

**THE CHALLENGES IN PERFORMANCE MEASUREMENT:
A CASE OF KENYA POWER AND LIGHTING COMPANY
LIMITED**

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**A Research Project submitted in partial fulfillment of the requirement for
the award of Master of Business Administration (MBA) Degree, Faculty of
Commerce, University of Nairobi.**

October 2008

DECLARATION


I declare that this Project report is my original work and has not been presented for a degree thesis/project in any other university.

Thanks to my loving husband, Frank Muzizi and Dear daughter, Jessica Zawadi for the much support that they gave me during this period. Thanks to my loving parents, brothers and

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Thanks to my supervisor Mr. S. O. Nyamwange for his patience during the entire research period.

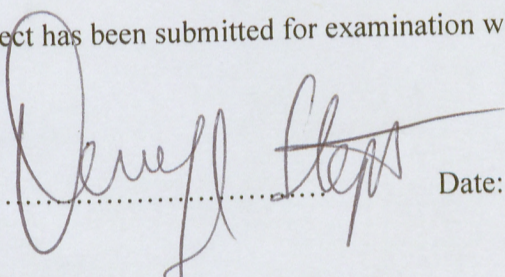
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I would also like to thank the respondents in KPLC for the cooperation that they extended to me during data collection.

Last but not least, sincere thanks go to my colleagues and friends for helping me with typesetting and proofreading the document.

This project has been submitted for examination with my approval as university supervisor

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DEDICATION

This research project is dedicated to my Husband Frank, Daughter Zawadi and my Parents
Silas and Kellen Ileri.

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GPRA	Government Performance and Results Act
KPLC	Kenya Power & Lighting Company Limited
OPM	Operational Performance Management
PM	Performance measurement
PMS	Performance Management System
SBU	Strategic Business Units
TOC	Theory of constraints

LIST OF ACRONYMS

BSC	-	Balanced Score Card
CCICA	-	Canadian Institute of Chartered Accountant
GPRA	-	Government Performance and Results Act
KPLC	-	Kenya Power & Lighting Company Limited
OPM	-	Operational Performance Management
PM	-	Performance measurement
PMS	-	Performance Management System
SBU	-	Strategic Business Units
TOC	-	Theory of constraints

ABSTRACT

Performance measurement is a strategic and integrated approach to delivering sustained success to organizations by proving the performance of the people who work in them and by developing the capabilities of teams and individual contributors.

This study sought to determine the challenges experienced in the process of performance measurement in Kenya power and lighting Company Ltd. A descriptive research which involved collecting data from 150 of the 2097 staff who go through the performance measurement process was carried out. Descriptive research portrays an accurate profile of persons, events, or situations. The study used Primary data which was collected using structured questionnaires administered through drop and pick method.

The data collected was analysed using descriptive statistics such as mean scores to show frequency and graphs to show percentages. The research concluded that the most significant challenges experienced were non alignment of performance with rewards, setting achievable yet challenging targets, failure to involve staff in setting targets, accessing the right data, lack of ownership by union staff, lack of monitoring tools, employees' fear of measurement, aligning targets to corporate strategy and lack of resources.

The study recommends that for successful performance measurement the challenges must be determined and strategies to counter and solve them framed. Of particular importance is the building of a knowledgeable staff that appreciates and contributes to performance measurement process. It also recommends that staff members should be involved in setting targets so as to ensure that they fully accept the set targets and work towards their achievement. IT Systems should be implemented to capture and evaluate data. Adequate resources should also be availed to ensure that targets are met. The reward system should also be aligned with the performance so as to increase productivity.

CHAPTER ONE: INTRODUCTION

1.1 Background

The long survival of a business is dependant upon meeting market needs through a long-term value creation process. Traditional performance measurements systems have been criticized as being too narrowly focused on financial figures and functional level performance such that they often fail to capture organizational long-term business success (Sam and Koh, 2001). In the recent years much progress has been made on establishing performance measurement systems, which include a portfolio of measures aimed at balancing the more traditional single focus view on profitability. (Buichi, 1994) suggests that a major objective of such performance measurement systems is to encourage pro-active rather than re-active management.

Traditional financial accounting measures like return on investment and earnings per share can give misleading signals for continuous improvement and innovation, yet these activities are a must in today's competitive environment. The traditional financial performance measures worked well for the industrial era, but they are out of step with the skills and competences companies are trying to master today. For effective performance measurement, a balanced presentation of both Financial and non-financial measures is required since no single measure can provide a clear performance target or focus attention on the critical areas of the business (Buichi, 1994).

Performance measurement systems are designed to monitor the implementation of organizations plans and determine when the plans are unsuccessful and how to improve them (Atkinson et al, 1997). They are used to focus attention on the organizations objectives, to measure and report performance and to understand how process performance affects organizational learning (Atkinson et al, 1997). Identifying operational problems, which can be solved by adjusting existing processes, and indicating more fundamental problems, which require an adjustment to strategies of the organization, are further uses of performance measurement (Argyris, 1997).

1.1.1 The Concept of Performance Management.

Performance measurement can be defined as a strategic and integrated approach to delivering sustained success to organizations by improving the performance of the people who work in them and by developing the capabilities of teams and individual contributors (Armstrong and Baron, 1998). It's a means of assessing progress against stated objectives in a way that is unbiased and quantifiable. It brings with it an emphasis on objectivity, fairness, consistency, and responsiveness. At the same time, it functions as a reliable indicator of an organizations long-term health. Its impact on an organization can be both immediate and far-reaching. Whereas the performance measurement concept is deeply rooted in the context of manufacturing, it has to some extent been neglected in service management (Adam and Cravesen, 1996; Adam et al, 1995). However the importance of performance measurement in service industries is widely accepted in literature (Wilson, 1988; Gummesson, 1993 Van Biena and Greenwald, 1997).

Total performance measurement includes measurement of the performance of the operating system, measurement of the extent to which resources are utilized and measurement on the level of service provided. These are the principle responsibilities of operations managers and also the means by which operations managers are assessed by others. Performance measurement is made against a set of operations objectives, which in turn must be derived from business objectives. The priorities of the business (cost, quality) largely influence the manner in which operations performance is measured or at least the emphasis in the measurement used (Atkinson et al, 1997).

The balanced scorecard is a tool that translates an organization's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system. The balanced scorecard is an approach for driving organizational improvement toward pre-selected goals, which keeps track of progress through carefully selected measures. The balanced scorecard is also an integrated management system consisting of three components: strategic management system, communication tool, and measurement system (Niven, 2003). It results in a carefully selected set of measures derived from and linked to an organization's core strategies. The measures selected for the scorecard represent a tool for leaders to use in communicating to employees and external stakeholders the outcomes and performance drivers by which the organization achieved its mission and

strategic objectives. Companies are using the scorecard to: clarify and update strategy; communicate strategy throughout the company; align unit and individual goals with strategy; link strategic objectives to long term targets and annual budgets; identify and align strategic initiatives; and to conduct periodic performance reviews to learn about and improve strategy, (Niven, 2003).

Organizations measure performance so as to identify whether they are meeting customer requirements, to know whether they are providing services/products that the customers require, to help them understand their processes, to confirm what they know or reveal what they do not know, identify where problems, and where improvements are necessary, ensure decisions are based on facts, not on supposition, emotion or faith or intuition and Show if improvements planned, actually happened (Parker, 2000).

Performance measurement also helps shareholders to be able to measure how well the resources they have placed in the hands of the directors, managers and employees are being used. The difficult but extremely important and recurrent organizational design problem of organizations can structure incentives so that people (“agents”) who are placed in control over resources that are not their own with a contractual obligation to use these resources in the interests of some other person or group of people actually performed this obligation as promised – instead of using their delegated authority over other peoples resources to feather their own nests at the expense of those whose interests they are supposed to be serving(their “principals”)(Johnson,2005).

Although performance measurement has all these benefits, (Othieno, 2006) concluded that it also faced challenges resistance to change by managers, lack of adequate data and irregular performance reviews. (Mwangi, 2006) concluded that some of the highest barriers to effective development, implementation and use of performance measures in institutions of higher learning are senior management inertia, lack of common understanding of measurement objectives and use of off-shelf systems that are largely inflexible.

1.1.2 Performance Measurement in the Public Sector

Government performance needs to measure “economy, efficiency and effectiveness” (Palmer, 1993). Economy is defined as acquiring resources in appropriate quantity and at least cost. Efficiency is defined as maximizing output for a given set of inputs for a required output. Together, economy and efficiency are consistent with notions of financial accountability in the public sector. Economy and efficiency are usually measured in financial terms, and data such as costs, volume of service and productivity are relatively simple to measure (Palmer, 1993). Measuring economy and efficiency is consistent with Fitzgerald et al.’s (1991) and Kaplan and Norton’s (1992) categories of resource utilization and financial performance. Effectiveness is defined as the extent to which the defined task has been accomplished (Palmer, 1993; Jackson and Palmer, 1998).

Notions of public sector accountability became widely used in the 1990’s, with formal systems of accountability being built into Legislation, rules and regulations for government bodies (Fowles, 1993; Hyndman and Anderson, 1995; Cochrane, 1993). The public sector has been under pressure to improve their operations and processes so as to deliver products and services more efficiently and at affordable prices to the taxpayer/ Customer. Whereas within the private sector profit orientation and competitiveness have necessitated the introduction of performance contracts, the public sector has taken long to embrace the practice, especially in the developing countries (Okumu, 2004).

Public sector organizations have recently come under increasing criticism for placing too much emphasis on financial control as well as suffering from excessive proliferation of performance indicators. A solution to both these problems has been presented in the form of various strategic, goal-directed and multidimensional models for performance measurement (PM), such as the Balanced Scorecard. Whilst originally developed in the private sector, there are growing signs of such models diffusing to the public sector. Current studies have concluded that PM myths based on goal-directed, multidimensional models may gradually replace the myth that public service provision may be improved by heavy reliance on financial control and come to affect operating-level action. However, such models may be ‘corrupted’ or prevail alongside seemingly incompatible PM myths depending on differences in implementation processes and the rhetoric invoked to legitimise a goal directed, multidimensional PM approach, (Fowles, 1993).

1.1.3 Kenya Power and Lighting Company (KPLC)

KPLC, which is an electric public utility company that is charged with the responsibility of distributing electricity in Kenya, is one of the organizations that introduced performance measurement systems in 2005. Just like other public organizations, the performance of KPLC has been wanting. In the past KPLC had been very inefficient with poor customer service, and poor quality electricity. There has been a need for increased accountability and transparency in the organization. KPLC owns all transmission and distribution assets, buys electricity in bulk from all generating companies. It then transmits this power through its transmission and distribution network to domestic and commercial customers. The government owns 51% of KPLC. It's the key stakeholder in terms of regulation, policy reforms, provision of energy sector development plan, taxation and a key source of funds from exchequer and development partners.

KPLC has undergone various strategic change management initiatives: Business Process Re-engineering 1998-2001, restructuring 2001-3, Retrenchment 1999-2001, Re-organisation to Strategic Business Units (SBU) in 2002-3) latest being the introduction of performance contracts in October 2004. Performance contracts were signed between the Government and the Company board of Directors and thereafter the board of directors signed one with the entire management cadre of staff. Union represented staffs were given delegation of duties, which were not signed for (Stima Newsletter, June-September 2004; KPLC Annual Financial Reports 1998-2004).

In August 2006, the government contracted a team of Canadian managers from Manitoba hydro (MHI) to help turn around KPLC. Connecting 150,000 new customers was one of the performance indicators assigned to Manitoba hydros Managers. KPLC has also invested heavily on staff Training. There is therefore need to accurately measure the performance.

There was need for the study to be conducted in order to establish the challenges of performance measurement at the KPLC Ltd. Ittner (2003) observes that businesses that do not scrupulously uncover the fundamental drivers of their units of performance face several potential problems. They often end up measuring too many things, trying to fill every perceived gap in the measurement system. The result is a wild profusion of peripheral, trivial or irrelevant measures.

1.2 Problem Statement

In order for KPLC to be assured of future survival, it must improve its performance so as to ensure that the prices for electrical energy are globally competitive and that the reliability of supply is maintained. The frequent power interruptions, outages and power surges must be minimized if not eliminated completely. The current global trend is opening up the sector for competition; efficiency is therefore a must for KPLC to survive in the competitive market. Thus the use of effective performance measurement systems is critical for KPLC.

Tangen (2004) argues that all performance measures should have a clear purpose and be defined in an unambiguous way along with details of who uses the measure. Okumu (2004) also observes that performance contracts have failed in developing countries due to among other reasons erosion of trust, lack of both intrinsic and extrinsic motivation, information asymmetry, and insufficient commitment from both parties to the contract and poor incentives. Diverse Challenges from Managers, politicians and various stakeholders bring about conflict of objectives and interest at KPLC, in turn these affects productivity. There is also lack of efficient check up systems and effective performance measurement. The study was therefore aimed at determining the challenges that KPLC has faced in the process of measuring its performance and suggesting possible solutions to these challenges.

Kamuna (2007) studied conditions necessary for an effective performance management system and concluded that the greatest challenge to effective performance implementation in Deloitte and touché was the attitude problem where employees felt that PMS was a tool for pinning down some of them. Njiru (2007) established that most challenges faced by state corporations during the implementation of performance challenges manifested themselves in the form of either behavioural or systemic resistance, less consideration given to employee antipathy and low morale, shortage of financial and material logistics that are necessary to support effective change, technological limitations and existence of an organization structure that is prohibitive to the expected and /or required changes among others.

Mwangi (2006) studied performance measurement at the University of Nairobi and established that some of the highest barriers to effective development, implementation and use of performance measures in institutions of higher learning are senior management inertia, lack of common understanding of measurement objectives and the use of off-shelf systems

that are largely inflexible. Obwogi (2007) studied performance measures used in public universities and revealed that 80% of the performance measures used in public universities were financial. Othieno (2006) studied the process and experience of implementing performance contracts and established that the major factors that posed challenges to the implementation of performance measurement were resistance to change by employees and managers, internalization of the new concept of performance management, lack of adequate data and irregular performance reviews.

None of these studies tackled the issue of the challenges of performance measurement in preparation, implementation and evaluation or the refreshing stage in Kenya power and lighting company. It was in this light that the research sought to fill the existing gap in this area of study by answering the question: What were the challenges of performance measurement in KPLC?

1.3 Objective of the Study

To establish the challenges in performance measurement at KPLC Ltd.

1.4 Importance of the Study

The study is of importance to the following:

1. KPLC management

KPLC management will benefit from the information on the challenges of performance management system and come up with some possible solutions.

2. Government/Parastatals and private organisations

The Parastatals and private organisations will benefit from the information on workable performance measures in the public sector. Also it will help the government in guiding other parastatals on how to develop and manage performance management systems in the public sector.

3. Academicians/Scholars

It will stimulate academic interest in the whole aspect of performance measurement in the public sector and hence form a basis of future research in Performance measurements in public sector.

Wells et al. (1995) described performance measurement as the process of quantifying action, where measurement is the process of quantification and action correlates with performance. They further proposed that performance should be defined as the efficiency and effectiveness of action, which leads to the following definitions. Performance measurement is defined as the process of quantifying the efficiency and effectiveness of action. Performance assessment is defined as metrics used to quantify the efficiency and/or effectiveness of an action. Performance Management System (PMS) is defined as a set of metrics used to quantify the efficiency and effectiveness of an action.

Performance measurement can also be referred to as monitoring and evaluation. Monitoring is aimed at ensuring that the activities of the project are being undertaken on schedule to facilitate implementation as specified in the project design. Any constraints in operationalizing the design can be quickly detected and corrective action taken. Evaluation involves a systematic review or examination of the elements of success and failure in the project over time during the project life or how better to plan the project in future. This implies that evaluation is a continuous exercise during the project life and is much related to project monitoring. Monitoring provides the data on which the evaluation is based (Mbeche, 2009).

Performance measurement has three basic building blocks: the dimensions of performance that the organization is seeking to encourage; the standards to be set and the rewards or penalties associated with achieving performance targets (Orley, 1997). There is widespread recognition that the dimensions of performance are broader than financial performance alone, but financial performance measures measure and make visible only limited aspects of an organization's performance (Kaplan and Norton, 1992).

While monitoring systems are used to measure performance because they are considered to be reliable and objective, but because they focus with the primary objective of creating profits, they if a growing reliance has been placed on financial measures is inadequate for

CHAPTER TWO: LITERATURE REVIEW

2.1 Performance Measurement

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While accounting systems are used to measure performance because they are considered to be reliable and consistent and because they mesh with the primary objective of creating profits, there is a growing concern that concentration on financial measures is inadequate for

strategic decision making and indeed for full internal management and control (Atkinson et al., 1997). Long-term survival is linked to organizations chosen strategy, and the strategy determines what must be measured. Measuring only short-term financial results can have dysfunctional consequences to its long-term survival (Brignal, 1993). Brignal indicates how measures across six dimensions related to strategy over an extended period were needed to implement strategy in a local government child-care organization.

Although there are many current performance measurement systems that combine financial and non-financial aspects of organization, many organizations continue to use the traditional financial performance measures (Tangen, 2003). The traditional measure of profitability is flawed since many business strategies and opportunities involve sacrificing current profits for longer-term gain (Ross et al., 1993). Balancing financial and non financial aspects of the organisation can thus be challenging. Most of the times those whose performance is being evaluated do not understand the measures that are in use. A PMS must be designed in such a way that information is easily retrieved, usefully presented and easily understood by those whose performance is being evaluated (Tangen, 2004).

2.2 Evolution of Performance Measurement Systems

Many organizations have redesigned their performance measurement systems to ensure that they reflect their current environment and strategies (Kennerley and Neely, 2003). The literature in the field of performance measurement emphasizes the importance of maintaining relevant measures that continue to reflect the issues of importance to the business (Lynch and Cross, 1991).

Trends in performance measurement indicate that throughout history performance measurement has been used to assess the success of organizations. By the 1980s there was a growing realization that the traditional performance measures were no longer sufficient to manage organizations competing in modern markets (Johnson and Kaplan). With more demanding customers and more competitive markets came the need for greater responsiveness and external focus for activities. Many authors recognized that, whilst traditional financial accounting systems indicate the performance that results from the activities of an organization, they provide little indication of how that performance is achieved or how it can be improved.

(Komerley and Neely, 2007)

Authors suggest that traditional financial performance measures are historical in nature (Dixon et al., 1990); provide little indication of the future performance; encourage short termism (Hayes and Abernathy, 1980; Kaplan, 1986); are internally rather than externally focused, with little regard for competitors or customers (Kaplan and Norton, 1992; Neely et al., 1995); lack strategic focus (Skinner, 1974); and often inhibit innovation (Richardson and Gordon, 1980). It is widely believed that the information provided by such cost based systems is insufficient for the effective management of business in rapidly changing and highly competitive markets.

(Gupta 1993), observed that performance measurement in service industries is more complex

In an attempt to overcome these criticisms, performance measurement frameworks have been developed to encourage a more balanced view. For example, Keegan et al. (1989) propose a balance between internal and external measures and between financial and non-financial measures; Cross and Lynch (1988-1989) describe a pyramid of measures which integrates performance through the hierarchy of the organization; Fitzgerald et al. distinguish between the results and their determinants and Kaplan and Norton (1992) between the four perspectives of their "balanced scorecard". These frameworks are therefore multidimensional, focusing more on non-financial information in an attempt to redress the balance. They are designed to provide a balance by including measures which are designed to give an early indication of future business performance as well as a record of what has been achieved in the past, (Norton, 1992).

Improving service quality and boosting service productivity, (Chatterjee, 2002), proposed a

Many organizations had adopted the balanced score card by the middle 2001 (Downing, 2001). Organizations are implementing new measures to reflect new priorities but failing to discard measures reflecting old priorities (Meyer and Gupta, 1994). As a result, it is suggested that organizations are drowning in data (Neely et al., 2000). Meyer and Gupta (1994) observe that failure to effectively manage this change causes the introduction of new measures "that are weakly correlated to those currently in place" so that an organization will have a diverse set of measures that are not consistent. As with measurement systems introduced at the turn of this century, there is a danger that failure to effectively manage the way in which measurement systems change overtime caused new measurement systems to lose their relevance, (Neely et al., 2000). Lack of the necessary skills, Absence of an effective process, Inflexible systems, and inappropriate culture are some of the barriers that prevent the evolutionary process of the performance measurement systems in an organization,

2.3 Performance Measurement in the Service Industry

Service organizations constitute the largest and fastest growing segment of the economies of the world. It encompasses a wide range of area including financial services, transportation, health care, retailing, education, Research and development, hospitality, and tourism and consultancy services (Sanay, 2005).

(Gupta 1995), observed that performance measurement in service industries is more complex owing to the following inherent characteristics of services: the intangibility of services precludes the stockpiling and counting of finished goods inventory; Productivity measures the capability to meet demand not sales. Consequently, attempts to measure the output in terms of unit sold in a shop, or meals served in a restaurant, mixes both a production measure and a demand measure in a way that makes it difficult to quantify ; even if the traditional measures of performance for operations are considered, one question that still remains unanswered is what should be measured as input and output respectively; the organizations delivering services must broaden their examination of performance from the conventional organizational oriented perspective to a dual organization-customer perspective.

This broadened approach can help reconcile conflicts – the leverage synergies – between improving service quality and boosting service productivity. (Parasuraman 2002), proposed a conceptual framework for understanding the inter-linkages among service quality and the various components of the organization – customer perspective of productivity.

(Fitzgerald et al. 1991) suggests that performance in service organizations should be measured across six dimensions: competitiveness and financial performance; and determinants of results – quality of service, flexibility, resource utilization and innovation. Fitzgerald et al.'s framework, formulated for service industries, has application in the government sector, where financial measures alone are insufficient to obtain a complete picture on performance (Ghobadian and Ashworth, 1994). It has been recognized that the absence of profit and the nature of the services offered in local government make financial performance as the sole performance criterion more problematic (Ghobadian and Ashworth, 1994; Pollitt, 1986a).

2.4 Performance Measurement Process

2.4.1 Design Stage

The design stage involves identifying the key objectives to be measured and designing the measures themselves. Measures should be derived from strategy (Keegan et al. 1989). Measures should be designed in a way that encourages behaviour which supported strategy (Neely et al., 1996).

2.4.2 Implementation Stage

This is the phase in which systems and procedures are put in place to collect and process the data that enable the measurements to be made regularly. This may involve computer programming to trap data already being used in the system and present them in a more meaningful form. It may involve initiating new procedures, so that information currently not recorded is captured and it may involve completely new initiatives, such as the setting up of a regular customer or employee survey.

2.4.3 Evaluation Stage

Since the measures are derived from strategy, the initial use to which they should be put is that of measuring the success of the implementation of that strategy (Kaplan and Norton, 1996). The information and feedback from the measures should be used to challenge the assumptions and test the validity of the strategy, (Kaplan and Norton, 1996).

2.4.4 Review

The performance measurement system requires developing and reviewing at a number of different levels as the situation changes e.g. the performance measurement system should include an effective mechanism for reviewing and revising targets and standards (Ghalayini and Noble, 1996); the performance measurement system should include a process for developing individual measures as performance and circumstances change (Dixon et al., 1990); the performance measurement system should include a process for periodically reviewing and revising the complete set of measures in use. This should be done to coincide

with changes in either the competitive environment or strategic direction (Dixon et al., 1996) and the performance measurement system should be used to challenge strategic assumptions.

2.5 Requirements of a Good Performance Measurement System

2.5.1 Support Strategic Objectives

A PMS should be derived from the company's strategic objectives. Otherwise, the PMS may support actions that have the opposite effects of those implied in the strategy (Tangen, 2002a). Since the environment is dynamic, strategies keep changing; a good PMS should thus be flexible.

2.5.2 Guard against Sub-Optimization

A PMS must guard against sub-optimization, possibly by establishing a clear link from the top of the company all the way to the bottom, to ensure that employee behavior is consistent with corporate goals. It should reward behavior that contributes to business success (Kaplan and Norton, 1992; 1996a; 1996b; Arnkinson and Epstein, 2000)

2.5.3 Have a Limited Number of Performance Measures

To create appropriate action it is necessary to use a Limited number of performance measures (Jackson, 2000). A large number of performance measures increase the risk of information overload.

2.5.4 Easily Understood and Accessible

PMS should be designed in such way that information is easily retrieved, usefully presented and easily understood by those whose performance is being evaluated (Tangen, 2004).

2.5.5 Have an Appropriate Balance

A PMS should consist of various types of performance measures covering all-important

aspects agreed as representing the success of a company. It should cover both financial and non-financial aspects. There must also be a balance between various performance measures in the PMS. A PMS should be appropriately focused on short and long term results, different types of performances (e.g. cost, quality, delivery, flexibility and dependability), various perspectives (e.g. the customer, the shareholder, the competitor, the internal and the innovativeness perspective) and various organizational levels (e.g. global and local performance) (Tangen, 2004).

2.5.6 Should be clearly Defined and Have a Clear Purpose

A PMS should have a clear purpose and be defined in an unambiguous way along with details of who used the measure (e.g. collect the data, with what frequency, and how to act on the measure). It is also necessary to specify a target for each performance measure and a time frame within which those targets should be reached (Tangen, 2004).

2.5.7 Must be Reliable

The benefit of measurement is often dependant on the reliability and comparison of measures overtime. It is therefore important to identify measures that can be made reliably and consistently over the desired time period (Parker, 2003).

2.5.8 Must be supported by Top Management

It must gain top management support. This would only happen if it makes their jobs easier, by offering information that is truly helpful (Parker, 2000)

2.6 Performance Measurement Approaches

The pressure of reporting corporate performance based on non-financial as well as financial measures has intensified over the last few years. For example, the conference board of the Canadian Institute of Chartered Accountant (CCICA) reported that traditional accounting-based performance measures are excessively historical, they lack predictive power and reward the wrong behaviour and do not capture key business changes until too late. The conference board also concluded that, these measures give inadequate considerations to such

resources as intellectual capital (Waterhouse, 1999). Accordingly, the board suggests that strategically oriented performance measurement systems should measure non-financial as well as financial outcomes. Likewise, a report by the American Institute of Certified Public Accountants (AICPA) recommends that companies should disclose leading, non financial measures on key business processes such as product quality, cycle time, innovation, and employee satisfaction AICPA Report, (1994).

In a rapidly changing business environment, the need to constantly adapt is deemed essential to maintain competitive advantage. This requires an optimum balance of quantitative and qualitative measures to monitor progress and performance (Sun and Scott, 2003). The major difficulty with qualitative measures is the reliability of the measurement, since it is often difficult to represent the phenomena in qualitative terms. Most qualitative phenomena tend towards the phenomenological paradigm where reality is derived from social constructions and/or projection of the human imagination (Hussey and Hussey, 1997). This has led to many using metaphors and/or narratives to describe these phenomena. An example of a difficult phenomenon to measure is learning in the organization. The learning processes are multi-dimensional and influenced by factors such as emotions, beliefs and attitudes. Smith and Hosey (1999) identified some reasons why learning in the organization cannot be measured reliably. But irrespective of the difficulties and challenges, qualitative phenomena should be measured.

Numerous researchers have exposed limitations of the traditional approach to performance measurement using solely financial performance measures (Maskell, 1991; Ghalaynis et al, 1997; Jagder et al, 1997). Financial measures are concerned with cost elements and try to quantify performance solely in financial terms, but many elements are difficult to quantify monetarily, such as lead time reduction, quality improvements and customer service; Financial reports are usually produced monthly and are results of decisions that were made one or two months previously. Financial measures have predetermined inflexible format used across all departments, ignoring the fact that a department may have its own unique characteristics and priorities, (Jagder et al, 1997)

To use a PMS that solely consist of financial performance of measures can cause problems for a company (Tangen, 2004). Financial measures are not directly related to manufacturing strategy: excessive use of return on investment (ROI) also distorts strategy building and may

confuse with strategic objectives. Traditional criteria such as cost efficacy and utilization may pressure managers and supervisors for short-term results and, for that reason, discourage improvements. Financial measures do not report accurately on the cost of the processes, products and customers: they are also focused on controlling processes in isolation rather than as a whole system. Financial resources are not applicable to new management techniques that give shop-floor operators responsibility and autonomy. Financial measures do not penalize over production and do not adequately identify the cost of quality.

Parker (2000) also argues that although performance measures are useful, they also attract much cynicism and skepticism over why, how and when they are used. There are issues of measuring the right things, of comparing like with like, and of comparing yesterday with today. Traditional business performance measures have been financial-measuring such ratios as rate of return, cash flow and profit margins. These financial data have the advantage of being precise and objective. However, significant arguments against such measures are that: They tend to be inward looking (although financial data can be, and are, compared with other organizations, the 'like for like' argument can make comparison unreliable). They fail to include the less tangible factors such as products or service quality, customer satisfaction and employee morale, (Parker, 2000).

2.6.1 Balanced Score Card

Robert Kaplan, of the Harvard Business School, and David Norton, the president of a Massachusetts consulting firm, developed the Balanced Score Card (BSC) in the early 1990s (Kaplan & Norton, 1992). It was built around the premise that companies can no longer gain sustainable competitive advantage solely by developing tangible assets. To phrase it differently, the ability of a company to build its "intangible assets" or "intellectual capital" has become a critical success factor in creating and sustaining competitive advantage (Sim and Koh, 2001). According to Kaplan and Norton (1996a; 1996b), the four perspectives of BSC, will enable companies to track financial results and simultaneously monitor progress in building the capabilities that are necessary for acquiring the "intellectual capital" or "intangible assets" needed for future business growth and for providing keener competition.

Proponents of the balanced score (Kaplan & Norton, 1992) long suggested that the use of non-financial performance measure via three additional perspectives (i.e. customer, internal

business process, and learning and innovation) to supplement traditional financial measures. According to Kaplan and Norton (1996b), used this way, the score card addresses a serious deficiency in traditional management systems; their inability to link a company's long term strategy with its short term actions.

The balanced score card proposes that a company should use a balanced set of measures that allows top managers to take a quick and comprehensive view of the business from the following focus important perspectives: financial perspective – How do we look to our shareholders?; internal business perspective – What must we excel in? ; Customer perspective – How do our customers see us? and innovation and learning perspective – How can we continue to improve create value?.

The balanced score card has the advantage of including financial performance measures and thus giving the results of actions already taken. It also complements the financial performance measure with more operational non-financial performance measures which are considered as drivers of future financial performance. Kaplan and Norton (1992) argue that by giving information from 4 perspectives, the balanced score card minimizes information overload by limiting the number of measures used. It also forces managers to focus on the handful of measures that are most critical. The use of several perspectives also guards against sub-optimization by compelling senior managers to consider all measures and evaluate whether improvement in one area may have been achieved at the expense of another (Kaplan and Norton, 1992).

But according to Ghalayini et al (1997), the balanced score card's main weakness is that it is primarily designed for senior managers with an overall view of performance. Thus it is not intended for the factory operational level. They also argue that the balanced score card is constructed as monitoring and controlling tool rather than an improvement tool. Furthermore, Neely et al (2002), argue that although the balanced score card is a valuable framework suggesting important areas in which performance measures might be useful, it provides little guidance on how the appropriate measures can be identified, introduced and ultimately used to manage business. They further conclude that the balanced score card does not consider the competitor perspective at all, (Neely et al, 2002).

2.6.2 Activity Based Costing

Activity Based Costing (ABC) was developed by Johnson and Kaplan (1987) in the late 1980s as an attempt to resolve some fundamental inadequacies of traditional cost account. ABC is concerned with the cost of activities within a company and their relationships to the manufacture of specific products rather than to basic functional areas (Hill, 1995). The basic technique of ABC is to analyze the indirect costs within a company and to discover the activities that cause those costs. Such activities are referred to as cost drivers and can be used to apply overloads to specific products. In this way, it is believed that ABC results in a more accurate identification of costs than traditional cost allocation.

According to Maskell (1991), several cases indicate that ABC can be of practical value for product pricing, production decision-making, overload cost reduction and continuous improvements. However, there are researchers who claim that the argument that ABC provides more accurate production costs has never been proved (Neely et al, 1997). In addition, an improved cost accounting system will not entirely solve the problem of financial measures – often other measures than cost are needed to adequately gauge manufacturing performance relative to a competitive strategy (White, 1996).

2.6.3 The Performance Pyramid

The performance pyramid which was proposed by Cross and Lynch (1992) links an organization's strategy with its operations by translating objectives from the top down (based on customer priorities) and measures from bottom up. This PMS includes four levels of objectives that address the organizations external effectiveness (left side of the pyramid) and its internal efficiency (right of the pyramid). The development of a company's performance pyramid starts with defining an overall corporate vision at the first level, which is then translated into individual business unit objectives. The second level business units are set short-term targets of cash flow and profitability and long-term goals of growth and market position (e.g. market, financial). The business operating system bridges the gap top-level and day-to-day operational measures (e.g. customer satisfaction, flexibility, productivity). Finally, four key measures (quality, delivery, cycle time and waste) are used at departments and work centres on a daily basis (Lynch, 1992).

Ghalayini et al (1997), suggests that the main strength of the performance pyramid is that it attempts to integrate corporate objectives with operational performance indicators. However, this approach does not provide any mechanism to identify key performance indicators, nor does it explicitly integrate the concept of continuous improvement.

2.6.4 Theory of Constraints

Developed by Goldratt (1990), within a system a constraint is defined as anything that limits the system from achieving higher performance relative to its purpose. Theory of constraints (TOC) focuses on 5 steps (Goldratt, 1990): Identification of the systems constraints, deciding how to exploit the systems constraints, Subordinating everything else to the above decisions, evaluating the systems constraints and going back to step (1) when a constraint is broken. With the TOC, 3 global performance measures are used for assessing a business organizations ability to obtain the goal (i.e. making money). These global measures are net profit, ROI and Cash Flow.

TOC offers a systematic and focused process that organizations use to pursue ongoing improvement successfully. Studies have shown that the TOC approach provides a focus in a world of information overload (Tangen, 2000b). Another advantage is that the performance measures within TOC are both easy to access and easy to comprehend. However TOC is far from being a complete PMS. One could argue that TOC simplifies the reality a little too far, since TOC assumes that there always is a legible constraint in the system, which is not necessarily true.

2.6.5 The Performance Prism

The performance prism suggests that a PMS should be organized around 5 distinct but linked perspectives of performance (Neely et al, 2001). These include Stakeholder satisfaction, Strategies, Processes, Capabilities and Stakeholder contributions. The performance prism has a more comprehensive view of different stakeholders (e.g. investors, customers, employees, regulators and suppliers) than other frameworks. Neely et al (2000), argues that the common belief that performance measures should be strictly derived from strategy is incorrect. It is the wants and needs of stakeholders that must be considered first. Then, the strategies can be formulated (Neely et al, 2001). Thus, it is not possible to form a proper strategy before the

stakeholders and their needs have been clearly identified.

The strength of this conceptual framework is that it first questions the company's existing strategy before the process of selecting measures is started. In this way, the framework ensures that the performance measures have a strong foundation. The performance prism also considers new stakeholders who are usually neglected when forming performance measures.

However, although the performance prism extends beyond "traditional" performance measurement, it offers little about how the performance measures are going to be realized. Just like many other PMSs, it gives little or no consideration to existing PMS that companies may have in place (Medori and Steeple, 2000).

2.6.6. Medori and Steeple's Framework

Medori and Steeple (2000), present an integrated framework for auditing and enhancing PMSs. The approach consists of 6 stages: Define the company's manufacturing strategy and Success factors; Match company's strategic requirements with 6 defined competitive priorities (e.g. quality, cost, flexibility, time, delivery and future growth) ; Use a checklist that contains 105 measures with full descriptions to select the most suitable measure ; Audit the existing PMS to identify which existing measures will be kept; Do the actual implementation of the measures by describing each measure by eight elements: title, objective, benchmark, equation, frequency, data source, responsibility and improvement and periodically review company's PMSs.

In contrast to many other frameworks, this one is beyond being simple guidelines, and can actually be followed by a measurement Practitioner in practice. A major advantage is that it can be used both to design a new PMS and to enhance an existing PMS. It also contains a unique description of how performance measures should be realized. Its limitations are only located in Stage 2, where a performance measurement grid is created in order to give the PMS its basic design. Little guidance is given here and the grid is only constructed from 6 competitive priorities (e.g. quality, cost, flexibility, time, delivery and future growth).

2.7 Benefits of Performance Measurement

2.6.7 Sink and Tuttle Model

2.7.1 Transparency

This model claims that the performance of an organization is a complex interrelationship between seven performance criteria (Sink and Tuttle, 1989) namely effectiveness, efficiency, quality, productivity, quality of Life, innovation and profitability.

Although much has changed in industry since the model was first introduced, the seven performance criteria are still important. However, the model has several major limitations. For example, it does not consider the need for flexibility, which has increased markedly during the last few decades. The model is also limited by the fact that it does not consider the customer performance.

2.6.8 Fitzgerald et al (1991) model for Services

Fitzgerald et al (1991) adopted a feed forward/feedback control model in which performance measurement is part of a feedback control, being a stimulus to appropriate action and organizational learning at the right level of the organizational learning and stage of the decision-making process. Recognizing that many large service organizations are diversified and face the problem of geographical dispersion, Fitzgerald et al (1991) next recommended that strategic business units (SBUS) be the main focus for PMS where an SBU is defined as “an operating unit which sells a distinct set of products or services to a identified group of customers in competition with a defined set of organizations”. For an SBU, the business is given and the manager’s task is to select and implement a strategy to beat the competition while satisfying organizational performance requirements (Fitzgerald et al, 1991).

Recognizing that organizations compete on many factors other than cost, and price, Fitzgerald et al (1991) suggested six dimensions of performance, split between two which measure the results of an SBU’s strategy (competitiveness measures such as market share or sales growth rate, and financial measures such as cost, profit and value added and four dimensions which are the determinants of that strategy’s success (quality, flexibility, resource utilization and innovation). There will be interactions and trade-offs between the six dimensions, the consideration of which during the process of strategy formulation should lead to better-balanced strategic plans.

2.7 Benefits of Performance Measurement

2.7.1 Transparency

Performance measurement provides an organization with insight into its products, the cost per product and also shows how much a particular part of the activity of an organization contributes to the organization's output. Transparency may then result in various forms of rationalization. For example, it may trigger an internal distribution about how various activities contribute to the organizations performance. There is also a clear standard for judging new procedures or structures; how do they contribute to improving the organizations performance (Osborne and Gaebler, 1992). "What gets measured, gets done (Osborne and Gaebler, 1992) summarizes these findings: the rationalization and improvement process starts as soon as an organization can measure its existing output.

2.7.2 Acts as an incentive for Output

Performance measurement rewards output and is thus an incentive for performance. Some public organizations have reported a link between the introduction of performance measurement and a rise in outputs, for example with municipalities (Osborne and Plastrik, 1997) and in higher education (Intveld, 1996).

2.7.3 Accountability

Since public tasks are complex, autonomy is essential for the success of these organizations. If this autonomy is granted, it implies accountability, that is, those who are granted a great deal of autonomy have to account for their performance and provide an insight into the performance. Performance measurement helps accomplish this since the information about performance is measured systematically and quantified, thus enabling comparisons over a certain period. The information can be easily communicated. The information can be supplied at the same time each year

2.7.4 Internal Control

Performance measurement systems are designed to monitor the implementation of an organization's plans and determine when the plans are unsuccessful and how to improve them (Arnkinson et al, 1997). They are used to focus attention on the organizations objectives, to measure and report performance and to understand how process performance affects organizations learning (Arkenson et al, 197). Identifying operational problems, which can be solved by adjusting existing processes and indicating more fundamental problems, which require an adjustment to the strategies of the organization, are further used of performance measurement (Argyvis, 1997).

2.7.5 Learning & Benchmarking

The transparency created may teach an organization what it does well and where improvements are necessary. The organization can be able to benchmark with world-class organization

According to Ministry of foreign affairs (2000), performance measurement has the following functions: - Transparency, Learning, Appraising and Sanctioning. There is a great deal of literature on performance measurement in government, and governments around the world have made large investments to develop performance measurement systems, frequently related to notions of accountability (Thompson, 1995; Osborne et al., 1995; Hyndman and Anderson, 1995).

2.8 Challenges of Performance Measurement Systems

2.8.1 Choosing the right measures

In design, the challenge lies in choosing the right measures (Neely et al. (1995). In the 1990s the problem in many organizations was that they measured the wrong things, notably things that were easy to measure many of which were financial and historical in nature. Today the nature of this measurement crisis has changed and in many businesses now the problem is excessive measurement. There is a desire to quantify absolutely everything. If the focus is on

the customer, there will be proposals to measure customer complaints, satisfaction, loyalty and profitability, returns, rejects and warranty claims. So the current challenge is not necessarily identifying what you could measure, it is also identifying what you need to measure in order to concentrate on what is absolutely vital (Neely et al., 1995).

The real challenge arises to when it comes to what we call “refreshing” the measurement system (Neely et al., 1996). Inside the organization, individual managers can, if they wish, performance reports in response to a specific problem. However, this leads to constant introduction of new performance reports while those that have become obsolete, because problems have been resolved are rarely deleted. To ensure that as the organization changes the measurement system keeps pace, there needs to be a named performance manager whose role to manage the measurement system.

2.8.2 Accessing the right data & political and cultural issues

There is the data access issue i.e. the need to get access to the right data and the political and cultural issues, notably people’s fear of measurement and the games they consequently play to try and manipulate target setting to ensure that targets are achievable and no blame can be attributed. To combat this people inside the organization need to be educated to understand the purpose and the use of performance measurement systems (Neely et al., 1996).

2.8.3 Processing the raw data and making conclusions

The challenge in managing through measures in many organizations requires a cultural shift. The focus needs to be firmly on targets. The problem is that in many organizations, managers are presented with raw performance data and left to draw their own conclusions. They can lead to time consuming and largely unnecessary debate to justify figures while the focus should be on the current situation, what can be learned from it and, more importantly how targets can be achieved. Education is required on how to present data to encourage such discussion (Neely et al., 1996).

2.8.4 Performance Measurement adds to Internal Bureaucracy and Prompts Game Playing

Research shows that an organization scoring well in a system of performance has invested heavily in procedural and organizational provisions in order to meet the requirements of the PMS (Leeuw, 1996). These procedures make the organization to be very bureaucratic resulting in slow decision making.

Measuring and rewarding products may be a major incentive for game playing. The public organization raises its out-put in accordance with the standards of the system, but this increase in production has either no significance or a negative significance from a professional perspective. This is referred to as “gaming the numbers”. Numerous examples of this type of behavior can be given (de Bruijn, 2002).

2.8.5 Performance Measurement Blocks Innovation

An organization faced with performance measurement will make an effort to optimize its production processes to ensure that it can achieve its performance target as efficiently as possible. This maybe a strong incentive for thinking in “cash cows”: What products can be manufactured simply, allowing a measuring amount of money to be generated? Cash cow thinking implies that an organization minimizes its throughput, nearly always at the expense of innovation (Smith, 1993) speaks of “ossification” here. Those who want to innovate will explore the unknown and accept the risk that the results will be either different from or less than what they expected. As a result, innovation may harm an organization’s output. Performance rewards the constant reproduction of the existing (Behn and Kart, 1999).

2.8.6 Performance Measurement Blocks Ambitions

The phenomenon of organization increasing the performance by optimizing their input is also well known. The criterion for selecting this output is that obtaining the desired output should require minimum throughput (“creaming”, “cherry picking”). Schools rewarded for performance are found to select in terms of input. They can refuse entry to potential students or successfully use a “counseling out” strategy (Zollers and Ramanathan, 1998). An organization optimizing its input does so at the expense of its ambition.

2.8.7 Performance Measurement may kill professionalism

Performance indicators measure quantities and will therefore mainly cover measurable and clearly definable aspects of the performance. For example for a museum, these are the number of visitors, although there are other important aspects (e.g. the integrity of the collection or the value of the collection for scientific research) (Carnegy and Wolnizer, 1996). Performing a task that has so many aspects requires professionalism. Professionalism means that all these aspects are respected, and that if necessary a trade-off can be made between these aspects. The professional will build “tacit” knowledge in handling this complexity.

But since performance measures only focus on the clearly defined aspects, it may therefore ignore complexity and make a trade off in favour of the clearly defined aspects. Performance measurement may also be an incentive to ignore local circumstances and may result in less rich tacit knowledge (Carnegy and Wolnizer, 1996). Performance measurement may then kill the professional attitude (Smith, 1992, Goddard et al, 2000).

2.8.8 Performance Measurement Kills System Responsibility

In the public sector organizations have a system responsibility. These organizations are expected to make some of the professional insights they develop available to other public sector organizations. Performance measurement may force out the system responsibility. Research by Fiske and Ladd (2000) shows that schools competing with each other in terms of performance are less willing to share their (best practices) with each other. Performance measurement is an adverse effect on the relations between schools (Fiske and Ladd, 2000).

2.8.9 Performance Measurement Punishes Good Performance

Performance measurement brings transparency and may stimulate output. As a result, more may be produced on a given budget and – the reasoning goes – the same performance can probably be achieved on a lower budget. Bordewijk and Klaasen (2000), point out that an organization that invests in efficiency and in transparency, takes a risk: the manager can translate this into a lower budget for the following year for the same performance. The

colleague organization that does not invest in efficiency and transparency is rewarded with the same budget for the same performance (Bordewijk and Klaasen, 2000).

2.9 Possible solutions to challenges

In an industry where superior performance is increasingly difficult to prove and funding is equally difficult to justify, federal agencies must find a way to best satisfy the requirements of many stakeholders, with fewer resources. The challenges of meeting innovation include staying ahead of the technological curve, managing ongoing mandates, collaborating across government agencies, focusing on logistics, providing accountability, and dealing with budget cuts. No matter what your branch of government, you are challenged to do more with less. As a result, the Government Performance and Results Act (GPRA) of 1993, holds federal agencies accountable for using resources wisely and achieving program results (GPRA, 1993).

The Balanced Scorecard is not a new concept for many private and public organizations, but gaining buy-in to the adoption of this methodology in the strategic planning and management process is still a common challenge for many organizations that engage the process. If you are considering or currently using Balanced Scorecard as a strategic management system, there is a new approach that when properly implemented can help ensure your success.

Learning more about how Operational Performance Management (OPM) can be the driver to provide the common framework necessary to align disparate parts of the organization, using proven methodologies and techniques to ensure individual business units are performing optimally and contributing to the core organizational mission.

2.10 Performance measurement in KPLC

There has been increased pressure from donors and other stakeholders on accountability and transparency in the public sector in Kenya. The government of Kenya recognized the need to enhance efficient service delivery through its policy paper on Economic Recovery Strategy for wealth and employment creation (2003-2007), which envisaged efficient service delivery by state corporations as a basic necessity to developmental growth. This paper argues that in order to improve performance, corporate governance and management of state enterprises, performance contracts will be introduced in state enterprises.

KPLC uses a performance measurement system that covers both financial and non financial aspects of the company. The system does not cover the performance of the union staff. The current performance system was introduced in October 2004. Before then, the company used to evaluate its employees based on the appraisal system which lacked objectivity. Recently the company linked the performance measurement system to rewards.

The research studies by various authors had not focused on the challenges in performance measurement in Kenya power and lighting company limited in the preparation, implementation and evaluation stage of measuring performance at KPLC. This study was motivated by the need to fill this gap in knowledge.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research design

This research Study was carried out through a descriptive survey. Descriptive research portrays an accurate profile of persons, events, or situations (Robson, 2002). Surveys allow the collection of large amount of data from a sizable population in a highly economical way. It allows one to collect quantitative data, which can be analysed quantitatively using descriptive and inferential statistics (Saunders et al., 2007). Therefore, the descriptive survey was deemed the best strategy to fulfill the objective of this study. Descriptive survey has also been successfully used in other studies on commercial banks for example (Ngugi, 1999) used descriptive survey design in the empirical analysis of interest rates spread in commercial banks in Kenya .

3.2 Population and sampling

Data was collected from 150 of the 2097 management staff. These were selected as shown in table 3.1 below. The respondents were selected from a listing of all the KPLC management employees in Central and Nairobi Region. KPLC management employees are divided into senior management and middle management. This staffs are spread across 5 geographical regions namely Central office, Nairobi region, Western region, Coast Region and Mt. Kenya Region. Due to time and financial constraints, central and Nairobi region staff were used.

Though there are various statistical methods, the adhoc method was used to determine the sample size. This was due to lack of statistical variables on the population chosen for this study, which would be input in building a mathematical model. This was consistent with other recent studies done in KPLC. In their surveys, Muriithi, 2007, took a sample of 150, Nganga, 2004, took a sample of 100, while Omondi, 2005, took a sample of 165. A sample size of 150 was chosen for this study.

Table 3.1 Selection of Respondents

Population (N)				Sample size (N)	
No. of employees by level in Management				% of Sampled employees	No. of employees in Target sample
Region	No. of Senior Management Employees	No. of middle Management Employees	Total No. of employees in Management level.		
Central office	286	231	517	64.4%	96
Nairobi Region	127	159	286	35.6%	54
Total	413	390	803	100%	150

Source: Adopted from KPLC Human Resources records in SAP (Systems Applications in data Processing) in July 2008.

3.3 Data collection

The study used Primary data. The primary data was collected from the staffs that go through the performance measurement exercise using structured questionnaires which were administered through drop and pick method.

3.4 Data analysis

Factor analysis was used to analyze the data collected. Content analysis is the systematic qualitative description of the composition of the objects or materials of study. It involves observation and detailed description of objects, items or things that comprise the study (Mugenda, 1999). The reason for choosing this methodology was that it does not restrict respondents on answers and has potential of generating more information with much detail.

The data collected was analysed using descriptive statistics such as mean scores to show frequency and graphs to show percentages.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis and interpretation; the analysis draws from the objectives of the study as was set in the proposal to this study. The analyses are both qualitative and quantitative in nature.

4.2 Demographic statistics

This section presents the various characteristics of the respondent; this was required to assist the researcher in making adequate conclusions regarding the accuracy of responses obtained.

4.2.1 Gender of the respondent

The results showed that a majority of the respondents were male, represented by 55%, while the female were 45%. The difference was minimal showing that no significant disparities may exist in relation to responses orientation to gender.

4.2.2 Level of Education

The respondents were asked to show their level of education. This was required to help the researcher judge the ability of the respondent to give relevant and correct responses. This attribute was also expected to enable the researcher understand the kind of the responses given and make other inferential analytics in validating the responses. The results showed that a majority of the respondent had attained graduate level of education at 51%; this was followed by master's level at 34%. This indicates that a majority of the respondent were able to understand and give correct answers to the questions asked. The table below shows the results

Table: 4.1 Level of education

Level of education	Frequency	Percentage
Masters	46	34
Graduate	64	51
Diploma	21	13
Certificate	4	2
Total	135	100

Source: Research Data

4.2.3 Analysis of Department

The respondents were asked to show the department they worked in. This was expected to aid in making conclusions as to which departments were prone to most challenges in the organisation. The results showed that among the departments listed the majority of the respondents were from the supplies department at 41% followed by the IT department at 24%. This implies that the challenges as obtained in this research study can be severally generalized on the two departments. The table below shows the results of the study.

Table: 4.2 Department of the respondent

Departments of the respondent	Frequency	Percentage
IT	32	24%
Supplies	55	41%
Administration	18	13%
Procurement	14	10%
Customer service	16	12%
Total	135	100%

Source: Research Data

4.2.4 Analysis of position of the respondent

The respondents were asked to indicate their position in the department and in the organisation. The responses were expected to help the researcher in making conclusions regarding the positions that experience most challenges. The results showed that for a majority of the respondent they were ICT officers, represented by 23%, this was followed by administrators at 21% and engineers at 13%. This indicated that for the challenges established they are likely to be experienced by the three positions to a large extent over and above the other positions. The table below shows the results.

Table: 4.3 Position of the respondent

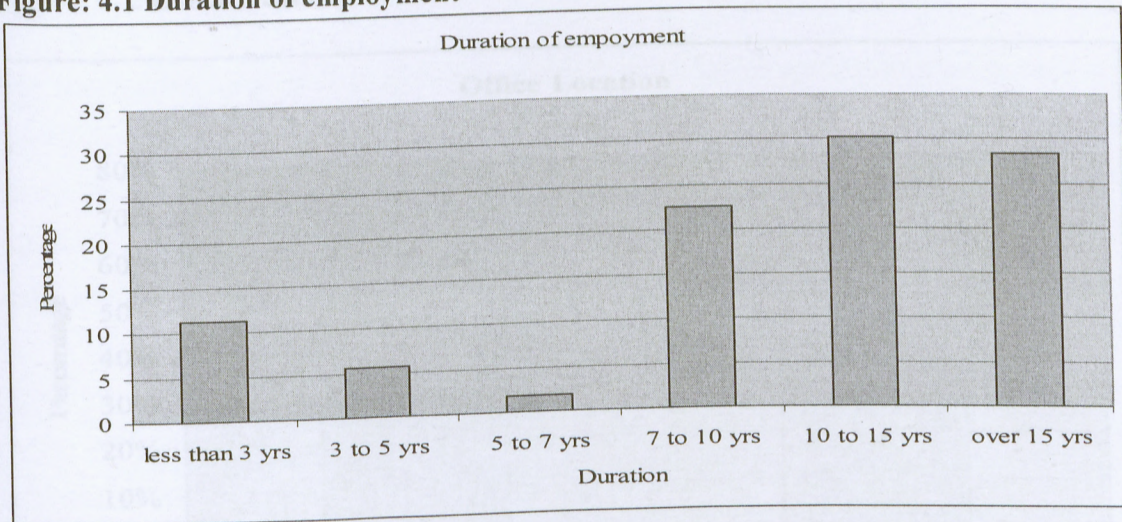
Position	Frequency	Percentage
ICT officer	31	23%
Administrator	28	21%
engineer	18	13%
Secretary	14	10%
Supplies officer	12	9%
Clerical staff	9	7%
Librarian	7	5%
Auditor	7	5%
Accountant	5	4%
Technician	2	1%
transport officer	2	1%
Total	135	100%

Source: Research Data

4.2.5 Duration in KPLC

The respondents were asked to show the duration they had been working in KPLC. This was an important attribute which was expected to guide the researcher in validating the challenges enlisted, since more working years automatically means more experiences in terms of challenges. The results in the graph below show that a majority of the respondent had been in the firm for between 10 to 15 years. This was represented by 30% of the respondent. A significant percentage had also been in the firm for over 15 years represented by 28%. This implies that the majority of the respondent had enough experience to advice on the challenges experienced.

Figure: 4.1 Duration of employment



Source: Research Data

4.2.6 Level in Management

The respondents were asked to show their level in management, this was required to show the seniority of the respondent and make comparisons as to the challenges on management and other staff. The table below shows that a majority of the respondent, represented by 60% were in the middle management positions. This implies that majority of the challenges may have been experienced in the middle level of management. The table below shows the results.

Table: 4.4 Level in management

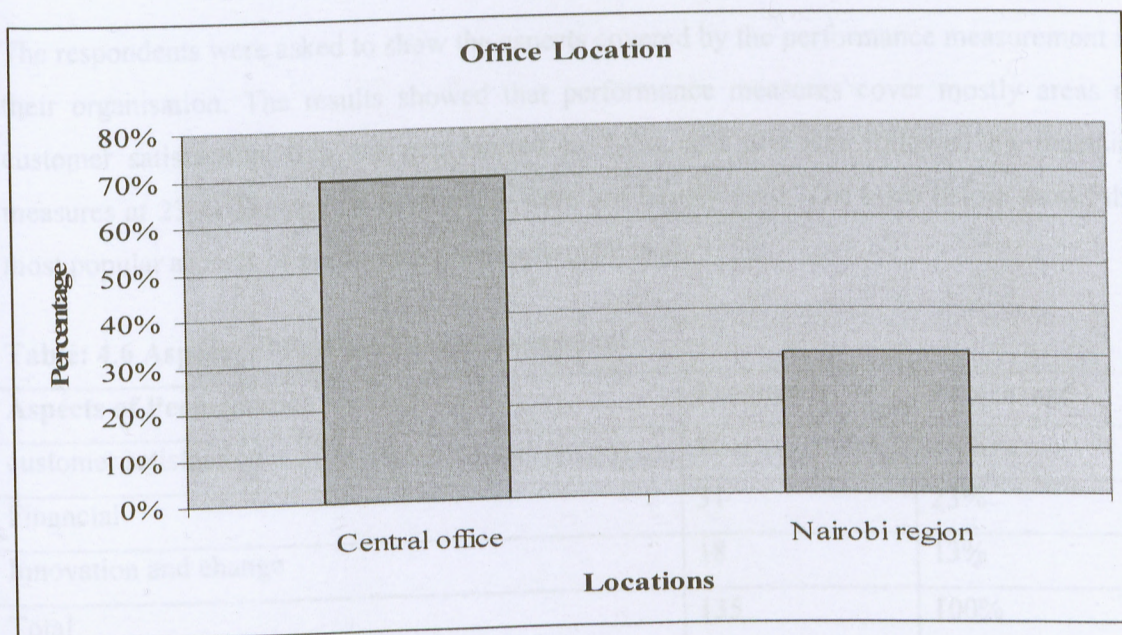
Level in management	Frequency	Percentage
senior mgt	54	40%
middle mgt	81	60%
Total	135	100

Source: Research Data

4.2.7 Office Location

The researcher wanted to establish the location of the office that the respondents were in. This was also required to guide in conclusions regarding the challenges experienced in each office location. With majority of the respondent coming from the central office, represented by 60%, the bulk of the challenges may be generalized on the central office to this extent.

Figure: 4. 2 Office location



Source: Research Data

4.3 Performance Measurement

4.3.1 Involvement in Performance Measurement

The researcher sought to establish whether the respondents were involved in the performance measurement in their organisation. This was to help the researcher in making conclusions on the respondent's awareness and appreciation of the process of performance measurement in their organisation. The table below shows that a majority of the respondent are involved in the process of performance measurement, represented by 71%. This implies that the majority of the respondent were aware and appreciated the process of performance measurement.

Table: 4.5 Involvement in Performance measurement

Responses	Frequency	Percentage
Yes	96	71%
No	39	29%
Total	135	100%

Source: Research Data

4.3.2 Aspects covered by Performance Measurement

The respondents were asked to show the aspects covered by the performance measurement in their organisation. The results showed that performance measures cover mostly areas of customer satisfaction, this was represented by 64%, and this was followed by financial measures at 23%. The rest of the aspects were not largely used. The table below shows the most popular aspects of performance measurement used.

Table: 4.6 Aspects of Performance measurement

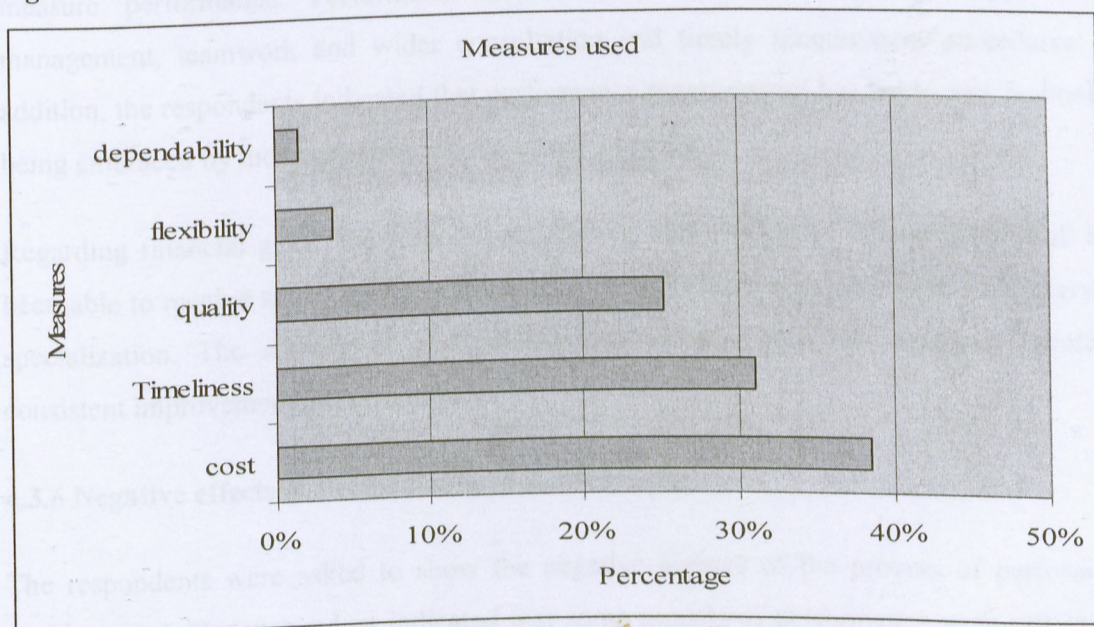
Aspects of Performance Measurement	Frequency	Percentage
customer satisfaction	86	64%
Financial	31	23%
Innovation and change	18	13%
Total	135	100%

Source: Research Data

4.3.3 Measures used in Performance Measurement

The respondents were asked to show the measures used in performance measurement, this was expected to advise the researcher on the most popular criteria employed in measurement. The graph below shows the results of the findings.

Figure: 4.3 Measures used



Source: Research Data

4.3.4 The respondents understanding of Performance measures used

The respondents were asked to show whether they understood performance measures used to measure their performance. This was in order to validate the responses to other sections of the study since they require awareness. The results show that a majority of the respondent understand the performance measures used to measure their performance. This implies that to this extent the responses obtained are valid. The table below shows the results of the study.

Table: 4.7 Awareness of Performance measures used

Responses	Frequency	Percentage
Yes	93	69%
No	42	31%
Total	135	100%

Source: Research Data

4.3.5 Positive effects of Performance measurement

The respondents were asked to show the positive effects they have experienced in the process of performance measurement. The respondents indicated several effects that have boosted the organisation. Particularly, the respondents showed that performance measurement has led to timely completion of projects; this may be because of the measure of timeliness used to measure performance. Performance measurement has led to greater support from management, teamwork and wider consultation and timely procurement procedures. In addition, the respondents indicated that performance measurement has led to new technology being embraced by the employees and the clarity of tasks.

Regarding financial gains, the respondents showed that employees who perform well have been able to receive salary increase and clear cut duties have been established for every job specialization. The activity of performance measurement has also evidently created a consistent improvement of performance.

4.3.6 Negative effects of Performance measurements

The respondents were asked to show the negative aspects of the process of performance measurement. The respondent indicated that some aspects of performance were not easy to measure, as a results this would lead to non inclusion of all aspects of a job description and

hence the employee being disadvantage. The process also leads to lack of consistency in performance measurement; this was because people would mostly focus on attaining the targets. Other respondents showed that some targets depend on other departments and as a result, the ability of person to attain a given level of performance is pegged on another persons ability to meet their own.

4.4. Challenges

Table: 4. 8 Challenges in performance measurement

Challenges	Mean
Non alignment of measures with rewards	4.36
setting achievable yet challenging targets	4.06
Failure to involve staff in setting targets	3.98
targets depend on other divisions	3.91
Accessing the right data	3.87
lack of ownership by union staff	3.83
difficulty in choosing measures	3.79
employees fear of measurement	3.74
lack of monitoring tools	3.68
Inadequate resources to meet targets	3.66
lack of leadership, support and commitment	3.60
aligning targets to corporate strategy	3.58
Resistance to change	3.55
May kill professionalism	3.53
making the team committed to targets	3.51
PM prompts game playing	3.49
ensuring credibility of the evaluation process	3.45
lack of ownership	3.40
lack of common understanding	3.38
frequent performance reviews	3.36
processing raw materials	3.34
Blocks ambition	3.30
unclear reporting lines	3.30
increases bureaucracy	3.26
lack of organisation structure	3.21
lack of job description and delegation of authority	3.11
Blocks innovation	3.08
failure to delete old performance reports	3.06
Kills system responsibility	2.94
Punishes good performance	2.92

Source: Research data

The respondents were asked to show the level of significance of the challenges in relation to the performance measurement process. The respondents were asked to use a scale of 1 to 5 to rank the challenges. In the given scale, 5 represented very significant and 1 represented negative significance. The researcher in judging whether a challenge was significant or not used a cut off, for all the challenges with a mean of 3.5 and above, it was concluded that they were significant. The results as shown above indicate that non alignment of measures with rewards performance is significant challenge; this may be due to the fact that obtaining a measure that is able to peg the level of achievement to the rewards obtained is hard to define. In this sense when rewards are not aligned to measures, a person who performs better may not necessarily get more or better reward.

It can also be observed that setting achievable yet challenging goals was a challenge; in particular, it is not easy to determine which challenges best suits a given employee job description and specialization. Other significant challenges experienced included failure to involve staff in setting targets; targets depend on other divisions; accessing the right data; lack of ownership by union staff; difficulty in choosing measures; employees fear of measurement; lack of monitoring tools; inadequate resources to meet targets; lack of leadership, support and commitment; aligning targets to corporate strategy; resistance to change; may kill professionalism; making the team committed to targets. The above challenges are widely varied from both individual as well as organisational variables.

4.5 Possible Solutions

The respondents were asked to indicate what possible solutions would be necessary to solve the challenges experienced in performance measurement. The 5 point likert scale was used to grade the solutions into the very significant represented by 5 and the negatively significant represented by 1. The researcher used a cut off mean of 3.5 to judge whether a solution was significant. All solutions with means above 3.5 were considered significant.

As was presented in the table below, all the solutions listed were graded as significant. Enhancing training may have been considered a significant solution given the exposure it gives the employees as well as the reviewers so that the process is conducted in a knowledgeable manner. Well defined organization structure enables the identification of roles and responsibilities among the participants and the establishments of monitoring and

reporting frameworks. In addition, rewarding good performance enables the employees to develop a drive to success. Top management support is mandatory for success of any undertaking within an organisation since the top management sets the tone for leadership.

Enhancement of supervision is likely to achieve timely identification and correction of hiccups in the process of performance measurement. Delegation of authority enables lower level persons to undertake other bigger responsibilities and this ensures continuity. The availability of resources determines to what extent the performance measurement process can be successful, resources are particularly required for financing the rewards. Staff involvement in setting the goals is important in ensuring acceptability of the targets and the likelihood of the achievement. Finally it is important that the management staff in charge of the performance of various lower level staff have relevant knowledge and experience for conducting the reviews. Of particular importance are the skills that enable the management staff to make correct judgment.

Table: 4.9 Possible solutions to the challenges

Possible Solutions	Mean
Enhance training	4.19
Well defined organisation structure	4.30
Reward good performance	4.49
Top management support	4.32
Enhance supervision	4.21
Give delegation of authorities	4.06
Avail resources	4.28
Consults staff in setting targets	4.53
Implement systems to capture data and evaluate data	4.28
Set SMART targets	4.25
Impart skills and know how on mgt staff	4.25
Evaluate relative importance of measures	4.25

Source: Research data

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions and recommendations. The conclusions are drawn from the objective of the study. The recommendations establish criteria for improving the state of affairs as was established by the study.

5.2 Summary of findings

The study was set to establish the challenges experienced in performance measurement at the Kenya Power and Lighting Company. The demographic characteristics of the respondent indicate that a majority were male respondents who had attained graduate level of education; this implied that the respondents were better placed to answer the research questions and appreciate its purpose. Most of the respondents were from the supplies department and IT department. In relation to the positions held in the firm, majority were found to be ICT officers this may be attributed to the high level of information technology sophistication involved.

Regarding the duration in the firm, it was established that a majority of the respondent had been in the firm for between 10-15 years, this indicated that most respondent had the experience to answer the questions on the challenges. In relation to the level of management, most of the respondents were from the middle management level, in this sense therefore, the challenges may be generalized on the middle management levels. The majority of the respondents were also from the central office.

The majority of the respondent indicated that they were involved in the development of performance measures that were used. The aspects covered by the measures included customer satisfaction, innovation and financial aspects. In measuring performance, the measures used included cost; timeliness and quality. The majority of the respondent understands the performance measures that are used.

In relation to the positive aspects of performance measurement, the respondents showed that performance measurement has led to timely completion of projects; this may be because of

the measure of timeliness used to measure performance. Performance measurement has led to greater support from management, teamwork and wider consultation and timely procurement procedures. In addition, the respondents indicated that performance measurement has led to new technology being embraced by the employees and the clarity of tasks. Regarding financial gains the respondents showed that employees who perform well have been able to receive salary increase and clear cut duties have been established for every job specialization. The activity of performance measurement has also evidently created a consistent improvement of performance and experiences.

Regarding the negative aspects, the respondent indicated that some aspects of performance are not easy to measure, as a results this would lead to non inclusion of all aspects of a job description and hence the employee being disadvantage. The process also leads to lack of consistency in performance measurement; this was because people would mostly focus on attaining the targets. Other respondents showed that some targets depend on other departments and as a result, the ability of person to attain a given level of performance is pegged on other person's ability to meet their own.

In relation to the challenges experienced, the respondent indicated that non alignment of performance with rewards is significant challenge; due to the fact that obtaining a measure that is able to peg the level of achievement to the rewards obtained was hard to define. Setting achievable yet challenging goals was a challenge since it was not easy to determine which challenges best suited a given employee's job description and specialization. Other significant challenges experienced included failure to involve staff in setting targets and the dependence of targets on other divisions. Accessing the right data and lack of ownership by union staff as well as difficulty in choosing measures were also significant challenges.

The possible solutions to the challenges listed above were established to be all relevant as was listed in the questionnaire. Particularly; enhancing training was considered a significant solution given the exposure it gives the employees as well as the reviewers so that the process is conducted in a knowledgeable manner. Well defined organisational structure enabled the identification of roles and responsibilities among the participants and the establishments of monitoring and reporting frameworks. Rewarding good performance enables the employees to develop a drive to success. Top management support is mandatory for success of any undertaking within an organisation since the top management sets the tone for leadership.

Enhancement of supervision is likely to achieve timely identification and correction of hiccups in the process of performance measurement. Delegation of authority enables lower level persons to undertake other bigger responsibilities and this ensures continuity. The availability of resources determines to what extent the performance measurement process can be successful, resources are particularly required for financing the rewards. Staff involvement in setting the goals is important in ensuring acceptability of the targets and the likelihood of the achievement.

5.3 Conclusions

The objective of the study was to determine the challenges experienced in the process of performance measurement. In relation to the significant challenges experienced in performance measurement, it can be concluded that non alignment of measures with rewards is a significant challenge. This may be attributed to the fact that obtaining a measure that relates the level of achievement to the rewards obtained was hard to define. In addition, setting achievable yet challenging goals was a challenge since it was not easy to determine which challenges suited best a given employee's job description and specialization. It can also be concluded that failure to involve staff in setting targets and the dependence of targets on other divisions also influence the performance measurement. Accessing the right data, employees' fear of measurement, lack of adequate resources, aligning targets to corporate strategy and lack of ownership by union staff as well as difficulty in choosing measures were also significant challenges.

5.4 Recommendations

The study recommends that for successful performance measurement, the challenges must be determined and strategies and plans to counter and solve them framed. Of particular importance is the building of a knowledgeable staff that appreciates and contributes to the performance measurement process.

The study also recommends that staff members should be involved in setting targets. This ensures that they fully accept the set targets and work towards their achievement. The set

targets should also be cognizant to the rewards and measures used; this would imply that a person who performs best gets most rewards. IT Systems should also be developed and implemented to capture and evaluate data. Adequate resources should also be availed to ensure that targets are met.

5.5 Limitations of the study

The study was carried out in KPLC. The respondents were selected from a listing of all the KPLC Management employees in Central and Nairobi region due to financial constraints of the researcher. The research mainly focused on employee's performance measurement as the area of study.

5.6 Areas of further Research

The study suggests that additional research should be undertaken in the area of performance measurement regarding the factors that lead to successful performance measurement function in KPLC or other firms. Additional studies can also be undertaken in areas such as the perception of employees on the performance measurement and its contribution to firm performance.

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APPENDIX 1: QUESTIONNAIRE

Part A: Demographic

1. What is your gender? ()

Male ()

Female ()

2. State your highest level of education?

PhD ()

Masters degree ()

Undergraduate ()

Diploma ()

Certificate ()

Secondary ()

Primary ()

None ()

3. What department do you work in?

.....

4. What is your position in the department?

Administrator ()

Engineer ()

Librarian ()

Secretary ()

Technician ()

Clerical Staff ()

Transport Officer ()

ICT Officer ()

Accountant ()

Supplies Officer ()

Auditor ()

Human Resource Officer ()
Other (specify)

5. How long have you been working in the KPLC?

- Less than 3 years ()
- Between 3 and 5 years ()
- Between 5 and 7 years ()
- Between 7 and 10 years ()
- Between 10 and 15 years ()
- Over 15 years ()

7. What is your level in management?

- Senior Management ()
- Middle Management ()

8. Office location

- Central office ()
- Nairobi Region ()

Part B: Performance Measurement

1. Were you involved in the development of the Performance Measures that are used to measure your performance?.

- Yes ()
- No ()

2. Do your Performance Measures cover the following aspects?

- Customer satisfaction ()
- Innovation and change ()
- Financial ()
- Internal business processes ()

3. What Measures are used to measure your Performance?

- Timeliness ()

- Quality ()
- Cost ()
- Flexibility ()
- Dependability ()
- Teamwork ()
- Change Management ()
- Business Knowledge ()
- Technical Knowledge ()

4. Do you understand all the Performance measures that are used to measure your performance?

YES ()

NO ()

5. List down the POSITIVE effects that you have experienced as a result of performance measurement:

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

6. List down the NEGATIVE effects that you have experienced as a result of performance measurement:

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

Part C: Challenges

7. Listed below are some of the challenges faced when using performance measures on a

likert scale of 1 to 5. Please rank by a tick in the appropriate box the extent to which you consider these challenges significant using the following rating:

5=very significant, 4=significant, 3=Moderately significant, 2=Not significant and 1= Negative significant.

	Challenges	5	4	3	2	1
1.	Difficulty in choosing the right measures					
2.	Setting achievable, yet challenging Targets					
3.	Employees' fear of measurement					
4.	Accessing the right measurement data					
5.	Processing the raw data may be time consuming					
6.	Failure to delete old performance reports					
7.	Resistance to change					
8.	Increases bureaucracy					
9.	Blocks innovation					
10.	Blocks ambition					
11.	Kills system responsibility					
12.	Punishes good performance					
13.	Performance measurement prompts game playing					
14.	Non alignment of measures with rewards					
15.	May kill professionalism because it focus on clearly defined aspects and ignores complexity					
16.	Lack of adequate resources to meet the targets					
17.	Lack of ownership by unionisable staff					
18.	Targets being dependent on other divisions					
19.	Lack of leadership, support, & commitment by senior managers during implementation					
20.	Failure to involve staff when setting targets					
21.	Lack of common understanding of the measurement objectives					
22.	Making the team committed to the targets					
23.	Aligning targets with corporate strategy					

	Challenges	5	4	3	2	1
24.	Lack of monitoring tools and systems					
25.	Unclear reporting lines					
26.	Lack of job descriptions and delegations of authority					
27.	Lack of a proper organisation structure					
28.	Too frequent performance reviews					
29.	Lack of ownership					
30.	Poor communication					
31.	Ensuring credibility of the evaluation process					
	Others (Please specify)					
32.						
33.						
34.						
35.						
36.						

8. To what extent do you feel that the following can eliminate the challenges that KPLC is facing in its performance measurement process? Please rank by a tick in the appropriate box the extent to which you consider these possible solutions significant. 5=very significant, 4=significant, 3=Moderately significant, 2=Not significant and 1= Negative significant.

	Possible Solutions	5	4	3	2	1
1.	Enhance Training					
2.	Have a well defined organisational structure					
3.	Reward good performance					
4.	Solicit Top management support					
5.	Enhance supervision					
6.	Give delegation of authorities					
7.	Avail resources					
8.	Set targets in consultation with the staff who are to achieve the targets					

	Possible Solutions	5	4	3	2	1
9.	Implement systems to capture data and evaluate					
10.	Set SMART Targets					
11.	Impart skills and know-how to all management staff					
12.	Evaluate relative importance of measures					
	Others (please specify)					
13.						
14.						
15.						
16.						
17.						

APPENDIX II: LETTER TO RESPONDENTS

Dear Sir/Madam,

RE: ASSISTANCE IN COLLECTING RESEARCH DATA IN KPLC

I am a student at Nairobi University pursuing a Masters Degree. In partial fulfillment of the course requirements, I am undertaking a research on **“The challenges in performance measurement”**.

Kindly fill the attached questionnaire as accurately as possible. The information being sought is purely for academic purposes and all responses are strictly confidential. Thank you for your co-operation.

Yours Sincerely,