16.7%	4	6.7%	3.79	.84
My work involves designing and surveying of power lines,	9	15.0%	27	45.0%	8	13.3%	11	18.3%	5	8.3%	3.06	.95
I have received complaints from customers	4	6.7%	31	51.7%	9	15.0%	12	20.0%	4	6.7%	3.89	.85
most customers are satisfied with my connection	8	13.3%	30	50.0%	8	13.3%	8	13.3%	6	10.0%	2.06	1.1
Generally, the supply of electricity to customers is done significantly	6	10.0%	28	46.7%	10	16.7%	8	13.3%	8	13.3%	1.89	.93

Source: Survey Data (2015)

From table 4.3 it is evidently clear that majority at 63.3% agreed that they connected electricity to more than 20 customers a month. Only 23.3% disagreed and 13.3% were neutral. This implies that the company had a high supply of electricity volume indicative of high business performance. Lumpkin and Dess (2006) point out that it is essential to recognize the multidimensional nature of the performance construct. Such measures could include traditional accounting measures such as sales growth, market share, and profitability and for our purposes high connectivity to customers.

The respondents were asked if their work involved designing and surveying of power lines, signing wayleaves and fixing the meter. On this, 60.0% agreed, 26.7% disagreed and only 13.3% were neutral. This implies that the contractors had a considerable amount of outsourced work in electricity supply. This agrees with Arnold (2000) who suggested that organizations with a significant concentrated work in a highly competitive market is on its way to high performance and that with strategic outsourcing decisions that share could undoubtedly go up.

When asked whether they had received complaints from customers on their work, 58.3% agreed, 26.7% disagreed and 15.0% were neutral. According to Richard et al. (2008), a service delivery exercise is often hampered by customer and consumer complaints because it often indicates that the quality of service is not top notch. It is therefore an indicator that despite the fact that services are delivered, the delivery is awash with numerous mistakes which lends credence to poor connectivity of electricity at times.

When asked if it was their opinion that most customers were satisfied with their connection of electricity, 63.3% disagreed, 23.3% agreed and 13.3% were neutral. This implies that in spite of indications of complaints, the contractors felt that the majority of customers were satisfied with their performance further improving the impression that the decision to outsource by KPLC was necessary.

Finally, the respondents were asked if generally, the supply of electricity to customers was done frequently, significantly and effectively. On this, 56.7% disagreed, 26.7% agreed and 16.7% were undecided. This is an indication that despite negative

indications of complaining, the contractors felt that growth had not been steady as far as supply and connection of electricity was concerned. Zahra (2009) in agreeing with this result noted that both financial and non-financial measures should be used to assess organizational performance and when this is done, even in situations where service delivery is significantly favorable, other indicators may slow business performance.

From the responses obtained, customer complaints was a reality as it had the highest mean score of 3.89. All the above data was reliable.

4.5 Influence of Cost Reduction on Supply of Electricity

The second objective sought to establish the influence of cost reduction on electricity supply to customers. The results are clear in table 4.4

Table 4.4 Influence of Cost Reduction on Supply of Electricity

	SA		A		N		D		SD		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
Outsourcing reduces costs overhead, fixed costs	12	20.0%	29	48.3%	6	10.0%	7	11.7%	6	10.0%	2.70	1.0
Outsourcing for cost reduction creates better short term performance	5	8.3%	33	55.0%	7	11.7%	8	17.3%	7	11.7%	3.05	.87
It creates better long term performance	12	20.0%	28	46.7%	7	11.7%	8	13.3%	5	8.3%	2.67	.83
firm equate cost of outsourcing to cost of acquiring more resources to do work internally	10	16.7%	27	45.0%	6	10.0%	13	21.7%	4	6.7%	2.87	.94
It generates cash for sell assets or transfer employees to vendors	5	8.3%	32	53.3%	10	16.7%	8	13.3%	5	8.3%	2.69	.74
It is a major contributor to improved performance	10	16.7%	33	55.0%	5	8.3%	8	13.3%	4	6.7%	3.16	.81

Source: Survey Data (2015)

Maximum=5 Minimum=1

From table 4.4 it is clear that majority at 68.3% agreed that outsourcing reduced costs, both overhead and fixed costs. Only 21.7% disagreed and 10.0% were neutral. This is an indication that cost cutting is a factor influencing outsourcing decision in KPLC. A review of the literature reveals that most empirical research and discussion examine cost cutting and strategic advantages as mutually exclusive and important motives for outsourcing and improved business performance (Quinn, Doorley, and Pacquette, 2000). Further, studies from the Resource Based View perspective suggest that firms

base their decisions on whether outsourcing reduces costs or builds strategic advantages (Sharpe, 2007).

When asked whether outsourcing for cost reduction created better short term performance, 63.3% agreed, 25.0% disagreed and 11.7% were neutral. This implies that firms where outsourcing to grow a high short term performance needed for daily supply of electricity operations of the firm mainly through working capital management. This study agreed with a Unilever action of outsourcing its data network operations to cut overhead and increase efficiency in the short run, while enhancing product development and marketing in the long run (Keller, 1992). Further, firms cite specific reasons for how outsourcing motivated by cost reduction can improve short-term performance (Arnold, 2000).

When asked whether outsourcing for cost reduction created better long term performance, 66.7% agreed, 21.7% disagreed and 11.7% were neutral. This is an indication that part of the outsourcing decision was driven by the need to improve long term supply of electricity performance in form of profits, sales, product innovation and overall firm growth. Kavan et al (1999) had mentioned that outsourcing was helpful in improving long term performance as it reduced cost while improving the overall operations of the firm.

When asked if firms equated the cost of outsourcing to the cost of acquiring additional resources to do work internally, 61.7% agreed, 28.3% disagreed and 10.0% were neutral. This is in agreement with literature which argues that as a baseline for assessing advantages, firms equate the cost of outsourcing to the cost of acquiring additional resources to do work internally (Kavan, Saunders, and Nelson, 1999). Leveraging a vendor's ability to reduce clients' operating costs provides a comparable

level of service at lower cost. Vendors' relative cost advantages may arise from scale and scope economies, which they achieve, respectively, by aggregating expertise and capacity across a large number of clients and by simultaneously undertaking a variety of projects across which they share or transfer capabilities (McCarthy and Anagnostou, 2004). This then creates a situation where cost is reduced via outsourcing for better business performance like the supply of electricity to customers by KPLC.

When asked if outsourcing also generated needed cash when firms sold assets or transferred employees to vendors, 61.7% agreed, 21.7% disagreed and 16.7% were neutral. This implication agrees with reviewed literature that argued that outsourcing can also generate needed cash when firms sell assets or transfer employees to vendors (Juma'h and Wood, 2003). Cost advantages may come from reducing or eliminating new investments or investment renewals (Gilley and Rasheed, 2000; Kakabadse and Kakabadse, 2005). This occurs, for instance, when vendors offer services using technologies that are more efficient than the client's or skills that are unjustifiably costly for client develop in house (Abraham and Taylor, 2006).

Finally, the respondents were asked if cost reduction was a major contributor to improved performance. On this, 71.7% agreed, 20.0% disagreed and 8.3% were neutral. This is an indication that cost reduction was a major factor influencing supply of electricity to customers through KPLC. Wright (2007) had argued that a major factor that firms consider before any major outsourcing decision is the need to reduce costs and consequently improve and maintain firm competitiveness and performance.

From the responses obtained, KPLC considered cost reduction as an influence on outsourcing decision for supply of electricity as it had the highest mean score of 3.16.

All the above data was reliable as most of the respondents indicated that outsourcing helped to both manage and reduce much needed fixed and operation costs.

4.6 Influence of Knowledge and Skills on Supply of Electricity

One factor that has been found to influence the outsourcing decisions of firms is employee competence or knowledge and skills which consequently influences organizational performance like the supply of electricity for KPLC. To find out if it was also true for KPLC, this study's second objective sought to determine the influence of employee competence on supply of electricity. The result is as seen in table 4.5.

Table 4.5 Influence of Knowledge and Skills on Supply of Electricity

	SA		A		N		D		SD		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
I am not highly skilled	9	15.0%	16	26.7%	3	5.0%	19	31.7%	13	21.7%	3.18	.81
Our workers have long standing experience	8	13.3%	12	20.0%	3	5.0%	31	51.7%	6	10.0%	3.28	.82
We have experts and specialist in the Electricity industry	12	20.0%	24	40.0%	4	6.7%	12	20.0%	8	13.3%	2.67	.87
Outsourcing has become necessary because of the unskilled labour	14	23.3%	26	43.5%	2	3.3%	14	23.3%	4	6.7%	2.47	1.1
The KPLC is not as competitive as it should be because of unskilled labour	6	10.0%	33	55.0%	2	3.3%	14	23.3%	5	8.3%	2.65	.93
lack of in-house skilled labour has lowered our their electricity supply capabilities	8	13.3%	36	60.0%	3	5.0%	8	13.3%	5	8.3%	2.60	.84

Source: Survey Data (2015) Maximum=5 Minimum=1

From table 4.4, it is clear that majority at 53.3% agreed with the assertion that the contractors were highly skilled. Only 41.7% agreed and 5.0% were undecided. This implies that a significant number of the contractors were high on skilled labour and overall competent employees. Outsourcing has been viewed as an impetus and agent for change. Competent and skilled workers can bring to the organization more specialized and efficient ways of undertaking the given tasks (Bergstrom, 2003; Sharpe, 2007). This is particularly important if the enterprise has work practices that are no longer relevant or economically sustainable.

However, when asked whether the company had workers with long standing experience, 61.7% disagreed, 33.3% agreed and 5.0% were neutral. This implies that majority of workers were not experienced mainly due to the high turnover of experienced workers to other workstations or careers. Arnold (2000) had argued that the lack of experience by workers affects their competence consequently creating the need for outsourcing for a company that wants to retain its high competitiveness and performance.

The respondents were then asked if the company had experts and specialist in the electricity industry in all sectors, ie IT, Operations etc. On this, 60.0% of respondents agreed, 33.3% disagreed and 6.7% were undecided. This is a positive indication that every sector in the connection of electricity business has an expert or specialist to guide the others in performing important tasks. This may further imply that with such experts and specialists, there would be no need to outsource HR functions. However, According to Teresko (2002), outsourcing is still necessary as despite the presence of experts and specialists, a predominant number of functional employees still remain

incompetent due to lack of consistent training and the high turnover of the few trained employees.

When asked if outsourcing had become necessary because of the unskilled labour and lack of specialists, 68.3% agreed, 28.3% disagreed, and 3.3% were undecided. This implies that employee competence is one of the reasons for outsourcing in KPLC and improves performance in the process. This seems to go against review by Prahalad and Hamel (1990) who argued that, 'outsourcing can provide a shortcut to a more competitive product, but it typically contributes little to building the people-embodied skills that are necessary to sustain product leadership. Deavers (2007) however, reject such an argument as there 'is little empirical evidence to support their concern.'

The respondents were asked if the company was not as competitive as it should be because of unskilled labour and therefore created need to outsource. The result shows that 65.0% agreed, 31.7% disagreed and 3.3% were neutral. This implies that firms have a deep need to remain competitive in a highly cutthroat market and that outsourcing of HR functions has become a strategic option for KPLC to remain or introduce competitive advantage for higher business performance. Such an option, it has been seen, cannot be effectively used if firms maintain their incompetent employees and as a result, outsourcing to firms that can offer such a competence has become necessary.

When the respondents were finally asked if lack of in-house skilled labour had lowered electricity supply capabilities over time, 73.3% agreed, 21.7% disagreed and only 5.0% were neutral. This implies that lack of in-house employee competence had dipped on the long run, business performance. Such a situation is argued in literature with majority noting that business performance is often directly proportionate to

employee competence (Uddin,2005; Gilley and Rasheed, 2000). From the responses obtained, KPLC did not have workers with long standing experience as it had the highest mean score of 3.28. All the above data was reliable as most of the respondents indicated that outsourcing was done taking the lack of employee competence to keen consideration.

4.7 Influence of Lead-Time on Supply of Electricity

The third objective of the study sought to determine the influence of lead time on supply of electricity to customers. The result is as seen in table 4.6.

Table 4.6 Influence of Lead-Time on Supply of Electricity

	SA		A		N		D		SD		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
As contractors we do our jobs and deliver on time	10	16.7%	31	51.7%	5	8.3%	12	20.0%	2	3.3%	2.42	.61
There have been complaints from customers on the long time we take to supply	6	10.0%	31	51.7%	5	8.3%	14	23.3%	4	6.7%	2.65	1.0
We as outsourced manpower pride ourselves on the timeliness of our services	10	16.7%	27	45.0%	7	11.7%	13	21.7%	3	5.0%	2.53	.94
KPLC outsources to us because they want supply of electricity to be done on time	11	18.3%	29	48.3%	6	10.0%	8	13.3%	6	10.0%	2.40	.85
A short lead time is necessary for supply of electricity to customers	6	10.0%	29	48.3%	7	11.7%	13	21.7%	5	8.3%	2.62	1.1

Source: Survey Data (2015)

Maximum=5 Minimum=1

From the table, majority at 68.3% agreed that as contractors they did their jobs and delivered on time, 31.7% disagreed and 5.0% were neutral. This implies that the contractors with the outsourced task of ensuring that the customers got supplied with electricity has successfully shortened lead-time of supply thus implying that the manpower outsourcing was working (Rundquist, 2006). As a consequence, outsourcing decision is inherent in this scenario to help effectively manage the long lead-time that accompany operations in parastatals like KPLC.

The respondents were asked if there had been complaints from customers on the long time contractors took to supply electricity. On this 61.7% agreed, 30.0% disagreed and 8.3% were undecided. This is an indication that the contractors despite their opinion that they took less time had customers who wanted the time shortened further. This is especially important considering that the service delivery rendered is for customers and that the question of lead time will continue to bite.

When asked if in the same vein, as outsourced manpower the contractors prided themselves on the timeliness of their services, 61.7% agreed, 11.7% were neutral and 26.7% were neutral. This is an indication that the contractors had gotten to a place where they thought that their services were under the correct lead-time. The issue of shortened lead time has been discussed by Quinn et al (2000) who argued that the lead-time will continue to be prided by committed workforce with an occasional customer dissatisfaction.

When the respondents were asked if therefore, KPLC outsourced to contractors because they wanted supply of electricity to be done on time, 66.7% agreed, 23.3%

were undecided and 10.0% were neutral. This is an indication that KPLC was faced with the high cost of developing new products internally, it chose the option of outsourcing to help create quality products while reducing lead-time at the same time. According to Quinn et al (2000), many firms in operational industries have difficulties staying competitive today. They often lack resources due, for example, to higher costs in comparison with competitors abroad or higher costs compared to larger firms to engage in a much needed innovation and as a result require strategic outsourcing to keep up.

The respondents were asked if a short lead time was necessary for effective supply of electricity to customers, 58.3% agreed, 31.7% disagreed and 8.3% were undecided. This is an indication that shortened lead-time was a significant factor influencing outsourcing decision in KPLC to help them improve supply of electricity. To increase resources, to share risks or to lower costs, many firms choose to outsource, collaborate with other firms or organizations in product development. This collaboration can be in the form of, for example, partnership, joint ventures, networks, research contracts or alliances (Chiesa et al., 2000).

From the responses obtained the contractors considered lead-time as an influence on supply of electricity as it had the highest mean score of 3.17. All the above data was reliable.

4.8 Influence of quality of Supply on Supply of Electricity to Customers

The fourth objective sought to establish the influence of quality of supply on supply of electricity. The result is as seen in table 4.7

Table4.7 Influence of Quality of Supply on Supply of Electricity

	SA		A		N		D		SD		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
Fixing meters, signing wayleaves, fixing and supervising power lines is a common work to ensure the supply of electricity to customers	11	18.3%	27	45.0%	6	10.0%	12	20.0%	7	11.7%	2.72	.63
It is however a complex matter which we find challenges in doing	8	13.3%	18	30.0%	7	11.7%	25	41.7%	6	10.0%	2.67	.59
Effective supply of electricity has been made possible because of my effective Fixing meters, of power lines	9	15.0%	26	43.3%	7	11.7%	15	25.0%	6	10.0%	3.01	.84
KPLC has maintained their contract with us because of the good job we do in Fixing meters, power lines	13	21.7%	23	38.3%	6	10.0%	13	21.7%	8	13.3%	2.80	.64
However, occasionally poor Fixing meters, power lines has had adverse effects on supply of electricity to customers	11	18.3%	21	35.0%	10	16.7%	15	25.0%	8	13.3%	2.47	.10
It is absolutely necessary to ensure that the supply of electricity to customers is effective	14	23.3%	26	43.3%	5	8.3%	10	16.7%	6	10.0%	2.92	.83

Source: Survey Data (2015)

Maximum=5 Minimum=1

From the table, it is clear that majority at 63.3% agreed that fixing meters, signing wayleaves, fixing and supervising power lines was a common work to ensure the supply of electricity to customers. Only 31.7% were not sure and 5.0% were undecided. This is an indication that the respondents were aware of what was core and in the process implying that they were aware what to outsource and the kind of work they needed to do to effectively supply electricity.

When asked if fixing meters, signing wayleaves, fixing and supervising power lines was however a complex matter which they found challenges in doing, majority at 51.7% disagreed, 43.3% agreed and only 5.0% were neutral. This is an indication that a significant number of contractors did not consider the work as challenging may be because they were experts in the field. Arnold (2000) had mentioned that when dealing with experts while they may find the work they are doing challenging they love and are willing to do it effectively. This lends credence to high quality work as Arnold (2000) notes.

The respondents were asked if effective supply of electricity had been made possible because of contractors' effective fixing meters, signing wayleaves, fixing and supervising power lines. On this, 58.3% agreed, 35.0% disagreed and only 6.7% were neutral. This implies a long standing opinion in contracting that KPLC was getting quality for their outsourcing decision to remain highly performing. This opinion is held by Gilley and Rasheed, (2000) among others.

When asked whether KPLC had maintained their contract because of the good job contractors were doing in fixing meters, signing wayleaves, fixing and supervising power lines, 60.0% agreed, 35.0% disagreed and 6.7% were neutral. This implies again the long standing opinion in contracting that KPLC was getting quality for their

outsourcing decision to remain highly performing (Dekkers, 2000;Klopach, 2000). Perhaps the most often cited strategic reason for outsourcing is to allow the organization to better focus on its core competencies (Sislian and Satir, 2000; Quinn, 2000).

When asked if however, occasionally poor fixing meters, signing wayleaves, fixing and supervising power lines had had adverse effects on supply of electricity to customers, 53.3% agreed, 38.3% disagreed and 8.3% were neutral. This implies that the quality of supply occasionally was hampered. In outsourcing, resources are typically redirected to where they make the greatest positive impact, namely the organization's core functions and sometimes the quality of service may not be up to date (Kakabadse and Kakabadse, 2000).

Finally, the respondents were asked if fixing meters, signing wayleaves, fixing and supervising power lines was absolutely necessary to ensure that the supply of electricity to customers was effective. On this 66.7% agreed, 26.7% disagreed and 6.7% were neutral. This is an indication that the quality of supply to customers was very essential in manpower outsourcing. This is in agreement with literature that argues that more recently the main drivers for outsourcing appear to be shifting from cost to strategic issues such as core competence and flexibility (Elmuti and Kathawala, 2000). All the above data was reliable.

4.9 Data Analysis of Interview Schedule with Selected Customers and KPLC

Managers

An interview was done on selected customers to get their opinion about the supply of electricity by KPLC. Majority of the Customers used KPLC power frequently and the

overall quality of the product, the overall experience, was basically satisfactory. However, they felt that there were other products that were more than satisfactory. In addition, the customers had contacted KPLC customer care services citing need for such interaction. This is so because the customers argued that as soon as they were dissatisfied with any KPLC service, they simply could not replace it with another company product because of monopoly.

4.10 Correlation Analysis

As part of the analysis, Pearson's Correlation Analysis was done on the Independent Variables and the dependent variables. The results is as seen on Table 4.8

Table 4.8 Correlation Analysis

		Supply of Electricity	Lead-Time	Knowledge and Skills	Quality of Supply	Cost Reduction
Supply of Electricity	Pearson Correlation	1				
	Sig. (2- tailed)					
	N	60				
Lead-Time	Pearson Correlation	.655**	1			
	Sig. (2- tailed)	.000				
	N	60	60			
Knowledge and Skills	Pearson Correlation	.635**	.433**	1		
	Sig. (2- tailed)	.000	.000			
	N	60	60	60		
Quality of Supply	Pearson Correlation	.578	.410**	.127**	1	
	Sig. (2- tailed)	.000	.000	.002		
	N	60	60	60	60	
Cost Reduction	Pearson Correlation	.712**	.205**	.038	.557**	1
	Sig. (2- tailed)	.000	.005	.000	.000	
	N	60	60	60	60	60

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

Source: Survey Data (2015)

Pearson correlation analysis was conducted to examine the relationship between the variables. The measures were constructed using summated scales from both the independent and dependent variables. As cited in Wong and Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8, to avoid

multicollinearity. Since the highest correlation coefficient is 0.712 which is less than 0.8, there is no multicollinearity problem in this research (Table 4.7).

All the independent variables had a positive correlation with the dependent variable with cost reduction having the highest correlation of ($r=0.712$, $p < 0.01$) followed by lead-time with a correlation of ($r=0.655$ $p < 0.01$) and then knowledge and skills with a correlation of ($r=0.635$ $p < 0.01$), quality of supply has the least correlation of ($r=0.578$ $p < 0.01$). This indicates that all the variables are statistically significant at the 99% confidence interval level 2-tailed. This shows that all the variables under consideration have a positive relationship with the dependent variable.

4.11 Regression Analysis

Since the measures that are used to assess the primary constructs in the model are quantitative scales, regression analysis can be used to achieve this end. Regression analyses are a set of techniques that can enable us to assess the ability of an independent variable(s) to predict the dependent variable(s). As part of the analysis, Regression Analysis was done. The results is as seen on Table 4.9, 4.10 1nd 4.

Table 4.9 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.882 ^a	.848	.841	.196

a. Predictors: (Constant), Knowledge and Skills, Cost reduction, Lead-time, Quality of supply

b. Dependent Variable: Supply of electricity

From table 4.9 it is clear that the R value was .882 showing a positive direction of R is the correlation between the observed and predicted values of the dependent variable. The values of R range from -1 to 1 (Wong and Hiew, 2005). The sign of R indicates the direction of the relationship (positive or negative). The absolute value of R

indicates the strength, with larger absolute values indicating stronger relationships. Thus the R value at .882 shows a stronger relationship between observed and predicted values in a positive direction. The coefficient of determination R^2 value was 0.841. This shows that 84.1 per cent of the variance in dependent variable (supply of electricity) was explained and predicted by independent variables (Knowledge and Skills, Cost reduction, Lead-time, Quality of supply)

Table 4.10 ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	242.743	3	47.046	114.491	.000 ^a
	Residual	12.888	237	.684		
	Total	255.630	240			

a. Predictors: (Constant), Knowledge and Skills, Cost reduction, Lead-time, Quality of supply

b. Dependent Variable: Supply of Electricity

The F-statistics produced (F = 114.491.) was significant at 5 per cent level (Sig. F < 0.05), thus confirming the fitness of the model and therefore, there is statistically significant relationship between Knowledge and Skills, Cost reduction, Lead-time, Quality of supply, and supply of electricity.

Table 4.11 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.767	.361	.287	7.668	.000
	Knowledge and skills	.385	.078	.393	5.968	.000
	Cost Reduction	.168	.065	.193	2.593	.004
	Lead-Time	.284	.065	.324	4.383	.000
	Quality of Supply	.329	.064	.352	5.129	.000

a. Dependent Variable: Organizational performance

The t-value of constant produced ($t = 7.668$) was significant at .000 per cent level (Sig. $F < 0.05$), thus confirming the fitness of the model. Therefore, there is statistically significant relationship between Knowledge and Skills, Cost reduction, Lead-time, Quality of supply and Supply of electricity.

Cost reduction was significant ($p < 0.05$) in supply of electricity. Most empirical research and discussion examine cost cutting and strategic advantages as mutually exclusive and important motives for outsourcing and improved performance (Quinn, Doorley, and Pacquette, 2000). Further, studies from the Resource Based View perspective suggest that firms base their decisions on whether outsourcing reduces costs or builds strategic advantages making cost reduction as a major outsourcing decision motivator (Sharpe, 2007).

Knowledge and skills was significant ($p < 0.05$) in electricity supply. Outsourcing has been viewed as an impetus and agent for change. Competent and skilled workers can bring to the organization more specialized and efficient ways of undertaking the given tasks (Bergstrom, 2003; Sharpe, 2007). This is particularly important if the enterprise has work practices that are no longer relevant or economically sustainable. Further, Arnold (2000) had argued that the lack of experience by workers affects their competence consequently creating the need for outsourcing for a company that wants to retain its high competitiveness.

Quality of supply was significant ($p < 0.05$) in electricity connectivity. This implies that quality of supply affects electricity supply in KPLC. This is in agreement with literature that argues that more recently the main drivers for outsourcing appear to be shifting from cost to strategic issues such as core competence and flexibility (Elmuti and Kathawala, 2000).

Lead-time was significant ($p < 0.05$) in supply of electricity. This is an indication that outsourcing is one of many ways to reach the goals of shortened lead-time. Firms use outsourcing of new innovation to lower costs, to cut peaks in NPD efforts, or to get access to resources which did not previously exist within the firm. From: Regression Model

$$y_{od} = \alpha + \beta_1 (\text{K\&S}) + \beta_2 (\text{CR}) + \beta_3 (\text{LT}) + \beta_4 (\text{QS}) + e$$

Thus;

$$y_{od} = 2.767 + 0.393 (\text{K\&S}) + 0.193 (\text{CR}) + .324 (\text{LT}) + 0.352 (\text{QS})$$

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains a summary of findings, the conclusions drawn and the recommendations made thereof. It finally offers the suggestions for further research.

5.2 Summary of Findings

The purpose of the study was to determine the effect of manpower outsourcing on electricity supply to customers in Eldoret West Sub County. Simple random sampling was used to select 60 respondents comprising of contractors out of the targeted 120 contractors with KPLC. The respondents were given questionnaires while an interview schedule was used on the KPLC management. The validity of the instruments were measured by the supervisors while reliability was measured using Cronbach coefficient formula. Descriptive statistics and inferential statistics were used to analyze and interpret data. The main findings of the study based on the research objectives were as follows:

5.2.1 Cost reduction influencing electricity supply to customers

The first objective on cost reduction has a correlation of ($r=0.712$, $p< 0.01$) and regression results of ($\beta=.193$, $t=2.593$, $p<0.004$). This is an indication that cost reduction was a major influence on the supply of electricity to customers. This also implies that cost reduction as an element in outsourcing of manpower influenced the supply of electricity.

5.2.2 Knowledge and Skills influencing electricity supply to customers

Based on the second objective on knowledge and skills, on this knowledge and skills had a correlation of ($r=0.635$ $p < 0.01$) and regression results of ($\beta=.393$, $t=5.968$, $p < 0.000$). This is an indication that employee competence was a major influence on the connection of electricity to customers.

5.2.3 Lead-Time influencing electricity supply to customers

The third objective on Lead-time had a correlation of ($r=0.655$ $p < 0.01$) and regression results of ($\beta=.324$, $t=4.383$, $p < 0.000$). This is an indication that lead-time was a major influence on the supply of electricity. Lead-time was found as an element that reduces the amount of time an operation is done and consequently was found to have an influence on supply of electricity to customers.

5.2.4 Quality of Supply influencing electricity supply to customers

The fourth objective on quality of supply had the least correlation of ($r= 0.578$ $p < 0.01$) and regression results of ($\beta=.352$, $t=5.129$, $p < 0.000$). This is an indication that quality of supply was a major influence on supply of electricity.

5.3 Conclusion of the study

Based on the objectives and findings of the study, the following are the conclusions

Based on the first objective, cost reduction had a correlation of ($r=0.712$, $p < 0.01$) and regression results of ($\beta=.193$, $t=2.593$, $p < 0.004$). This is an indication that cost reduction was a major influence on the supply of electricity to customers. Most empirical research and discussion earlier reviewed examine cost cutting and strategic advantages as mutually exclusive and important motives for outsourcing for improved business performance (Quinn, Doorley, and Pacquette, 2000). Further, studies from the Resource Based View perspective agrees with this conclusion by suggesting that

firms base their decisions on whether outsourcing reduces costs or builds strategic advantages making cost reduction as a major outsourcing decision motivator (Sharpe, 2007; Stalk, 2008; Monczka and Trent, 2008). It can therefore be concluded that manpower outsourcing for cost reduction had a significant positive influence on connection of electricity to customers by KPLC in Eldoret West Sub County.

Based on the second objective, knowledge and skills ($\beta=.393$, $t=5.968$, $p<0.000$) had significant influence on supply of electricity to customers. This is an indication that employee competence was a major influence on the connection of electricity to customers. This agrees with literature earlier reviewed (Arnold, 2000; Roberts, 2001; Wright 2001; Teresko, 2002) which argued that for firms to remain competitive and improve performance they needed to provide high level of employee competence and where they cannot, outsourcing becomes a viable option. It can therefore be concluded that manpower outsourcing for knowledge and skills had a significant positive influence on connection of electricity to customers by KPLC in Eldoret West Sub County.

Based on the third objective, Lead-time had regression results of ($\beta=.324$, $t=4.383$, $p<0.000$). This is an indication that lead-time was a major influence on the supply of electricity. The issue of lead-time is a factor that is in agreement with Chiesa et al (2000) who noted that a shortened lead-time can play a big role in service delivery and particularly to ensure that the tasks are met. It can therefore be concluded that manpower outsourcing for shortened lead-time had a significant positive influence on connection of electricity to customers by KPLC in Eldoret West Sub County.

Based on the fourth objective, quality of supply with regression of ($\beta=.352$, $t=5.129$, $p<0.000$). This is an indication that quality of supply was a major influence on supply

of electricity. This agrees with literature which asserted that outsourcing has been viewed as an impetus and agent for change and that focus on core competencies and quality of service delivery has become a major driving force for strategic options, a major part of which is outsourcing (Bergstrom, 2003; Sharpe, 2007). It can therefore be concluded that manpower outsourcing for quality of supply had a significant positive influence on connection of electricity to customers by KPLC in Eldoret West Sub County.

5.4 Recommendations of the study

Based on the objectives and conclusions this study recommends;

1. Based on the first objective on cost reduction, KPLC should employ strategic and well thought out outsourcing to further reduce operating and overhead costs for further firm growth and effective connection of electricity to customers
2. Based on the second objective on knowledge and skills, KPLC and the contractors should offer better terms of service and proper training to help improve employee competence and reduce costs of outsourcing its HR functions for connection of electricity to customers.
3. Based on the third objective on lead-time, KPLC and the contractors should carefully consider the issue of shortened lead-time to ensure that the customers are getting the services on time.
4. Based on the fourth objective on quality of supply, KPLC and the contractors should invest in quality connection of electricity tools to give customers a return on their money with quality supply services.

5.5 Suggestions for further research

This study proposes that further research be done in the following area:

1. Human resource factors influencing outsourcing decision in industries.
2. Human Resources are critical for the success of any organization and a deeper study into how to effectively outsource this function is necessary as it has not been an area of concentration in past studies, especially in the textile industry in Kenya.

REFERENCES

- Abraham, K. and Taylor, S. (2006). 'Firms' Use of Outside Contractors: Theory and Evidence', *Journal of Labor Economics*, 14 (3): 394-424.
- Arnold, U. (2000). New dimension of outsourcing: a combination of transaction cost economics and the core competencies concept. *European Journal of Purchasing & Supply Management*, 6, 23-29.
- Atkinson, J. (2007). 'Flexibility or Fragmentation? The United Kingdom Labour Market in the Eighties', *Labour and Society*, 12 (1): 87-105.
- Baglioni, G. (2000). 'Industrial Relations in Europe in the 1980s', in G. Baglioni and C. Crouch (eds), *European Industrial Relations: The Challenge of Flexibility*, Sage, London, 1-41.
- Bardhan, I., Whitaker, J., and Mithas, S. (2006). "Information Technology, Production Process Outsourcing, and Manufacturing Plant Performance", *Journal of Management Information Systems*, 23(2),
- Barthèlemy, J. (2004). "The seven deadly sins of outsourcing", *Academy of Management Executive*, Vol. 17, No. 2, pp 87-100
- Bender, J. (2009). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120
- Bergstrom, R. (2003). 'The Heart of New Reality', *Production*, January: 40-44.
- Bettis, R., Bradley, S., and Hamel, G. (1992). "Outsourcing and Industrial Decline", *Academy of Management Executive*, 6(1)
- Bhagwati B, Jagdish C., Bugger, G (2004). The Muddles over Outsourcing, *The Journal of Economic Perspectives*, Vol. 18, No. 4. (Autumn, 2004), pp. 93-114.
- Brunhes, B. (2009). 'Labour Flexibility in Enterprises: A Comparison of Firms in Four European Countries', in *Labour Market Flexibility: Trends in Enterprises, Organisation for Economic Cooperation and Development*, Paris, 11-36.
- Burke, R.J./Ng, E. (2006). The changing nature of work and organizations: Implications for Human Resource Management: In: *Human Resource Management Review*, Vol. 16, No. 2, pp. 86-94.
- Cannon, D. (2009). 'Keeping Outsourcing in Hand', *Chief Executive*, November-December: 38-41.
- Cappelli, P. (1995). 'Rethinking Employment', *British Journal of Industrial Relations*, 33 (4): 563-602.
- Cáñez, L.E., Platts, K.W., Probert, D.R. (2000). Developing a Framework for Make-or-Buy Decisions. In: *International Journal of Operations & Product Management*, Vol. 20, Issue 11, pp. 1313-1330.

- Chandler, M. (2004). *Management Rights and Union Interests*, McGraw-Hill, New York.
- Chiesa, B. Catchpole, L. Hall, D. (2000). *Outsourcing and Offshoring*. In: *CESifo Forum 2/2004*, pp. 17-21
- Cooper, D.R and Schindler P.S (2000). *Business Research Methods*. 10th edition, McGraw Hill, International Edition.
- Davis, E. (2002). 'Global Outsourcing: Have U.S. Managers Thrown the Baby Out with the Bath Water'. *Business Horizons*, 35: 58-65.
- Deavers, K. (2007). 'Outsourcing: A Corporate Competitiveness Strategy, Not a Search for Low Wages', *Journal of Labor Research*, 18 (4): 503-519.
- Dekkers, G. G (2000). "The New Corporate Architecture", *Academy of Management Executive*, 9(3),
- Dess, G. G., Rasheed, A., McLaughlin, K., and Priem, R. (1995). "The New Corporate Architecture", *Academy of Management Executive*, 9(3),
- Elmuti, D. and Kathawala, Y. (2000). "The effects of global outsourcing strategies on participants' attitudes and organizational effectiveness", *International Journal of Manpower*, Vol. 21 No. 2, pp. 112-28.
- Farag, N. I., and Krishnan, M. S. (2003). The market value of IT outsourcing investment announcements: An event-study analysis. In D. Galletta and J. Ross (Eds.), *Proceedings of the 9th Americas Conference on Information Systems*: 1623-1629. Atlanta: Association for Information Systems.
- Field, N. I., (2005). *The market value of Research*; 1623-1629. Atlanta: Association for Information Systems.
- Ford, J.W., Joseph, M. and Joseph, B. (1993). "Service quality in higher education: A comparison of Universities in the US and New Zealand using SERVQUAL: Unpublished manuscript, Old Dominion University, Norfolk, VA
- Gallivan, M. J., & Kim, J. W. (2006). The market's perception of the transactional risks of information technology outsourcing announcements. *Journal of Management Information Systems*
- Gilley, K. M. and Rasheed, A. (2000). "Making More by Doing Less: An Analysis of Outsourcing and its Effects on Firm Performance" *Journal of Management*, 26(4).
- Harris. P. (2008). "Outsourced Learning: A New Market Emerges", *Training and Development*, 57(9). 30-38
- Harrison, B. and Kelley, M. (2003). 'Outsourcing and the Search for Flexibility', *Work, Employment & Society*, 7 (2): 213-235.
- Joppe, W.G (2000). *Exploring Marketing Research*. The Dryden Press. 4th edition.

- Juma'h, A. H., and Wood, D. (2003). The price sensitivity of business service outsourcing announcements by UK companies. *International Journal of Information Technology & Decision Making*, 2, 161-180.
- Kakabadse, A. E, and Kakabadse, N. (2005). Outsourcing: Current and future trends. *Thunderbird International Review*, 47, 183-204.
- Kavan, T., Saunders, M., and Newak, J. (2009). 'Human Resource Strategies and Contingent Workers: The Case of Safety and Health in the Petrochemical Industry', *Human Resource Management*, 33 (1): 55-77.
- Keller, M. (2002). 'New Employment Relationships and the Labor Market', *Journal of Labor Research*, 18 (4): 551-559.
- Kochan, T., Smith, M., Wells, J. and Rebitzer, J. (2004). 'Human Resource Strategies and Contingent Workers: The Case of Safety and Health in the Petrochemical Industry', *Human Resource Management*, 33 (1): 55-77.
- Kosters, M. (2007). 'New Employment Relationships and the Labor Market', *Journal of Labor Research*, 18 (4): 551-559.
- Kotabe, M. and Murray, J. (2000). "Linking Product and Process Innovations and Modes of International Sourcing In Global Competition: A Case of Foreign Multinational Firms", *Journal of International Business Studies*, 3,
- Kombo, B.G. (2006). *Fundamentals of Research Methods*; 3rd Edition. Macmillan Publishers
- Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*. 2nd Edition.
- Klopack, L. (2000). "The Upside of Outsourcing", *Kiplinger's Personal Finance*
- Lacity, M. and Hirschheim, R. (2003). *Information Systems Outsourcing*, Wiley, New York,
- Langlois, R. N. (1990). "Creating External Capabilities: Innovation and Vertical Disintegration in the Microcomputer Industry." *Business and Economic History* 19(1): 93-102.
- Loh, L. Venkatraman, H. (2001). "An Organizational-Economic Blueprint for Information Technology Outsourcing: Concepts and Evidence." *Proceedings of the 15th International Conference on Information Systems*, Vancouver, Canada, S: 73-89.
- Mellewigt, T. Kabst, R. (2003). Determination of Outsourcing. *Journal of The Bonn Institute of management* pp. 641-659

- Matiaske, W., and Mellewigt, T. (2002). *Motive, and Outsourcings* – Befunde und Defizite der empirischen Outsourcing-Forschung. In: *Zeitschrift für Betriebswirtschaft*, 72. Jg., pp. 641-659.
- Mayhew, C, Quinlan, M. and Bennett, L. (2006). 'The Effects of Subcontracting/ Outsourcing on Occupational Health and Safety', *Industrial Relations Research Centre, Monograph no. 38, University of New South Wales*.
- Mayhew, C. and Quinlan, M. (2006) 'The Effects of Outsourcing upon Occupational Health and Safety: A Comparative Study of Factory-based and Outworkers in the Australian TCF Industry', *Industrial Relations Research Centre, Monograph no. 40, University of New South Wales*.
- McCarthy, I., and Anagnostou, A. (2004). The impact of outsourcing on the transaction costs and boundaries of manufacturing. *International Journal of Production Economics*, 88, 61-71.
- McCune, J. (2003). 'Thin Is In', *Small Business Reports*, May: 30-40.
- McWilliams, G. (2005). Power switch: In electronics, U.S. companies seize momentum from Japan. *Wall Street Journal*, 10:A.1
- Merino, F. and Rodriguez, D. R. (2007). "Business Services Outsourcing by Manufacturing Firms", *Industrial and Corporate Change*, 16(6), 1147-1173
- Miles, R. and Snow, C. (1992). 'Causes of Failure in Network Organizations', *California Management Review*, Summer: 53-72.
- Mol, M. J., Tulder, R. J., and Beije, P. R. (2005). "Antecedents and Performance Consequences of International Outsourcing", *International Business Review*, 14(5), 599-617.
- Monczka, R. and Trent, R. J. (2008). "Global Sourcing: A Development Approach", *International Journal of Purchasing and Materials Management*, 27(2), 2-8.
- Moses Kemibaro, *The Adam Magazine*, (April 2011)
- Nayak, J. K., Sinha, G., and Guin, K. K. (2007). "The Determinants and Impact of Outsourcing on Small and Medium Enterprises--An Empirical Study", *IIMB Management Review*, 19(3), 277-284.
- Picot, A., Reichwald, R./Wigand, R.T. (2003). *Die grenzenlose Unternehmung: Information. Organisation and Management*, 5., aktualisierte Aufl., Wiesbaden.
- Piore, M. and Sabel, C. (2004). *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books, New York.
- Plunkett, S. (2008). 'Outsourcing: A New Way to Save', *Business Review Weekly*, 1 November: 8-10, 14.

- Prahalad, C. and Hamel, G. (1990.) 'The Core Competence of the Corporation', *Harvard Business Review*, 11 (3): 79-91.
- Quinn, J. B. (2000). *Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry*, New York: Free Press,
- Quinn, B. J., and Hilmer, E G. (2004). Strategic outsourcing. *Sloan Management Review*, 35(4), 43-55.
- Quinn, J.B. (2000). Strategic outsourcing: Leveraging knowledge capabilities. *Sloan Management Review*, 40(4), 9-21.
- Quinn, B. J., Doorley, T. L., and Paquette, P. C. (2000). Technology in services: Rethinking strategic focus. *Sloan Management Review*, 31(2), 79-87.
- Razzaque, M. A., and Sheng, C. C. (2008). Outsourcing of logistics functions: A literature survey. *International Journal of Physical Distribution & Logistics Management*, 28,
- Rees, G. and Fielder, S. (2002). 'The Service Economy, Subcontracting and the New Employment Relations: Contract Catering and Cleaning' *Work, Employment Society*,(3): 347-368.
- Rimmer, M. and Zappala, J. (2008). 'Labour Market Flexibility and the Second Tier', *Australian Bulletin of Labour*, 14 (4): 564-591.
- Roberts, J. B. (2001). *Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry*, New York: Free Press,.
- Rundquist, G. (2006). 'The Service Economy, Subcontracting and the New Employment Relations: Contract Catering and Cleaning' *Work, Employment & Society*, (3): 347- 368.
- Saunders, C. S., Gebelt, M., and Hu, Q. (2007). "Achieving Success in Information Systems Outsourcing", *California Management Review*, 39(2),
- Sharpe, M. (2007). 'Outsourcing, Organizational Competitiveness, and Work', *Journal of Labor Research*, 18 (4): 535-549.
- Sislian J. and Sativ (2000). 'Corporate Little Helpers', *Australian Business*, 7 August: 44-46, 48.
- Smith, V. (2001). 'Institutionalizing Flexibility in a Service Firm: Multiple Contingencies and Hidden Hierarchies' *Work and Occupations*, 21 (3): 284-307.
- Stalk, G. (2008). 'Time--The Next Source of Competitive Advantage', *Harvard Business Review*, 9 (4): 41-51.

- Stewart, A. and Spatz, L. (1993) 'Flexibility in the Workplace: Some Preliminary Findings', *International Journal of Employment*, April, pp. 102-114.
- Strassman, P. (2007). 'Outsourcing: A Game for Losers', *Computerworld*, 21 August: 1-3.
- Teresko, J. (2002). 'Outsourcing: Tie It to the Right Objectives', *Industry Week*, 1 June: 42-44.
- Tully, S. (2003) 'The Modular Corporation', *Fortune*, 8 February: 106-115.
- Uddin, M. (2005). Outsourcing – The Benefits and Risks. In: *Human Resource Management Review*, Vol. 16, Issue 2, pp. 269-279.
- Vosberg, D. (2002). *'Institutionalizing Flexibility in a Service Firm: Multiple Contingencies and Hidden Hierarchies'* *Work and Occupations*
- Walker, G./Weber, D. (1984). A Transaction Cost Approach to Make-or-Buy Decision. In: *Administrative Science Quarterly*, Vol. 29, pp. 373-391.
- Wasti, S.N. and Liker, J.K. (1997). Risky Business or Competitive Power? *Supplier Involvement in Japanese Product Design*. *Journal of Product Innovation Management*, 14, 337-355.
- Way, N. (1993). *'Melbourne Water Flushes Out Costs'*, *Business Review Weekly*, 24 September: 31-32.
- Wernerfelt, B. (1984). A Resource-Based View of the Firm. In: *Strategic Management Journal*, pp. 171-180.
- Williamson, O.E. (1990). *Operations Management: Creating Value along the Supply Chain*, 6th Edition, John Wiley and Sons, Hoboken, NJ, USA
- Williamson, O.E./Wachter, M. L./Harris, J.E. (1975). Understanding the Employment Relation: Analysis of Idiosyncratic Exchange. In: *Bell Journal of Economics*, Vol. 6, No. 1, pp. 250-280.
- Wooden, M. and VandenHeuvel, A. (2006). *'The Use of Contractors in Australian Workplaces'* *Labour Economics and Productivity*, 8 (2): 163-194.
- Wong, H.W and Hiew S.F (2005). *Market Research: Text and Cases*, 7th edition. Richard D. Irwin Inc.
- Wright, B. (2001). A Resource-Based View of the Firm. In: *Strategic Management Journal*, pp. 171-180.

APPENDICES

APPENDIX 1: LETTER OF TRANSMITAL

29th January, 2015

**The Managing Director
Kenya Power and Lighting Company
P.O.Box 30099
Nairobi**

Dear Sir/Madam

I am a student at University of Nairobi pursuing a Masters of Arts degree in Project Planning and Management. I am undertaking research on the influence of manpower outsourcing on electricity supply to customers by KPLC in Eldoret West Sub County. The findings of this study will be purely used for academic purposes. Any information given will be confidential and only for the purpose of this study.

Thank You in advance.

Yours Faithfully,

Maureen Amore

Reg No. L50/71689/2014

APPENDIX II: Questionnaire for Contractors

Instructions

Kindly answer all questions and tick

PART A-DEMOGRAPHIC DATA

Tick where appropriate [√]

1. Gender

Male Female

2. Age

18-25 years 26-35 years 36-45years

46-55years Over 55 Years

3. Highest level of education attained

Diploma Degree Masters PHD

Any other specify.....

4. How many years have you worked at your work?

Below 5 5-10

10 -15 15, and above

PART B: Information on Connection of electricity to customers

5. Kindly indicate the extent to which you agree or disagree with the following statements. Please indicate by ticking [√] your view. The Value of Scale is given below

SA-Strongly Agree (5), A-Agree (4), U-Undecided (3), D-Disagree (2), SD-Strongly Disagree (1)

	SA	A	U	D	SD
	5	4	3	2	1
I connect electricity to more than 20 customers a month					
My work involves designing and surveying of power lines, signing wayleaves and fixing the meter					
I have received complaints from customers on my work					
It is my opinion that most customers are satisfied with my connection of electricity					
Generally, the supply of electricity to customers is done frequently, significantly and effectively.					

6. Part C: Information on Cost Reduction

	SA	A	U	D	SD
	5	4	3	2	1
Outsourcing reduces costs, both overhead and fixed costs					
Outsourcing for cost reduction creates better short term performance					
Outsourcing for cost reduction creates better long term performance					
Our firm equate the cost of outsourcing to the cost of acquiring additional resources to do work internally					
Outsourcing also generates needed cash when firms sell assets or transfer employees to vendors					
Cost reduction is a major contributor to improved performance					

7. PART D: Information on manpower knowledge and skills

	SA	A	U	D	SD
	5	4	3	2	1
I am highly skilled					
Our workers have long standing experience					
We have experts and specialist in the Electricity industry in all sectors, ie IT, Operations etc					
Outsourcing has become necessary because of the unskilled labour and lack of specialists					
The KPLC is not as competitive as it should be because of unskilled labour and therefore needs to outsource					
lack of in-house skilled labour has lowered our their electricity supply capabilities over time					

7. Part E: Information on Lead Time

	SA	A	U	D	SD
	5	4	3	2	1
As contractors we do our jobs and deliver on time					
There have been complaints from customers on the long time we take to supply electricity					
We as outsourced manpower pride ourselves on the timeliness of our services					
KPLC outsources to us because they want supply of					

electricity to be done on time					
A short lead time is necessary for effective supply of electricity to customers					

8. PART F: Information on Quality of supply

	SA	A	U	D	SD
	5	4	3	2	1
Fixing meters, signing wayleaves, fixing and supervising power lines is a common work to ensure the supply of electricity to customers					
Fixing meters, signing wayleaves, fixing and supervising power lines is however a complex matter which we find challenges in doing					
Effective supply of electricity has been made possible because of my effective Fixing meters, signing wayleaves, fixing and supervising power lines					
KPLC has maintained their contract with us because of the good job we do in Fixing meters, signing wayleaves, fixing and supervising power lines					
However, occasionally poor Fixing meters, signing wayleaves, fixing and supervising power lines has had adverse effects on supply of electricity to customers					
Fixing meters, signing wayleaves, fixing and supervising power lines is absolutely necessary to ensure that the supply of electricity to customers is effective					

APPENDIX II: Interview Schedule for Customers

How often do you typically use your electricity?

- Once a year
- Daily
- Weekly
- Once a month
- Every 2-3 months
- 2-3 times a year less often
- Do not use

How does the electricity perform?

	Miserably	Somewhat Satisfactory	Very Satisfactory	Delightfully
Overall quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connection experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installation or first use experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Usage experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After purchase service (warranty, repair, customer service etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How important was performance on these attributes?

	Not Important	Somewhat Important	Important	Very Important
Overall quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connection experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installation or first use experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Usage experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

After purchase service (warranty, repair, customer service etc)

Overall, how satisfied were you with your electricity]?

- Not at all satisfied
- Somewhat Satisfied
- Satisfied
- Very Satisfied
- Delighted

Have you ever contacted customer service?

- Yes
- No

If you contacted customer service, have all problems been resolved to your complete satisfaction?

- Yes, by the company or its representatives.
- Yes, by me or someone outside the company
- No, the problem was not resolved

APPENDIX III: Interview Guide for Managers

1. How does cost reduction influence electricity supply to customers in Eldoret

West Sub County?

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2. How does manpower knowledge and skills influence electricity supply to customers in Eldoret West Sub County?

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.....

.....

3. How does lead-time influence electricity supply to customers in Eldoret West Sub County?

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

4. How does quality of supply influence electricity supply to customers in Eldoret West Sub County?

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

5. What are some of your recommendations to improve manpower outsourcing for quality supply of electricity to customers?

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