

**BUSINESS PROCESS RE-ENGINEERING AS A STRATEGIC TOOL FOR  
SERVICE IMPROVEMENT AT KENYA POWER AND LIGHTING COMPANY  
LTD**

**KEN ODHIAMBO OKUMBE**

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REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF  
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## DECLARATION

This research project is my unique work and has not been submitted for a degree in this or some other college/ university.

Sign ..... Date .....

**Ken Odhiambo Okumbe**

**D61/5139/2017**

This research project has been submitted for examination with my approval as the university lecturer.

Sign ..... Date. ....

**Dr. Caren Angima**

**Department of Business Administration**

**School of Business**

**University of Nairobi**

## **DEDICATION**

Dedicated to everyone involved in making the world go round.

## **ACKNOWLEDGEMENT**

To God for the guidance and serenity throughout this degree program.

To my academic supervisor, Dr. Caren, for the contributions and support. Her effortless encouragement has made this research project completely successful.

To my family for the motivation.

I could always do it again.

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## ABBREVIATIONS AND ACRONYMS

<b>BoFED</b>	: Bureau of Finance and Economic Development
<b>BPR</b>	: Business Process Re-engineering
<b>EAPLC</b>	: East African Power and Lighting Company
<b>ERP</b>	: Enterprise Resource Program
<b>ICT</b>	: Information and Communication Technology
<b>IT</b>	: Information Technology
<b>KETRACO</b>	: Kenya Electricity Transmission Company
<b>KPLC</b>	: Kenya Power and Lighting Company Ltd
<b>OO-BEM</b>	: Object Oriented Business Engineering Methodology
<b>PADM</b>	: Process Analysis and Design Method
<b>REA</b>	: Rural Electrification Authority
<b>RBV</b>	: Resource- Based View
<b>SAP</b>	: Systems Applications & Products
<b>SMS</b>	: Short Messaging Service

## **ABSTRACT**

Remodeling of an organization's core business can be achieved through several strategic tools. Business Process Re-engineering (BPR), as one of the strategic tools, is best to use because of its gradual and step by step implementation. The study objectives were to determine BPR strategies adopted by Kenya Power and Lighting Company Ltd (KPLC) and the relationship between BPR and Service Delivery at Kenya Power and Lighting Company Ltd. The theoretical framework was based on the Resource Based View and Lewin's Model of Change. This study was a case study since the focus is on one organization, KPLC. Data gathered from the research was qualitative in nature. Thirteen top managers of KPLC were required to give data that was used for analysis. Interview guide was utilized since it yields more noteworthy collaboration and least refusal rates. Responses from the interviewees were synthesized by content analysis so as to bring out common themes from the various responses. The study concludes that KPLC has adopted collaboration, benchmarking, experimental trial and business process automation as BPR strategies to enhance service improvement. Consequently, the study established that reengineering of business processes has a positive impact on service delivery at KPLC. The study recommends that change management is important to enable efficient transition of organizational processes to enhance customer value. Organizational change should be effectively implemented across the organization's departments. This will enable employees view Business Process Reengineering as a constructive measure rather than a re-organization plan. This ensures that set goals and objectives are met. The study recommends that the company ensures effective communication channels for changes at all levels exist. This can be achieved by changing the strategic approach of the company.

# **CHAPTER ONE**

## **INTRODUCTION**

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

Business environments are constantly changing and so it is imperative for organizations to adapt to these changes in order to survive and prosper (Johnsons & Scholes, 2008). Business Process Re-engineering (BPR) plays vital roles in the planning, coordination and control of resources that are used in the production of products and services of an organization (Magutu, Nyamwange & Kaptoge, 2010). As the business environment changes, so does the customers' needs. A firm therefore needs to adapt to the dynamics in order to be at par with its customers' requirements. This is achieved by reengineering the core business processes of an organization with the main motivation to improve the value of products and services perceived by internal and external customers of the company (Chogo, 2013).

This study was based on resource-based view (RBV) and Lewin's model of change as theoretical frameworks. The resource-based view of a business' performance is influenced by its particular resources and internal capabilities. Researchers add that businesses must have knowledge on their internal capabilities, since they are required to create strategies relating to outperforming competition with these capabilities. Lewin (1995) gives four stages undergone by an organization through its change process. These include awareness creation, decision to adopt, implementation and institutionalization.

The adoption of Business Process Re-engineering (BPR) is critical in ensuring that Kenya Power and Lighting Company (KPLC) reduces transmission and distribution losses in its supply of electricity. These losses are characterized as technical and system losses that occur when electricity is dissipated by the equipment and conductors in which it is supplied. The adoption of BPR is of integral importance to KPLC in the operations and performance of the company. Typical objectives that may be served by BPR at KPLC include reducing power losses, operational cost savings, lowered peak demand, new or increased revenue streams, improved long-term growth prospects and improved customer satisfaction.

### **1.1.1 Business Process Re-engineering**

BPR is a radical redesign of core business processes to achieve dramatic improvements in cost, quality, service, speed, cycle time and overall productivity. It is a process that cuts across an organization's levels of management with the main focus on satisfying customer requirements and expectations. It calls for an organization to completely abandon its old ways of operations and adapt to new ways of improved service delivery (Hammer & Champy, 2001).

The most common methodologies applied towards BPR implementation include the following: Hammer and Champy methodology based on business processes, jobs, managers and values as the four points of business system diamond. Davenport's and Short's methodology emphasizes on Information Technology (IT) as the main focal point of BPR. Object Oriented Business Engineering Methodology (OO-BEM) by Jacobson that begins by envisioning and reverse engineering to forward engineering (Romney, 2014).

A fourth methodology, the Process Analysis and Design Method (PADM) features a framework of tools and techniques for iterative activities. All these methodologies follow the basic phases of defining the business vision, process selection, analysis, design, implementation and review for continuous improvement (Muthu, Whitman & Cheraghi, 2004).

An organization would be driven to re-engineer its processes due to various factors. Where there is a substantial gap between stake-holders' expectations and actual service delivery in business processes such as production quality and customer care services. Quality of output may be improved by ensuring better input materials while for customer care, this may involve hiring professional and qualified customer care personnel with excellent skills (Peppard & Rowland, 2015). Successful implementation of BPR methodologies leads an organization to improve on efficiency and effectiveness of its processes, reduction in operational costs, faster service delivery due to reduction in throughput time, higher flexibility in terms of alternatives and high quality service hence increasing customer value (Muthu, Whitman & Cheraghi, 2004).

### **1.1.2 Service Delivery**

An economic activity that is intangible and cannot be stored or be given any kind of ownership is referred to as service delivery. This activity involves information exchange, all assets, knowledge, relationships from suppliers and management and development of the relationships (Romano & Giannakins, 2000). Organizations improve service delivery through integration of the supply chain which results to improvement in delivering of services and products. Provision of quality services to the customers is the main function of service delivery (Grönroos & Ojasalo, 2004).

In the economics field, a service is a commodity that is intangible. Similarly, all services are intangible hence also called economic goods (Kanter, 2014). The delivery of a high level of the quality service is an economic good where the buyer of the service is usually not the owner of the service unless under the contract. Such kind of benefits that are derived from provision of a service is the evidence that holds the buyer responsible to pay (Coe, 2000).

The success of production in an organization is expressed through delivery of quality services. Quality of services offered by an organization enables it to remain viable economically as it is stabilized by the customers. Competitiveness is increased by the quality of services. Competitiveness is achieved through; improving the operational processes, noting and solving of problems encountered, providing effective service production and other processes (Mboroki, 2012).

### **1.1.3 Kenya Power and Lighting Company Ltd**

KPLC is involved in transmission, distribution and retail of electricity. The company was founded in 1922. It was established as the East African Power and Lighting Company (EAP&L) (Oginda, 2013). EAP&L rebranded to KPLC in 1983 and was involved in both the generation and supply of electricity. Changes in the energy sector led to the formation of Kenya Electricity Generating Company (KenGen) in 1997, Rural Electrification Authority (REA) and Kenya Electricity Transmission Company (KETRACO) in 2008 (Aketch, 2015). The company is divided into twelve major divisions; Network Management, Information and Communication Technology, Supply Chain Management, Customer Service, Business Strategy, Infrastructure Development, and Internal Audit.

Others are Street Lighting, Connectivity, Finance, Human Resource and Management and Company Secretary, Legal & Corporate Affairs.

The Kenya Power and Lighting Company (KPLC) plays a critical role in the economic development of the country through supply of electricity for both domestic and corporate customers (KPLC, 2017). In this context, the energy sector is listed as one of the ten pillars of the country's Vision 2030 in which more electricity connection and efficiency in electricity consumption amongst other aspects need be achieved (Vision 2030 Secretariat, 2017). The country is also facing an increasing electricity demand at the moment from a peak demand of 899 MW in 2014/2015 to 1,585 MW in 2015/2016 year with an increase of customer base from 735,144 to 4, 890, 373(565.2% increase) in the same period. In its operations, KPLC faces challenges such as reliability of power supply to the diverse customer base. The company therefore targets in its 2016/17-2020/21 network strategic plan to adapt diverse new technology in its supply of electricity (KPLC, 2015b).

## **1.2 Research Problem**

Institutions need to have the necessary requirements to match BPR implementation. Remodeling of an organization's core business can be achieved through several strategic tools. Business Process Re-engineering would be the best to use because of its gradual and step by step implementation. It offers appropriate strategies for customer value creation and enhancement as it seeks to counteract the day to day challenges of resource management in these corporations by first determining a firm's vision, designing the process and final implementation.

The methodologies also emphasize on service delivery review and continuous improvement of the processes. This is necessary for a firm's growth and development.

In order to survive and prosper, a firm needs to undergo at least one major change almost every five years. Business Process Re-engineering is considered a strategic tool for an organizational change (Cackowski, 2012).

Implementation of BPR especially in KPLC is a key factor for enhancing customer value. KPLC has close interaction with citizens who are the customers for whom value addition is important for prosperity of the corporation. KPLC contributes greatly to the economic development by offering vital services in the sector of energy. The core functions of KPLC are to improve the living standards and promote economic development. Successful implementation of BPR methodologies leads an organization to improve on efficiency and effectiveness of its processes, reduction in operational costs, faster service delivery due to reduction in throughput time, higher flexibility in terms of alternatives and high quality service hence increasing customer value. In the past six or seven years the demand for electricity has been growing at about 6% every year. Kenya Power and Lighting Company Ltd therefore needs to meet the peak demand of electricity as a result.

Several empirical studies have put forward fundamental principles, concepts and models in an effort to explain Business Process Re-engineering, and their impact on service delivery. Studies done on BPR have focused on BPR and firm efficiency (Yuri & Federico, 2012) but not the use of BPR and service delivery.

Another study on BPR's impact on banks and other financial institutions narrows down to Pakistan (Nadeem & Ahmad, 2016) but does not widen up to the methodologies applied by the commercial state corporations. BPR has improved the performance of banks in Pakistan and for other locations in different business environments, this is yet to be confirmed.

BPR methodology has enhanced Spanish universities' systems and this can be applied to multiple industries. This study is politically tilted and narrows down on Spain (Adenso-Diaz & Canteli, 2001).

In Kenya, a study on Business Process Re-engineering implementation and service delivery of Kenya Revenue Authority (Odede, 2013) looks at the reform initiatives on tax collection put in place such as the revenue administration reform and modernization program. It does not focus on BPR methodologies and performance of KPLC. Determinants of BPR success have been examined by Owino (2015). It focuses on thirty selected companies in Nairobi and whose respondents are solely the managers. Achieng (2014) also looked at BPR implementation and the financial performance of Kenya Commercial Bank. These studies are not exhaustive as they concentrate only on specific regions and institutions and not KPLC. A gap that exists from these past researches calls for a study that concentrates particularly on Business Process Re-engineering implementation and service delivery at KPLC prompting the research question: what is the impact of BPR on service improvement at KPLC?

### **1.3 Objective of the Study**

The objectives of this study were;

1. To determine the BPR strategies adopted by Kenya Power and Lighting Company Ltd.
2. To determine the relationship between BPR and Service Delivery of Kenya Power and Lighting Company Ltd.

#### **1.4 Value of the Study**

These study findings are expected to provide insight to the management of KPLC in providing well informed, best ways and techniques to put in place to achieve the best service delivery amidst adoption of BPR. The study may also help other organizations with intentions to adopt BPR to understand its applicability in effective and efficient service delivery especially in the Public Sector.

Government and other policy makers of KPLC, will find this study to be of great significance as it may offer an insight on how business process re-engineering as a strategic tool ensures service improvement at Kenya Power and Lighting Company. It will also be useful to potential service providers since it will provide much insight as to where and how can they be of value to other firms globally.

The findings of this study are expected to assist academicians with available information and serve as reference points during their research. They are expected to add to the body of knowledge through building on the field of operations as well as strategic management.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter documents the literature review used in the study. Areas covered include review of theories, BPR practices, BPR and service delivery and empirical studies.

#### **2.2 Theoretical Foundation**

Business Process Re-engineering is based on certain fundamental theories that support its implementation for an overall achievement of an organization goals and objectives. This study relates BPR to the theoretical framework. The theoretical framework was based on the Resource Based View and Lewin's Model of Change.

##### **2.2.1 Resource Based View**

The Resource-Based View (RBV) of a company highlights the organization's inner circumstance as a driver for competition and underscores the benefits that companies have made to remain competitive. The theory consolidates ideas from organizational financial matters and vital administration. As stated by Barney (1991), the competitive edge and positive performance of an entity is clarified by the distinctiveness of its capacities. Wernerfelt (1995), states that the resource-based view as a foundation for the competitive edge of an entity lies solely in the use of physical or intangible resources available within the organization.

Changing a temporary competitive strategy into a sustained competitive edge demands that resources are diverse in character, imperfectly mobile and readily available. This will effectively change into precious resources which are neither perfectly distinctive nor substitutable effortlessly. According to (Barney, 1991) the immobility and heterogeneity are not enough factors for sustained competitive advantage.

In the context of the BPR processes, the firms must reorganize the organizational, human and physical capitals with a view of optimally utilizing their resources to achieve the organizational and operational performance objectives.

### **2.2.2 Lewin's Model of Change**

Change in an organization is a process that involves series of steps (Lewin, 1995). In his Stage Theory of Organizational Change, Lewin gives four stages undergone by an organization through its change process. These include awareness creation, decision to adopt, implementation and institutionalization. Implementation of BPR follows closely this theory as it calls for identifying the core business processes, making decision to redesign and implement (Morgan, 1986).

The theory holds that a firm that is well endowed with knowledge is capable of outperforming its adversaries. This is because such a firm is able to extract value from what it holds to attain abilities it did not have before. It can thus be argued that knowledge is a key driver of change and thus its coherent application through a BPR strategy is key in seeing out a successful organizational change (Lewin, 1995).

## **2.3 Business Process Re-engineering Strategies**

Business Process Re-engineering is a radical redesign of core business processes to achieve dramatic improvements in cost, quality, service, speed, cycle time and overall productivity (Magutu et al., 2010). Implementation of BPR cuts across an organization's processes at various levels with the main focus of satisfying customer requirements and expectations. This is may take various methodologies majority of which share common important features especially in the initial stages (Romney, 2014).

A process of rethinking and redesigning of work processes is termed as business process re-engineering. This process entails finding out what the customers really need and then assessing the organization's goals, missions and objectives (Romney, 2014). This process requires the organization to go deeper into its needs and ensure that changes are made from the root and not only the superficial face so that all problems are effectively solved (Gouranourimi, 2012). Changing of an organization requires the organization to answer some questions in how it operates and runs its activities and how it ensures that its mission is accomplished. Other strategies that involve successful reengineering of a business are discussed below.

### **2.3.1 Focus on Customer**

It has been observed that nowadays customers do not only demand on quality of the products they purchase but rather are strict on what they require (Hammer & Stanton, 2005). As per their argument, customers now demand for more alternatives as they have gained more knowledge on what they need.

Another observation that has been made by Kumar (2002) is that nowadays customers and the organizations do not only create relationships through buying, selling or delivering. Factors such as customer service, pricing, production, consulting and distribution have also contributed to the strengthening of the customers and organization's bond.

Hammer (1990) suggested that managers need to use technology to automate processes to that do not add any value to the organization as this has been observed to be the main challenge faced by organizations. Customers' needs and demands are not valued by most of the practices in the organizations (Hammer, 1990). Most of these practices that add no value to the customer need to be completely eliminated rather than using technology to advance them.

### **2.3.2 Staff Involvement**

The use of a top-model was initially considered as the form that was used to process the design of business process re-engineering (Myriam, 2003). This work therefore, requires selection of a small team that is effective in ensuring that redesigning is done effectively as it is broad in scope. It was only the duty of the managers in the organizations who were involved in the reorganizing and making changes where innovation was concerned. Despite this fact, a team was also needed in ensuring that the redesigning process was effectively completed. This team's main role was to identify standards and enablers in the whole process (Davenport & Stoddard, 2004).

Most of the organizations have not fully embraced the act of encouraging participation of employees in the process of re-engineering despite it being well known as a critical factor in ensuring their success (Taylor et al., 1997). Businesses that were involved in re-engineering were surveyed by Archer & Bowkers (2005) in a study they undertook. They found out that the re-engineering process was unsuccessful in organizations where there was no employee participation, poor communication channels and inability of employees to own the process.

### **2.3.3 Top Management Leadership**

The support of the senior management, users, an effective BPR team and proper funding from stakeholders are required in ensuring organizational commitment. Securing of support from stakeholders need to be ensured for the success of any BPR project. Another factor that is very significant in success of BPR projects is availability of strong leadership. Organizational commitment is the main factor that should be emphasized in the process of reengineering (Dooley & Johnson 2001).

A clear vision should be created by leadership, it should be strong and visible to ensure that BPR is effectively influenced (Odede 2013). Before the process begins, the whole team selected needs to be informed of the process and what it involves and the role they play. This reduces employees from resisting and rather embracing the process making even more effective. The teams are expected to be determined, consistent, strong and fully engaged to the process to ensure its success. Implementation of BPR and the team that does it also affects its success. Successful redesigning of businesses is ensured by greatly motivated, creative and skilled BPR teams (Al-Mashari & Zairi, 2001).

### **2.3.4 Information and Communications Technology**

The process of re-engineering has also been found to be significantly affected by Information and Communications Technology (ICT). Organizations make use of ICT within and between processes that enable changes. Most of the organizations have not fully appreciated ICT, but most have accepted it according to Larsen (2003). Integration of ICT is important in ensuring that efficiency is increased, cost is effected and competitiveness is ensured.

The challenges faced in most organizations can be dealt with by implementing modern computers and communication skills (Hammer, 1990). It is therefore essential for BPR processes to take advantage of Information Technology (IT) to ensure competitive advantage in planning of its strategies. Shared services, intellectual assets, physical assets and networks which are information technology functions should be included in the process of BPR (Hammer, 1990). Another important factor in ensuring success in delivery of information resources is configuration of information technology infrastructure as argued by (Hammer, 1990). Use of strategy and information systems should be key in implementing an effective information technology infrastructure. Systems, data and computer architecture details make up information systems strategy.

### **2.4 Business Process Re-engineering and Service Delivery**

BPR in an organization is the main determinant of service delivery. Lead time consists of procurement and delivery strategies, supplier location and transport choice factors (Beamon, 1999).

Other elements through servqual method include flexibility, assurance, tangibles and responsiveness with flexibility measuring organizations' ability to respond to different magnitudes and time taken in delivering to customers' needs. Another factor suggested by Beamon (1999) was utilization of resources as a factor that can be used to measure lead time as it is responsible for estimating and accurately providing the funding of requirements in outsourcing.

Business Process Re-engineering (BPR) plays vital roles in the planning, coordination and control of resources that are used in the production of products and services of an organization (Magutu, Nyamwange & Kaptoge, 2010). The success of every organization begins with recognition of customers and their input to the firm. Customers would be more willing to remain tied to a firm only when they get what they want from it. As the business environment changes, so does the customer's need and therefore a firm also needs to adapt to the dynamics in order to be at par with its customers' requirements. This is achieved by reengineering the core business processes of an organization with the main motivation to improve the value of products and services perceived by internal and external customers of the company (Chogo, 2013).

The delivery of services is a very crucial aspect in an organization as it deepens the relationship between customers and the organization. Quality of services offered by an organization enables it to remain viable economically as it is stabilized by the customers. Competitiveness is increased by the quality of services.

Competitiveness is achieved through; improving the operational processes, noting and solving of problems encountered, providing effective service production and other processes. Service delivery plays a great role in ensuring that a business grows effectively (Mboroki, 2012).

The services are usually delivered by simply encompassing and organizing the appropriate required level of the available resources, experience and skills that affect specific benefits to the consumers who are in need of such kind of services. The providers of the service usually carry out the service provision as a way of participating in economy building. They participate in the economy without any restriction or any concern of carrying with them raw materials that are very bulky to carry. Moreover, their expertise in the field of investment requires consistent marketing of their services and constant upgrade especially during the time of competition. As mentioned by Anders & Michael (2013), the services can easily be categorized depending on their key generic characteristics.

## **2.5 Empirical Literature Review and Knowledge Gaps**

Technological advancement and globalization has led to total change in the way business is being done, a situation which has resulted in the international market place. Businesses have adopted BPR as means to eliminate non-core business competences. It is an important aspect to ICT enabled services such as human resource. With the business world being reduced to global village through technological advancement, the way of doing business has led to business process re-engineering as a strategy to effective and better performance of firms. Several studies both globally and locally have been done with regards to BPR.

Retail industries in India were studied by Sarang (2012), and how they conducted their re-engineering processes. He concluded that the process was made successful by using technology changes and providing new redesign ideas in the work flow. Another study was also conducted in Ethiopia on its Bureau of Finance and Economic Development (BoFED) by Ensermu & Moorty (2013), on how it conducted its re-engineering process. The study found that improvement in organizational performance and quality of services satisfied the customers. The study failed to explicitly show how BPR can be used to improve service delivery. The current study is out to establish this. Furthermore, the study focused on Ethiopia, which has a different operating environment to the current study which focuses on Kenya.

Orogbu, Onyeizugbe & Onuzulike (2015) conducted a study to find out BPR and firm performance of chosen motor companies in southeast of Nigeria. The findings revealed positive relationships between process redesign, implementation and employee satisfaction. The findings also revealed that work process innovation influences employee retention and that custom excise duties influence organizational success. The study failed to explicitly show how BPR can be used to improve service. Furthermore, the study focused on the firm performance of chosen motor companies in southeast of Nigeria, which have different operating environment.

Al-Mashari & Zairi (2001) in their study on implementation of Business Process Re-engineering found out that implementation of Business Process Re-engineering methodologies calls for incorporation of information and communication technology.

Implementation of BPR methodologies has the objective towards quantum leaps in service delivery measures all through to the six sigma. BPR methodologies focus on attaining overall customer satisfaction. It calls for an organization to completely abandon its old ways of operations and adapt to new ways of thinking for improved service delivery. The study failed to specifically show how BPR can be used to improve service delivery.

The Nigerian Oil Industry was also assessed by Awolusi & Onigbinde (2014) and what factors led to its BPR success. The findings revealed a positive relationship between process redesign and employee satisfaction, that work process innovation influences employee retention and that custom excise duties influence organizational success. However, the study was based in oil industry in Nigeria and thus little can be borrowed with regards to KPLC.

UAP's customer relationship, management of cost and efficiency of its operations was examined by Mungai (2015) and the role BPR plays in these functions. Processes of operations, tracking of complaints were improved, the process of operations was simplified, customer loyalty was also improved and customer acquisition and consistency in service delivery was also improved by BPR. The study focused on UAP Insurance Company and thus different context from that of KPLC.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter introduces the methodology used in determining the relationship between Business Process Re-engineering and service delivery at Kenya Power and Lighting Company. The research design, data collection, data analysis techniques and presentation methods used in the study were the focus of the methodology.

#### **3.2 Research Design**

This study was a case study since the focus is on one organization, KPLC. A case study is a top to bottom investigation of a specific setting that involves the gathering of extensive subjective information usually by means of meeting, observation, and record analysis. Kothari (2000) suggests that a case study is an effective type of research design subjective analysis. The level of analysis was one unit.

A case study is a type of qualitative research done on one institution and from the study, information and conclusions are drawn. Seeing as the study focused on just a single firm to typify BPR and service improvement, case study design was most suitable. The principle aspect was to decide the data that explains the attitudes, conduct or values. Fulfilment of the objectives of the study were best suited through the use of a case study design.

### **3.3 Data Collection**

Data gathered from the research was qualitative in nature. This is data that describes or approximates or characterizes, but this data fails to quantify the aspects and characteristics of a thing or marvel (Kothari, 2000). Thirteen top managers of KPLC were required to give data that was used for analysis. Top managers were preferred because they were involved in making strategic decisions within the various organizational divisions. Interview guide was utilized since it yields more noteworthy collaboration and least refusal rates, offers high reaction quality, exploits interviewer nearness and it gives a multi-strategy information accumulation (Simons, 2013). The interview questions were based on the research objective.

The interview guide (Appendix I) consisted of open - ended questions and was given face - to - face interviews to respondents. The study asked broad questions, therefore allowing the respondents to give a wide variety of answers. Depending on the answers given, the study continued to ask the respondent to expound more on the answers. The study looked at BPR; hence managers were the main target to obtain the information.

### **3.4 Data Analysis**

Data is a collection of raw numbers identifying with a specific topic under study. Data analysis is the entire procedure that begins instantly after data collection and closes at interpretation and processing of outcomes. This incorporates sorting of data, editing, coding, entry, processing of the data and eventually interpreting the outcomes (Creswell, 2003). The data gathered was qualitative. The data was analyzed by analyzing content. Synthesis of the responses of the interviews was done using content analysis so as to identify the common themes from the answers.

Content analysis is an empirical scientific approach that is utilized to draw conclusions concerning the content in several kinds of communication for example interviews and observation protocols. Content analysis is also known as text analysis method applied in qualitative social research. Reading of texts is qualitative even if one decides to convert the content into numbers through counting.

## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter presents the study's analysis and findings as described in the study's research methodology and objectives. The data collection method was conducted through interviews and the questions were developed in accordance with the study's objectives. The main objective of the research was to examine how business process re-engineering has affected service delivery at Kenya Power and Lighting Company Ltd.

#### **4.2 Profile of Participants**

In this study, the selected respondents they had a deeper understanding of Kenya Power and Lighting Company Ltd processes and procedures and were actively involved in the company's business process reengineering. Primary data was collected and the appendage was secondary data from the KPLC website, the organization's monthly publications, past research and business journals. The study also gathered information from thirteen top managers from different units at KPLC.

The background of the respondents taking part was considered by the study. The respondents were asked their job title and how long they had worked at KPLC. It was assumed that the longer one had worked for KPLC then they could truly be better placed to comment on BPR and service delivery over the years.

Job title and duration of time with KPLC were not only important in determining the reliability of any information realized for purposes of analysis and writing the report but also important in determining whether the respondent would be in a position to comment on BPR.

The people who took part in the study were made aware that the information given by them would not be given to any other party for any reason whatsoever. Those who took part in the interviews and gave their responses, similarly, were made aware that they were doing so voluntarily and would not be subjected to anything if they decided to stop in the middle and abandon the process.

#### **4.2.1 Departments of Respondents**

The study found it useful to inquire on the departments the respondents were attached. This is to ensure that all departments actively involved in the BPR were examined. Table 4.1 shows the various departments that the respondents represented and the number of respondents interviewed from each department.

**Table 4.1: Departments of Respondents**

<b>Department</b>	<b>Frequency (N)</b>	<b>Percent (%)</b>
Information & Communications Technology	5	38
Network Management	4	31
Customer Service	3	23
Other Supporting Departments	1	8
<b>Total</b>	<b>13</b>	<b>100</b>

Table 4.1 discloses that 38% of the selected respondents work in the Information & Communications Technology (ICT) department, 31% in Network Management, 23% in Customer Service and 8% in the other supporting departments.

From the analysis, it was concluded that all departments that are relevant to BPR were captured. Since most changes brought about by BPR at KPLC were experienced in the Information Technology (IT) systems, more response was realized from the ICT department. The Network Management and Customer Service departments had 54% of the responses since they make up the core businesses of the organization and work with different departments that are directly linked to the new business processes.

#### **4.2.2 Respondents' Working Years at KPLC**

The study established the duration of employment for the respondents as it would demonstrate the ability to understand the KPLC's processes and procedures in relation to BPR. From the interviews conducted, all the respondents had been at KPLC for between 12 to 25 years and most of them had managerial positions in their respective departments. The fact that the respondents had all been with the company for more than twelve years was a direct indicator that the company staff are well acquainted with the company's processes and the entire energy industry. It was also observed that employee satisfaction levels had improved. This could have been attributed to BPR, proper training, team work and good compensation and reward systems.

### **4.3 Business Process Re-Engineering Adoption and its Practice**

The respondents were asked if they were aware of the Business Process Reengineering taking place within KPLC. This was to establish if they comprehended the term before discussing further its adoption and practices and impact on competitiveness, advantages of BPR and service delivery. It was observed that the respondents understood the word. One respondent said that BPR was a tool that helped achieve competitive advantage by analyzing and adjusting business processes in order to meet the changing environmental needs. Another respondent also indicated that it was a tool used to ensure efficiency in a company's operations, speed up customer service interruptions, reduce operating costs, increase customer satisfaction and improve job satisfaction.

The study sought to understand BPR practices at KPLC. The participants collectively indicated that KPLC had adopted business process re-engineering as a performance strategy. Interestingly, as previous similar research has shown, most participants indicated that BPR at KPLC focuses mainly on customers, products and components of information technology. This means that if a company wants a business process that aims to focus more on the consumer, the focus must be on the simplicity of business processes and on the process structure. The overall achievement to BPR's success is to ensure that the customer is satisfied and that the customer is served in the shortest time possible.

Further, the research requested the respondents to indicate the considerations for adopting business process re-engineering. Most of the respondents outlined considerations for adopting business process re-engineering as to change how things are currently done.

The factors considered before adopting BPR at KPLC were the employees' readiness to change, company's goals/vision/ objectives/mission, and effectiveness/efficiency of the new technologies. In addition, the study required the participants to indicate whether the adoption of BPR by KPLC was increasing the service delivery of the company. Some of the managers indicated that the adoption of BPR by KPLC was giving the company competitive edge in terms of product packaging, customer base, market share as well as value addition. For this reason most citizens prefer electricity to other forms of energy as it is cheap and convenient for all. Kenya Power and Lighting Company Ltd has monopolistic powers in the electricity industry.

The study required the participants to indicate the Business Process Re-engineering strategies adopted by KPLC. Most of the respondents indicated the strategies as:

#### **4.3.1 Collaboration Strategy**

The study revealed that the collaboration strategy happens where every worthwhile improvement begins with understanding the current process. This is best achieved by understanding how all the team members operate within it.

KPLC used collaboration methods such as flowchart creation and self-assessment questionnaires to get a holistic view of the process end-to-end, learning from the domain experts – the functional department staff themselves. KPLC ensured the collaboration strategy was implemented both within and outside the organization. Internally, some core departments were merged to enhance efficiency. The Operations & Maintenance and Customer Service departments were consolidated into single manageable units at the county level headed by a manager. This reorganization was named the Feeder Based Business Unit (FBBU).

Externally, the respondents mainly gave the example of collaborating with the mobile service providers and application software developers who have allowed their services to reach their customers wherever they would be and perform their transactions. As a result of this collaboration, KPLC have been able to render their services to their customers effectively through user friendly mobile applications platforms and a 24 hour customer support service. This as a result, has improved service delivery within the company.

#### **4.3.2 Benchmarking Strategy**

Benchmarking was identified as another business process re-engineering practice that is adopted by KPLC. Benchmarking at KPLC involves comparing the current performance results against best-in-class examples, and to understand the innovations and improvements that make these outstanding. The respondents cited the comparison between the manual delivery of services versus online delivery and they realized all the technologies/ improvements they required to achieve an online service delivery system.

Benchmarking ensures that comparisons are made with other organizations on how the end product is delivered to the consumer. Some of the organizations that KPLC managers benchmarked are South Africa's largest energy utility, Eskom, Hydro-Quebec - Canada's largest power producer and Manitoba Hydro, a public energy utility company in Canada. This enabled the organization to improve on its services and processes to enable them more efficient to satisfy the expectations of consumer. Some of the implemented practices and technologies were borrowed from these benchmarked organizations and adopted by KPLC.

For instance, enhanced customer service and support platforms, electronic prepaid and postpaid meters, automated meters, improved switchgears and apparatus for power supply have been adopted by KPLC borrowed from Hydro- Quebec. These technological advancements have, as a result, improved service delivery.

#### **4.3.3 Experimental Trial Strategy**

KPLC also adopts experimental trial/ pilot project/ pilot study strategy as an implementation mechanism. Here, small scale execution of a prospective process or plan is first executed within a small area of interest, analyzed and the results measured. Positive outcomes call for a widespread implementation of the strategy within the organization. Negative outcomes lead to business processes either being abandoned or improved. The operational challenge of implementing improvements is primarily in change management – ensuring that the right orientation, training and quality controls are put in place and adopted by staff.

Experimental trial provides a holistic improvement of KPLC processes to ensure efficiency and effectiveness during the delivery of services to the consumer once adopted. KPLC sort to enhance the customer service platform with an increased bandwidth through the universal emergency hotline number and social media to be able to handle as many customer complaints within the shortest time by first rolling it out in Nairobi. A successful test run necessitated a countrywide implementation of the project. This has reduced customer queues and waiting times at the company's countrywide emergency offices and through the prompt feedback mechanism as a result.

The company has also made available a self-service mobile application that allows customers to report power failures, view outstanding bills, make bill payments, view interruption notices and identify KPLC employees.

The self- service mobile application was first tested amongst the ICT division employees before being rolled out after a successful dry run. This has improved service delivery as customer processes have been simplified.

#### **4.3.4 Business Process Automation Strategy**

Business process automation was also cited by the respondents as a BPR strategy. It takes time and effort to ensure that old ways are discarded and new ones accepted. Continuing performance measurement during this period is essential, both to track adoption and to validate that the new processes are working to optimal effect. The respondents held that it was a hard battle to fight in discarding the manual means of service delivery, but overall, KPLC had managed to automate most of the employee and customer process systems.

The company has integrated most of its systems with Systems, Applications & Programs (SAP) - the world's largest Enterprise Resource Program (ERP). This has improved human resource, operations and supply chain processes within the organization. This has reduced turnaround times in dealing with customer complaints, simplified business processes and reduced operational costs.

Moreover, the study was out to understand the advantages of adopting BPR as a competitive strategy at KPLC. As per the respondents, the company got a few advantages by adopting BPR as a competitive strategy.

The company tremendously reduced the time required to serve a client. Also, the service delivery efficiency improved and the number of customer complaints related to service delivery had decreased.

Some of the respondents pointed out to the information technology platform offered by BPR at KPLC enhanced information regarding interruptions, billing, tariffs, and products available to all the stakeholders. Real time feedback is realized from the stakeholders through the new and improved customer care systems accessed through the company website, social media and e-mail.

Furthermore, the study asked the respondents how BPR implementation by KPLC is sustainable. Most of the respondents indicated that BPR implementation by KPLC was sustained by formation of a committee which comprised of members from all the departments. The committee is directly in charge of developing and implementing new activities to be introduced. Some of the respondents indicated that the business process re-engineering at KPLC is based on IT platforms available. For this reason therefore, the company has installed the best IT systems and a professional support/technical team in place in case of any system failure.

The respondents added that they had all the customer information, sales, employees' personal information, creditors' and debtors' information backed up both internally and externally.

#### **4.4 BPR and Service Delivery**

The respondents were asked to indicate whether service delivery by KPLC has improved as a result of adoption of BPR. One of the managers was among the people who cited growth and positive change in service delivery after the adoption of BPR at KPLC. The service delivery had gained a higher efficiency unlike before the adoption of BPR.

In addition, the participants indicated that the data loss and other information discrepancies had greatly been reduced or done away with after the adoption of BPR. Automation of services had reduced the time used in queuing before adoption of BPR as automation has allowed customers to do all their transactions online without visiting the KPLC banking halls unless a special case which couldn't be realized through the online systems. In addition, the respondents indicated that the quality of the process of delivering services was higher as the online platforms had specific/concise response suggested by the system and once the customer made a transaction it was captured and saved into the company's database.

Consequently, the study requested the respondents to indicate whether power supply had quality improved in relation to BPR implementation by KPLC. All the respondents agreed that KPLC had and was still adopting new technologies and ways aimed at improving service delivery. These include, among them, installation of electronic postpaid meters, prepaid meters, automatic meter reading for large power consumers, and use of smart grid and meters.

As far as meter reading is concerned, the use of hand-held sets in meter reading for accurate billing and effective revenue collection has been put in practice while the acquisition of power analyzers has helped in evaluating the unit sales in comparison to the dispatched units. The adoption of other ways of making bills payments e.g. M-Pesa, Airtel Money, Posta Pay and EazzyPay has also helped the customers to pay their bills promptly without having to make long queues at KPLC banking halls.

The study further required the respondents to indicate whether the company increased its market share with BPR introduction. All the respondents cited increase in market share where one gave the example of the Stima Loans which have increased the number of new connections. The customers pay in installments and as a result, new clients are shifting from other forms of energy to electricity. In addition, the study required to understand whether the BPR adoption by KPLC led to reduced customer complaints. Collectively the respondents indicated that BPR adoption by KPLC led to reduced customer complaints. The common complaints from the clientele were in regard to poor online system, failed transactions, payments for prepaid and the tokens not sent to the customers. The managers argued that the all the complaints are resolved within 24 hours unless it's a special case unlike before the adoption and implementation of BPR.

Moreover, the study requested the participants to indicate whether KPLC's customer base/ connectivity increased as a result of BPR implementation. Unanimously, the respondents indicated that KPLC's customer base/ connectivity increased as a result of BPR implementation.

They connected this to the trust they have built over the years and the service delivery efficiency brought about by the new innovations/improvements. Each respondent pointed out that all the people seek the service of a company with a competitive edge. Further the study required the respondents to point out whether the BPR implementation reduced KPLC's turnaround time/ response time to customer complaints. The managers indicated that in the event of a customer's complaint the average resolution time is 3 hours unlike before when it could take 10 hours, on average, to have a complaint solved. The respondents attributed this to the distribution of customer service centers for technical support and their purpose is to deal with all kinds of complaints irrespective of the day or time.

The respondents were asked to explain if there is any advantage in adopting BPR. Many of the respondents agreed that service delivery was better in a financial year when KPLC have been involved in the BPR than in periods when the same was not applied. The respondents further stated that the act of BPR creates an opportunity for KPLC to concentrate on the core things and processes. This enables KPLC to concentrate on the satisfaction and wellbeing of the customers who are of prime importance. This also means that KPLC is able to focus on delivery of the best results to their customers therefore increasing their advantage upon competition. According to the responses by the interviewees, business process outsourcing brings significant result improvements. KPLC has outsourced services of Labour and Transport contractors to meet the demand of infrastructure development and customer connectivity.

Finally, the respondents were asked to indicate KPLC's staff motivation in relation to adoption of BPR before and after. The respondents gave varying responses; for example some held that before the adoption of BPR it is necessary to assess employees' perceptions about the results of reengineering projects that have been carried out in Short Messaging Service (SMS) in terms of their consequences on both employees and the company; gauge the success of these projects from the employees' point of view and measure the employees' satisfaction with reengineering. This research's aim is to reveal how reengineering tasks and their results are appraised by employees and how employees are affected by reengineering initiatives carried out in their company.

The KPLC's management believes that the results of employees' perspective will provide valuable internal information to change agents in SMS and also provide guidelines for their future BPR initiatives. Furthermore, most of the respondents believed that the company's rewarding system has played a great role in re-engineering the business process leading to improved service delivery. They stated that the rewards were in form of both tangible and intangible goods. The tangible good involved bonuses and other forms of physical goods. The intangible goods involved promotions or staff transfers of the hardworking employees.

#### **4.5 Discussion of the Results**

The study findings that there was need to reengineer KPLC processes and systems. It was clear that reengineering has positive results on development of strategy and service delivery.

In an environment where customer expectations shift and technological discontinuities emerge, organizations must make the concise strategic choices and set their priorities for efficient resource allocation. In tandem with the study findings, Mboroki (2012), opined that the delivery of services is a very crucial aspect in an organization as it deepens the relationship between customers and the organization. Quality of services offered by an organization enables it to remain viable economically as it is stabilized by the customers. Competitiveness is increased by the quality of services. Competitiveness is achieved through; improving the operational processes, noting and solving of problems encountered, providing effective service production and other processes. Service delivery plays a great role in ensuring that a business grows effectively.

The study found out that organizations must develop new tools, new concepts, new systems and the new mindsets to cope with the turbulent and chaotic environments leading to continuous, radical and dramatic changes. This can only be achieved through effective and efficient reengineering of their businesses. It is clear from the study that KPLC reengineered its processes and as a result service delivery and employee satisfaction was enhanced. Similarly, Anders & Michael (2013) note that the services are usually delivered by simply encompassing and organizing the appropriate required level of the available resources, experience and skills that affect specific benefits to the consumers who are in need of such kind of services. The providers of the service usually carry out the service provision as a way of participating in economy building. They participate in the economy without any restriction or any concern of carrying with them raw materials that are bulky.

Moreover, their expertise in the field of investment requires consistent marketing of their services and constant upgrade especially during the time of competition. Anders & Michael (2013) indicated that the services can easily be categorized depending on their key generic characteristics.

The study also established that business process reengineering has significant positive effect on the performance of KPLC. BPR has helped the company to improve on service delivery by enhancing the turnaround time of processes, simplifying and streamlining processes, increasing speed of processes and operations and reducing costs. KPLC had improved its service delivery index over the years through process reengineering and listening to customer needs.

In tandem with the study findings, Magutu, Nyamwange & Kaptoge, (2010) opined that BPR plays a vital role in planning, coordination and control of resources that are used in the production of products and services of an organization. The success of every organization begins with recognition of customers and their input to the firm. Customers would be more willing to remain tied to a firm only when they get what they want from it. As the business environment changes, so does the customer's need and therefore a firm also needs to adapt to the dynamics in order to be at par with its customers' requirements. This is achieved through re-engineering the core business processes in an organization with the main motive of having improved the value of the end product as identified by a firm's internal and external customers (Chogo 2013).

The research established that KPLC has experienced better performance after reengineering its processes than it did before. The company has also become more receptive to change now and has invested a lot in training to its staff.

The company has ensured that all staff affected by the changes are well conversant with the new processes, systems or developments. Changes have also been witnessed in different areas of the company which indicates that BPR streamlines and simplifies all processes and therefore performance is enhanced in all areas of the Company. Similar to the study findings, Muthu, Whitman & Cheraghi, (2004) opined that Successful implementation of BPR methodologies leads an organization to improve on efficiency and effectiveness of its processes, reduction in operational costs, faster service delivery due to reduction in throughput time, higher flexibility in terms of alternatives and high quality service hence increasing customer value. An organization would be driven to re-engineer its processes due to various factors.

Where there is a substantial gap between stake-holders' expectations and actual service delivery in business processes such as production quality and customer care services. Quality of output may be improved by ensuring better input materials while for customer care, this may involve hiring professional and qualified customer care personnel with excellent skills (Peppard & Rowland, 2015).

In conclusion, many findings from different literature state that business process reengineering redesigns the existing processes to achieve improvement in service delivery. The study findings also indicated that change is necessary for effective BPR. To manage this change, innovation is also necessary. Generally, from the study, it can be said that BPR is a very critical weapon for any organization that seeks to improve its performance and achieve cost leadership strategy. Processes for re - engineering remain a strategic tool for organizations out to survive in competitive environments.

Similarly, Orogbu, Onyeizugbe & Onuzulike (2015) conducted a study to find out BPR and firm performance of chosen motor companies in southeast of Nigeria. The findings revealed positive relationships between process redesign, implementation and employee satisfaction, that work process innovation influences employee retention and that custom excise duties influence organizational success. The study failed to explicitly show how BPR can be used to improve service delivery. Furthermore, the study focused on the firm performance of chosen motor companies in southeast of Nigeria, which have different operating environment.

#### **4.6 Chapter Summary**

This chapter has presented the findings of the study, results and discussion based on the objectives of the study. It has also given views from the respondents in regards to business process reengineering and its relationship to competitive strategy and change management. The study observed that BPR has been used as a tool to gain competitive advantage and ensure efficiency. The study noted that business process reengineering has a positive impact to service delivery and satisfaction.

## **CHAPTER FIVE**

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

#### **5.1 Introduction**

This chapter presents a summary of the key findings and the conclusions drawn in line with the objectives of the study. It also includes the recommendations made there-to for improvement and enhancement. Furthermore, the chapter presents limitations and further research areas.

#### **5.2 Summary of the Findings**

From the findings, it was established that the company experienced both positive and negative changes in different areas. The ICT division experienced great changes especially with the introduction of new systems that are efficient and cost effective. The increasing dependence of businesses on information technology (IT) requires focusing on the creation of value for intangible information technology (IT) issues such as process efficiency, IT experience and innovation. Other notable changes have been experienced in service delivery, the company structure and customer satisfaction. The customers can now be served in the shortest time possible and the turnaround time of complaints has immensely improved.

It was notable that implementation of some of the BPR strategies, for example experimental trial and collaboration, was slow in some departments, notably in the Internal Audit and Supply Chain divisions. It was further explained that the BPR took effect within the core business divisions in which the stated divisions were not part.

It was also pointed out by one of the interviewees that adaptation to change within an organization is greater amongst employees who are directly affected by the change. The ripple effect to supporting divisions is slower as established by this study.

Consequently, most interviewees admitted that the low level employees were not aware of the BPR taking place within the organization. This process was not communicated to the low level employees as it was deemed a management process. Proper communication of strategies adopted by the top management is key to ensure that the overall objectives are met at all levels of an organization. This improves the productivity of an organization.

The study revealed that collaboration happens where every worthwhile improvement begins with understanding the current process. This is best achieved by understanding how all the team members operate within it. They used collaborative methods such as flowchart creation and self-assessment questionnaires to get a holistic view of the process end-to-end, learning from the domain experts – the functional department staff themselves. The respondents mainly gave the example of collaborating with the mobile service providers who have allowed their services to reach their customers wherever they would be and perform their transactions. Internally, employees have collaborated across departments to share ideas and develop problem solving mechanisms that in return has improved the overall efficiency of the organization through service delivery.

Benchmarking is a strategy adopted by KPLC that ensured comparisons are made with other organizations on how the end product is delivered to the consumer. Some of the organizations that KPLC managers benchmarked are South Africa's largest energy utility, Eskom, Hydro- Quebec - Canada's largest power producer and Manitoba Hydro, a public energy utility company in Canada.

This enabled the organization to improve on its services and processes to enable them more efficient to satisfy the expectations of consumer. Some of the implemented practices and technologies were borrowed from these benchmarked organizations and adopted by KPLC. For example, enhanced customer service and support platforms, electronic prepaid and postpaid meters, automated meters, improved switchgears and apparatus for power supply have been adopted by KPLC and as a result improved service delivery.

Experimental trial is another BPR strategy that provides a holistic improvement of KPLC processes to ensure efficiency and effectiveness during the delivery of services to the consumer once adopted. KPLC sort to enhance the customer service platform with an increased bandwidth through the universal emergency hotline number and social media to be able to handle as many customer complaints within the shortest time by first rolling it out in Nairobi. A successful test run necessitated a countrywide implementation of the project. This has reduced customer queues and waiting times at the company's countrywide emergency offices and through the prompt feedback mechanism as a result.

Business process automation is another BPR strategy adopted by KPLC. KPLC managed to automate most of the employee and customer process systems. The company has integrated most of its systems with Systems, Applications & Programs (SAP) - the world's largest Enterprise Resource Program (ERP). This has improved human resource, operations and supply chain processes within the organization. This has reduced turnaround times in dealing with customer complaints, simplified business processes and reduced operational costs.

### **5.3 Conclusions of the Study**

The study interviewed thirteen top managers at KPLC. The respondents were selected with regards to their involvement in the BPR projects of the company and therefore were better placed to provide relevant information. From the study findings, it is evident that there is need for companies to reengineer their processes so that they improve their operations to remain relevant in the dynamic business environment. Customers' preferences are constantly changing and therefore organizations should plan an execution mechanism for their operations. Improved service delivery is achieved through change of processes so that they can keep up and meet the demands and needs of the well informed consumers.

The Business Reengineering Process to KPLC as a strategic tool cannot be overemphasized with the economic situation of this country, because it helps in meeting the domestic and industry needs or pursuance of better and high performance. BPR has helped in the achievement of the organization overall objectives. Reengineering is perceived to be a situation; when a business organization is transforming processes that together form a component of a larger system aimed at enabling organization to empower themselves with contemporary technologies business solutions and innovations. In the context of changing customer expectations, technological discontinuities, increasing environmental uncertainties, business managers have a big challenge of making the right strategic choice and setting their strategic priorities in order to allocate their resources to different functions in an efficient manner for business success.

The aim of reengineering a business process is to redesign the existence of a business practices in order to achieve improvement in performance. The study concludes that BPR is necessary at KPLC because it has significant positive impact on service delivery through improvement of business processes in meeting consumer demands. BPR cannot be effective without change and therefore change management is critical when carrying out BPR. Business process reengineering has enabled companies to improve productivity, improve on its relationships with customers as well as linking shareholder's value with organizational growth strategy.

From the study, it is evident that the BPR strategies adopted by KPLC have improved service delivery. The collaboration strategy, as a result of its adoption, has enabled the company to render services to customers effectively through user friendly mobile applications platforms and a 24 hour customer support service. The benchmarking strategy has enabled the organization to improve on its services and processes to enable them more efficient to satisfy the expectations of consumers. Enhanced customer service and support platforms, electronic prepaid and postpaid meters, automated meters, improved switchgears and apparatus for power supply have been adopted by KPLC as a result. The experimental trial strategy by KPLC has made available a self-service mobile application that allows customers to report power failures, view outstanding bills, make bill payments, view interruption notices and promptly identify KPLC employees through successful dry runs. This has improved service delivery as customer processes have been simplified.

The business process automation strategy has ensured successful automation of most employee and customer process systems. This has reduced turnaround times in dealing with customer complaints, reduced operational costs and hastened business processes.

It was determined also determined that the re - engineering of business processes yields positive outputs. One general conclusion drawn from the study, in relation to past findings, is that BPR involves the critical analysis and radical redesign of existing processes in order to achieve breakthrough improvements in business performance.

#### **5.4 Recommendations of the Study**

The study recommends that KPLC should adopt change management to efficiently implement Business Process Reengineering and learn to view it as an avenue to learn and advance. This will enable them view Business Process Reengineering as a constructive measure rather than a re-organization plan.

Recommendations are also made to KPLC management to should ensure effective communication channels for changes at all levels exist. This can be achieved by changing the strategic approach of the company. This will ensure that the organization's strategic plans and implementation strategies are well communicated to all employees who are instrumental in meeting the set objectives.

Another recommendation is that management should also ensure strong coordinative mechanisms exist between managers, employees, industry players and policy makers. This will ensure effective implementation of BPR practices.

The study noted that business processes re-engineering was largely a management concern and that the majority of low - level employees did not even know about BPR.

As top management oversee business process reengineering in their firms should strive to have the best interests of the clients and employees at heart at all costs. They should also avoid moves that may not auger well with a majority of the taskforce or clientele. They should focus the areas of deficiency and the steps necessary to achieve acceptable performance.

In order to successfully implement BPR, the study recommends that employees should be adaptable to the ICT advancements implemented by the organization. This will be beneficial in the overall performance improvement of the organization.

### **5.6 Limitations of the study**

The case study aimed at interviewing thirteen top KPLC managers. Availability and accessibility of some of the managers was a challenge. They either delegated the interview sessions or had limited time to give responses. This limited the study research as more comprehensive conclusions would have been drawn had time not been a limiting factor.

### **5.7 Implications for Policy and Practice**

Kenya Power and Lighting Company Ltd managers must develop new tools, new concepts, new organization and the new mindsets to cope with the turbulent and chaotic environments leading to continuous change. This can only be achieved through effective and efficient reengineering of their business processes.

Based on the information obtained from the secondary data and the interviews conducted, it is important for an organization to undertake an analysis of the current situation for successful BPR implementation. Organizations should ensure change is implemented across the entire organizational structure as opposed to intermittent changes in specific departments or strategic business units which may lead to delays or impact negatively on customer service thus affecting performance.

Wernerfelt (1995) states that the RBV as a foundation for gaining competitive advantage of an entity lies solely in the use of physical or intangible resources available within the organization. The study has established that KPLC reorganized its physical capital, human capital and organizational capital with a view of optimally utilizing resources to achieve the organizational and operational performance objectives.

Morgan (1986) states that implementation of BPR calls for the identification of the core business processes, making decision to redesign and implement. KPLC identified its core business processes, remodeled these processes and implemented practices so as to enhance customer value. This is in line with Lewin's model of change that gives the four stages undergone by an organization through its change process: awareness creation, decision to adopt, implementation and institutionalization.

### **5.8 Suggestions for Further Research**

Business process re-engineering as a strategic tool for service improvement concentrates on only one strategic tool affecting service improvement. Therefore, further studies should be done on the other strategic tools that affect service improvement.

For instance, other tools like balance score card, business analysis and/ or competitor analysis should be considered to be done in future so as to indicate how they influence service delivery.

In addition, further studies should be done sampling KPLC customers on their perceptions about service delivery at KPLC so as to get their views for comparison purposes with the current study.

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## APPENDICES

### APPENDIX I: INTERVIEW GUIDE

#### SECTION A. GENERAL INFORMATION

1. Job Title of Respondent.....
2. Duration worked with KPLC.....

#### SECTION B. BUSINESS PROCESS RE-ENGINEERING ADOPTION

1. Has KPLC adopted business process re-engineering as a performance strategy?
2. What are the business process re-engineering strategies adopted by KPLC?
3. What are some of the considerations for adopting business process re-engineering?
4. Is adoption of BPR by KPLC giving the company competitive edge?
5. What are the advantages of adopting BPR as a competitive strategy?
6. How is BPR implementation by KPLC sustainable?

#### SECTION C. BPR AND SERVICE DELIVERY

1. What is the performance measure on service delivery by KPLC in relation to adoption of BPR before and after?
2. Has power supply quality improved in relation to BPR implementation by KPLC?
3. Has the company increased its market share with BPR introduction?
4. Has BPR adoption by KPLC lead to reduced customer complaints?
5. Has KPLC's customer base/ connectivity increased as a result of BPR implementation?
6. Has BPR implementation reduced KPLC's turnaround time/ response time to customer complaints?
7. What is KPLC's staff motivation level in relation to adoption of BPR before and after?