

DECLARATION

**THE NATURE OF OPERATIONS STRATEGY AND ITS
CONTRIBUTION TO PERFORMANCE- THE CASE OF
KPLC**

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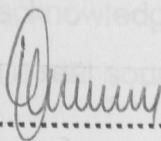
**A Research Report To The School Of Business Studies In Partial
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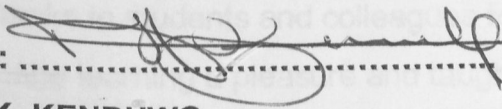
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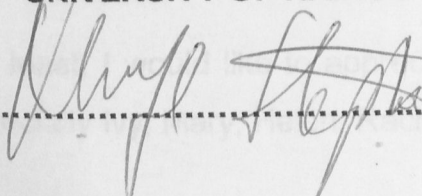
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ABSTRACT

Increased environmental changes in regionalisation, globalisation, technological advances and political reforms in Kenya are leading to increased liberalization. Partial liberalization of some sectors indicate that many Kenyans are willing to abandon the formerly protected service providers in favour of the emergent competitors who are showing increasingly improved performance as opposed to the protected parastatals. This paper studies the operations strategy of KPLC to find the extent to which operations strategy is entrenched and its visibility and the role operations strategy has played in the results achieved in an attempt to show that operations strategy plays an important role in the success of a firm and is therefore indispensable in the ever dynamic environment of hyper competition.

To achieve the objective, a questionnaire was given to 120 members of Top and Middle level Management of KPLC, comprising structured questions on operations strategy. Analysis of the data indicated that operations strategy is entrenched only to a little extent at KPLC implying that operations strategy is only developed, deployed, adhered to and recognised as crucial for the survival of the organization in a competitive environment only to a little extent. The results also show that operations strategy contributed little to the achieved results of KPLC. Finally the results show that there has been only little improvement in selected performance indices and there was no one area with outstanding improvement.

On the basis of the study it was recommended that KPLC needs to build its competencies in a particular area in which competitors cannot cope so as to stay ahead of competitors and in particular, find a way of locking in its customers so that they cannot be taken over by its competitors. The limitations of the study were recognised as failure to give room for respondents to give personal views that may differ from the researcher's and that the study merely considered Nairobi's Top and Middle level Management. KPLC performance may not be uniform countrywide and if the same research was conducted country wide covering all employees it may give different results. On suggested further research it was proposed to conduct the research company wide and to consider employees who were left out to see what difference it will make to the results.

CHAPTER ONE: INTRODUCTION

1.1 Background

Customers have very many choices today. This has forced companies which are customer focused, mainly from the private sector, to make efforts to meet the customer needs. Those firms from the private sector that have failed to adapt to meet customers changing demands have either lost their market share to competitors or in the extreme have been forced to close business. Skinner (1986) recognises this when he argues that to be competitive firms should concentrate on quality, reliable delivery, short lead times, good customer service, rapid product introduction, flexible capacity and efficient capital deployment.

In the last two decades we have seen the demise of the Soviet block, the rise of the South East Asian economies, increased regionalisation, technological advances and political reforms in the developing countries. The World Bank and the IMF have been at the forefront of demanding political reforms in the developing countries. Supported by the developed world, they have withheld financial support and development aid to the third world until the conditionalities of granting such aid are met. As Jarrar & Zairi (2001) have recapped the accelerating change in technology liberalization and markets requires companies to readjust and realign their operations to counter the emerging challenges. The conditionalities include more political freedom, liberalization of the economy and privatisation of the service sector where the governments have had a strong hold.

The above scenario has led to dramatic changes in a number of parastatals in Kenya. In this regard there has been a strong demand that the airwaves, the telecommunications industry and the energy sector be liberalised. For example, in the communications sector Telkom Kenya has not fared well in its competition with newcomers Safaricom and Celtel while Kenya Broadcasting Corporation has suffered the same fate in its competition with Nation Media, Citizen, Kenya Television Network and other media players. The success shown by a number of new competitors reflects that the parastatals were not ready for the challenge of competition and they never derived any advantage from their long experience in business to ward off competition. Perhaps they did not have a proactive operations

strategy that would have resulted in comparative advantages over the emergent competitors so as to retain their large market share. It can equally be said that the parastatals never focused on the emerging market trends in order to align their operations to counter their competitor's actions. Since change presents opportunities for growth and innovation or threats from cut throat competition (Jarrar & Zairi, 2001) market operators need tools to choose their position in the market place. A proactive operations strategy is one rich source of the requisite tools.

1.2 Operations strategy

Operations strategy is the strategic reconciliation of market requirements with operations resources (Foster, 2001) which a firm can use to form strategic decisions that can satisfy the performance requirements and meet market needs. As Lawson (2001) has stated, operations strategy is the strategic management of core competencies, capabilities, processes, technologies, resources and key tactical activities necessary in any supply network in order to create the value demanded by customers. Operations strategy therefore looks at the management imperatives on quality, cost, speed and flexibility and continuously aspires to develop the organisation's competencies to outdo the competition and appeal to customer preferences. Superior operations effectiveness can buttress a company's competitive position and when based on people's capabilities and processes it provides sustainable competitive advantage (Hayes & Upton, 1998). Operations strategy contributes to overall strategy as operations creates customer value from inputs. Operations strategy must be consistent with business and functional strategies and cannot be discreet and independent- hence providing a link with business strategy and other functions in order to be supportive and generative of operating excellence. Operations strategy thus reconciles the requirements of markets with the capabilities of resources and is necessary since resources are difficult to change, technically constrained and complex while market requirements are dynamic heterogenous and ambiguous.

1.3 Relationship between operations strategy & performance

Operations strategy is used by the operations management function to create customer value from inputs. Hayes & Wheelwright (1984) have identified four stages of competitiveness through which a firm can evolve using operations strategy; internally neutral when it occupies an insignificant position and its activities are routine, externally

neutral when the operations strategy strives to achieve parity with competitors and pursues capital investment thereby merely adopting and following industry practices, internally supportive of the overall business strategy if it purposefully pursues a manufacturing strategy to ensure its decisions are coherent, consistent and supportive of business strategy and in stage four manufacturing takes the strategic role of being externally supportive of the business competitive strategy in the market place and the operations function takes the lead in continually seeking capabilities in anticipation of needs, allowing the firm to stay ahead of the competition. Operations strategy therefore develops and leverages resources to create order winners and qualifiers (Chase et al, 2001). In stages one and two the operations strategy can be described as reactive while in stages three and four it becomes proactive and propels the company into market leadership. The operations strategy then uses the competencies of cost, quality, flexibility and speed to outdo the competition (Dilworth, 1996). The resource based view (Wanefelt, 1984) advances that a firm can use its tangible & intangible resources and its organisational capabilities to develop durable, appropriate and suitable competencies that will result in a competitive advantage. Prahalad & Hamel (1990) hold that the success of the operations strategy depends on how the resources are combined to create value for the customer. Operations strategy therefore plans how to acquire, develop, leverage and retain the resources as a competitive and survival weapon under the resource based view (Gagnon, 1999). Therefore, operations strategy helps to attain cost effectiveness, quality, flexibility and speed which translate to market dominance and increased financial performance. It also leads to adoption of best practices and harmonises the business strategy with the functional strategies.

1.4 Introducing Kenya Power & Lighting Company (KPLC)

Kenya Power & Lighting Company (KPLC) is a public utility dealing in the transmission and distribution of electricity and can be traced back to 1875. It has grown through various towns and countries in East Africa under the name of East Africa Power & Lighting Company. Following the disintegration of the East African Community its activities were limited to Kenya and it acquired the name of Kenya Power & Lighting Company in 1983. Prior to 1997 its activities encompassed the generation, transmission and distribution functions but in 1997 studies were commenced that culminated in the separation of the generation function to form Kenya Electricity Generation Company (Kengen). KPLC was

therefore left to deal with transmission and distribution of electricity throughout Kenya. KPLC operates with about 6000 employees under four regional divisions of Nairobi, Coast, Mt Kenya and Western. It is also divided into six functions of Transmission, Distribution & customer service, Human Resources & Administration, Planning Research & Performance monitoring, Information Technology and Finance. Transmission and Distribution & customer service which engage in energy transmission, Design, Construction, Operations & Maintenance and Billing & Revenue collection constitute the core functions and the others are support functions.

Due, mainly to the forces of liberalisation and political reform and the desire to achieve transparency and accountability in the way KPLC operated and invested in its projects, a Business Process Reengineering was done in 1997 where KPLC chose a Spanish partner to computerise its processes which subsequently led to staff reduction. These forces also led to separation of Kengen from KPLC in 1998. Sensing that the forces would lead to liberalisation and outright competition in the energy sector KPLC coined a vision- 'To achieve world class status as a quality service business enterprise so as to be the first choice supplier of electrical energy in a competitive environment' and a mission- 'To efficiently transmit and distribute high quality electricity throughout Kenya at cost effective tariffs, to achieve the highest standards of customer service and to ensure the company's long term technical and financial viability.

During the drought of 1999-2000, KPLC faced an electricity shortage and could not meet the demand of its customers and therefore resorted to electricity rationing. This not only increased the operating costs but also reduced revenues and the high fixed costs meant that KPLC had to contend with losses in the financial statements. An attempt to breach the gap using Independent power producers (IPPS) who came with diesel generators made the deficit in the balance sheet even greater due to the high cost of operating diesel generators. KPLC therefore resorted to cost cutting and another staff reduction was carried out. This opened the eyes of KPLC on the fact that its functions were not well aligned and its operations were not sustainable. It therefore sought a function harmonisation process and creation of self sustaining business units under a zonal structure. This was however shortlived as there was a management change in 2003 and the zonal structure was abandoned in favour of a functional structure.

It is worth noting that the separation of Kengen from KPLC did not give the latter a margin that would enable it to break-even as the tariffs under which electricity is bought and sold are regulated. The government therefore came out to adjust the tariff and help KPLC in debt restructuring which gave KPLC some reprieve. The separation of Kengen also acted to highlight to KPLC that there was a lot of pilferage of electricity as there was a big margin between the units purchased and those sold. KPLC then put in place measures to identify and rectify areas of electricity loss which have since reduced from 21% to 18% (KPLC, 2003).

1.5 KPLC and operations strategy

As the sole transmitter and distributor of electrical energy throughout Kenya KPLC has hitherto not faced competition. However the reforms taking place at KPLC are a pointer to liberalisation and outright competition in the energy sector. Such reforms include Business Process Re engineering which has seen some amount of staff reductions and realignment of the core functions to make the company more competitive and efficient. More lately the separation of the generation and distribution functions that is mainly geared towards preparation of the power sector for liberalization and competition has added to the number of reforms being undertaken. In its vision KPLC alludes that it intends to attain world class status as a quality service provider so as to become the first choice supplier of electricity in a competitive environment. It is therefore important that KPLC learns from the effects of liberalization of the Airwaves and Telecoms sectors in order to be able to compete favourably with new players in the power sector in the event of liberalization. In order to compete effectively companies need to rethink their structures, products, processes and markets, be customer focused, innovative, nimble, flexible and handle rapid change (Jarrar & Zairi, 2001). These options are offered by a proactive operations strategy.

The Global environment climate is dynamic and is ever changing faster. Companies that will survive will need to adapt fast to competition and develop appropriate advantages through appropriate strategy (Keegan, 1989; Porter, 1990; Dilworth, 1996). The area of operations strategy provides the KPLC a vast potential of improvements that will align and harmonise the core functions, increase efficiency and ward off competition and ensure long term survival. It is therefore recommended that in order to post a better show against

competition than its compatriots in the Airwaves and Telecoms sectors and retain a market leadership position, KPLC should be proactive in its operations strategy.

A proactive operations strategy will need to be entrenched in the company's operations to provide better guidance to the organisation, make managers alert to winds of change and opportunities presented by the dynamic environment. It also provides a rationale to evaluate competing resource requirements and to unify the numerous decisions managers make. Finally it also helps create a more proactive management posture than reactive and defensive postures and hence can propel a firm into a leadership position (Thompson & Strickland, 1993). As Skinner (1985) and Hayes & Wheelwright (1984) have also recognized operations strategy can lead to achievement of competitive advantages that can help manufacturers improve their performance and become order qualifiers and order winners.

Hayes & Upton (1998) also hold that sound strategy formulation and implementation will not only help a company to meet the challenges of competition but it can also enable a company to defend or attack competitors successfully and hence help a company to survive and prosper in the current dynamic and turbulent environment. This can be thought of as a measure of the productivity or the efficiency and effectiveness of converting inputs and resources into useful products and services. Gagnon (1999) has also recommended that there is a need for firms to address the issue how competencies and resources can be acquired, protected, leveraged and deployed to maintain a competitive advantage. There is therefore need to entrench operations strategy in the activities of KPLC.

A proactive operations strategy plays a crucial role in improving performance of organisations. This calls for management to analyse the operating capabilities and competencies selected to provide effective and sustainable competitive advantage and create coherent systems and processes that comprise the right proportions of each capability needed to face hypercompetitive markets (Dilworth, 1996). In developing the operations strategy a company must decide what kind of superiority it wants to achieve and then proceed to configure and manage its operations in such a way that will provide the desired advantage (Hayes & Upton, 1998). Since strategy also provides a common

vision and culture that is necessary for focused action in an organisation it can therefore lead to increased productivity and excellence in production or service delivery.

Strategy creates vertical and horizontal linkages and when operations strategy is carefully selected and integrated in the business and functional strategies the accomplishments of the company can be astounding (Schroeder, 1984). It is therefore important that strategy creates unanimity of action both vertically and horizontally, but if strategy fails then the expected success will not be achieved. Proper deployment of a proactive operations strategy will lead to better performance and increased productivity. Once a company has adopted a proactive operations strategy the same will be visible in the operations of the company. There will be evidence of strategic analysis and strategic planning and assessment of the desired and acquired levels of competencies and capabilities. The vision and culture of the organisation, which is a strong driving force towards goal achievement will be visible.

The Resource Based View (Gagnon, 1999) will guide the acquisition, training, retention, deployment and leveraging of resources including human and technology for innovation.

Adoption of a proactive operations strategy will allow the company to achieve customer satisfaction in terms of quality, cost, speed and flexibility and in the company's operations best practices like JIT, TQM, Benchmarking, CAD, CIM, MRP and MRO will be seen to be working.

A proactive operations strategy will call for adoption of appropriate information and computer technology to enable information sharing to improve decision making and speed of product delivery. A proactive operations strategy will therefore be visible in the operations of a company. The operations strategy must be responsive, agile and lean in order to be a source of competitive advantage (Hayes & Wheelwright, 1984) and will affect the structure, products, processes, markets and be customer focused, innovative, nimble, flexible and handle rapid change (Jarrar & Zairi, 2001).

1.6 Statement of Problem

The increased forces of regionalisation, globalisation, liberalization, technological advances and political reforms in Kenya have placed severe strain on the Kenyan Government and

the protected parastatals. Partial liberalization of the Airwaves and the Telecoms sectors have shown that more Kenyans are willing to switch to the emerging competitors and abandon the long established parastatals. Existing parastatals therefore need to improve their performance and match that of the competitors in order to keep their customers and this has often called for the parastatals to embrace operations strategy.

The emerging changes in KPLC are geared towards liberalisation and privatisation of the Energy sector. In order to ward off competition and ensure long term survival of KPLC it is imperative that operations strategy is well developed and implemented and must go beyond execution of routine objectives. It must be proactive and also fit vertically with the overall strategy and horizontally with other functional strategies. KPLC Managers need to recognise that change/competition presents opportunities for growth and innovation or threats from cut throat competition (Jarar & Zairi, 2001) and they need to develop tools of operations management to position their firm in the market place. A proactive operations strategy comes in handy in these circumstances. Companies that will survive need to adapt fast to competition and the dynamic environment and develop appropriate strategy (Keegan, 1989; Porter, 1990; Dilworth, 1996).

Operations strategy plays a key role in realizing competitive advantage as it develops and shapes core competencies and capabilities that will poise the company to challenge competitors and meet customer expectations. A proactive operations strategy will take into account the strategic resources of the company and make strategic decisions that will result in competitive advantage, by looking at the areas of quality, reliability, safety, timeliness, affordability, convenience/flexibility and innovation. The areas of safe electricity, quality, reliable, timely, affordable and convenient electricity offers KPLC a lot of room for improvement as customer needs have always centred in these areas. When emerging technology is adopted the area of innovation increases the scope of improvement available under operations strategy.

A number of related studies have been done in the past. Thiga (2002) did a study on the strategic response of airlines operating in Kenya in the face of changing environmental conditions to identify the environmental changes affecting airlines represented at JKIA and establish how the airlines were responding to changes in the environment. His findings

were that the changes comprised high operating costs, political influences, economic recession, deregulation and fare undercutting in the industry but the players were responding through restructuring, cooperation as opposed to competition, capability building, cost reduction and route rationalisation thereby dropping unprofitable routes. Since this was done in the airlines industry it is fitting to carry out a similar study in the energy sector to see how it is affected by environmental changes and how it is responding.

business performance over time to grasp how far the changes have been entrenched and

Njoroge (2003) did a study on customer's perception of service quality at KPLC based on Nairobi and Nakuru regions and his findings were that the expected service quality is generally high but the received service quality is generally low, hence resulting in a high service quality gap of 18% with KPLC's performance targets relating to service quality covering only 40% of the service quality dimensions. Since the study was based on the customer's perception of KPLC services it would be important to do a study to establish how KPLC management are poised to counter the challenge. Nyaoga (2003) did a study on the customer perception of KPLC services based on the Mt Kenya region and her findings were that customers need dependable services, accurate billing, timely service, quick response to emergencies, lower prices, courtesy and trust. Customers indicated dissatisfaction as service was lacking dependability, accurate billing, poor response, costly, tainted with corruption and constructions took long to execute. Like Njoroge she also found a large gap in the service given by KPLC. Since operations strategy enables companies to rethink their structures, products, processes and markets and helps create innovation and flexibility that will result in customer satisfaction a study on KPLC anchored on operations strategy will be in order.

challenges to the performance of KPLC.

Nengo (2004) researched on the proactiveness of the operations management function at KPLC to establish the extent to which operations management function contributes to the competitive strategy at KPLC and investigated the challenges experienced in integrating operations strategy into the overall competitive strategy. He found that the contribution of the operations management function was significant in most aspects of strategy development and the challenges were found to be organisational structure, appropriate skills & training, performance measurement and lack of equipment and infrastructure. But his study did not consider the contribution of the operations strategy to the performance of KPLC and neither did he relate the various performance measures over time to see if the

service gap is being breached. In the process of restructuring KPLC has adopted various performance measures of quality such as number of complaints of power failure, duration taken to restore power supply, number of applications for connection, number of new customers connected, duration taken to connect new applicants, percentage of system losses, quality of meter reading, quality of billing and reduction of the debt portfolio. It is the purpose of the current research to collect and analyse these quality indices together with financial performance over time to grasp how far the changes have been entrenched and translated into tangible gains. In a bid to actualise its vision KPLC has set some targets on a number of the above key performance measures.

This therefore gave rise to the statement of the problem; Given that KPLC is geared towards liberalization and privatisation and needs to ward off competition and ensure long term survival, To what extent is operations strategy entrenched in KPLC and what is the opinion of KPLC managers on how far its operations strategy has helped the firm to meet its competitive requirements?

1.7 Research Objectives

The objectives of this research therefore were:-

- i. To obtain the opinion of KPLC managers on the extent to which operations strategy is entrenched in the Kenya Power & Lighting Company as is visible or adopted by them.
- ii. To obtain the opinion of KPLC managers on the extent to which operations strategy contributes to the performance of KPLC.
- iii. To obtain the opinion of KPLC managers on the extent to which the performance of KPLC has improved on certain performance indices

1.8 Importance of the Research

- i. The findings of this research will contribute to operations management literature by providing empirical findings on the role of operations management in strategy development and implementation.
- ii. The findings from an investigation into the entrenchment of operations strategy at KPLC and its contribution to the performance of the firm will enable KPLC

Managers to reassess and readjust their strategy development and implementation in order to fit and survive in a competitive and dynamic environment.

- iii. The results of the research will provide invaluable information to managers of Kenyan parastatals who may wish to benchmark with KPLC on how the operations function provides areas of improvement in efficiency and competitiveness that will ward off competition if embraced.

CHAPTER TWO: LITERATURE REVIEW

2.1 Strategy

2.1.1 Nature Of Strategy

Pierce and Robinson (1997) have defined strategic planning as the set of decisions and actions that result in the formulation and implementation of plans designed to achieve a company's objectives involving the long term that are future oriented and complex. Johnson & Scholes (2002) have also defined strategy as the direction and scope management of an organisation takes over the long term, which achieves advantage for the organisation through its configuration of resources within a changing environment to meet the needs of markets and fulfill shareholder expectations while Thompson and Strickland (1993) define strategy as the game plan management has for positioning the company in its chosen market arena, competing successfully, pleasing customers and achieving good business performance. Strategy is a three-tier process that involves corporate, business and functional level planners and support personnel. At each successive lower level, strategic activities become more specific, narrow and short term and action oriented with lower risk but fewer opportunities for dramatic impact (Pierce & Robinson, 1997).

A firm's mission is best achieved through systematic and comprehensive assessment of both its internal capabilities and external environment. Evaluation of the opportunities leads to choice of long-term objectives and operating strategies which must be implemented, monitored and controlled (Thompson & Strickland, 1993). During strategy formulation top management craft a mission and vision to create unanimity of purpose that help to galvanise the various functions in a common direction by means of which a company survives and prospers as well as provides customer satisfaction and maintains competitive advantage (Dilworth, 1996). Strategy is therefore a matter of finding the right position in the market and streamlining competencies and resources to get to the desired position (Hayes & Upton, 1998). Mintzberg and Quin (1996) see strategy as a pattern or plan that integrates an organisation's major goals, policies and action sequences into a cohesive whole while Skinner (1969) argues that, strategy provides direction and competitiveness. Boyer (1998) also alludes to the same philosophy.

2.1.2 Role of Strategy

Thompson & Strickland (1993) have propounded that strategy provides better guidance to the organisation, makes managers alert to winds of change and opportunities and threats presented by the changing environment. It also provides a rationale to evaluate competing decisions a manager makes. Finally strategy helps create more proactive management posture than reactive and defensive postures. Aggressive pursuit of a creative strategy can propel a firm into a leadership position.

Hayes & Upton (1998) allude that sound strategy formulation and implementation will not only help a company to meet the challenges of competition but it can also enable a company to defend or attack competitors successfully. In so doing the company will survive and prosper in the current dynamic and turbulent environment. Strategy helps a firm to keep its customers by meeting customer's expectations and the changing tastes and preferences.

Strategy also provides a common vision that provides unanimity of action in an organisation (Pierce & Robinson, 1997). Strategy can give a corporate culture that is so vital for an organisation and even lead to excellence in the production or service processes. Skinner (1985) and Hayes & Wheelwright (1984) and other scholars recognise operations as having a very significant role in manufacturing as it leads to achievement of competitive advantages. In their view operations strategy can help a manufacturer improve performance to order qualifiers and order winners.

2.1.3 Strategy Development

In strategy formulation firms do a strategic analysis taking into account the internal and external environment. The internal environment encompasses the resources of the firm that may be tangible or intangible, the processes, skills and attitudes, suppliers, customers, culture, and people from which the company will identify its strengths and weaknesses. A firm has reasonable control on internal factors.

The external environment consists of competitors; social, political, legal and technological factors over which a company has no control. From the external factors analysis the company will identify the opportunities and threats presented by the environment. The aim

is for the company to hedge itself against the threats and take advantage of opportunities using its strengths and if possible make up for its weaknesses. In the process the company will make broad decisions on such matters as the breadth of the product line, the geographical scope, the competitive actions chosen, the level of social involvement, the performance objectives sought, and the technology chosen. (Pierce & Robinson, 1997; Dilworth, 1996; Thompson & Strickland, 1993).

In strategy formulation firms must choose a market segment and the capabilities they must develop to serve the chosen market effectively. Lawson (2001) has alluded that core capabilities and competencies do not just happen but are deliberately built by an organisation over time. Krajewski and Ritzman (1999) advance that a company cannot be everything to customers and must therefore choose what level of quality, cost, flexibility and delivery it will build into its products to keep its chosen markets. This choice must be made during strategy formulation so it can be integrated with the technology, and processes and skills. Boyer (1998) is also in agreement with the above view.

2.1.4 Competitive Strategy

Competitive strategy consists of business decisions a firm undertakes in order to attract more customers and fulfill its expectations. These decisions enable the firm to gain leadership position and outperform its competitors. The firm is therefore able to ward off competition and strengthen its market share (Thompson & Strickland, 2003). For competitive strategy to be realised the contribution and support of all functions is necessary.

Competitiveness of a company is its ability to compete and prosper in the market place and can be thought of as a measure of productivity or the efficiency and effectiveness of converting inputs and resources into useful products and services. Competitive strategy analyses the core competencies and capabilities of a firm vis-à-vis the competition and the customer needs so as to select the positioning the firm will take in order to survive and compete successfully. Competitive strategy therefor shapes the operations strategy and defines the competitive priorities in which companies will compete. Prahalad and Hamel (1990) argue that an organisation's resources can be combined to attain competitiveness.

Long term success however demands the creation of ever more powerful systems that are difficult for competitors to replicate and are steadily being improved. It involves the effective management of all the resources available at the heart of which are people in the organisation who alone have the capacity to build new abilities with time (Upton, 1995). The approaches and initiatives a company takes to meet customer needs, outperform competitors and achieve long-term goals constitute its competitive strategy. (Thompson & Strickland, 2003).

2.1.5 Emergent and Structured Strategy

Structured strategy is the formal planning process where top management deliberately draws long term and wide plans for the future of an organisation which are then cascaded down for implementation and control (Hill & Jones, 2001). This can be defined as the top-down strategy. However Emergent strategy does not rely on deliberate planning efforts, but rather, the way organisations are positioned and the skills and competencies they have acquired enable them to develop creativity and innovation arising from variety and diversity within the organisation. When those implementing plans have been exposed to learning and have sufficient understanding of the environment and are motivated to see and take advantage of opportunities, an organisation can then achieve its goals through emerging strategies (Hill and Jones, 2001). This process that derives a lot from operational experience is called a bottoms-up perspective of strategy and underscores the need for companies to minimize staff turnover, encourage skill acquisition and learning which can be used to enhance competitiveness. (Prokesh, 1993).

Robins (2004) has emphasized that with the learning and knowledge based organisation, knowledge is linked in unique ways to come up with novel and innovative ways that are surprising and which get competitors flat footed. This is more aligned to emergent strategy and can change the paradigms of the game so as to set new rules. Emergent strategy is more difficult to imitate as it resides in the minds of the innovators and provides real competitive advantage (Hayes & Upton, 1998). However Hill & Jones (2001) advocate that both structured and emergent strategy should be maintained by organisations as both compliment one another to make a total whole.

2.1.6 Resource Based View

This was first coined by Wanefelt (1984) who advances the idea that strategy of a firm is a function of the resources held and therefore competitive advantage is created when resources held are applied to develop unique competencies. When this is done, then the resulting advantage can be sustained due to lack of substitution and imitation by the firm's competitors. The resources held can be intangible assets, tangible assets or organisational capabilities. Resource based strategy provides competencies that are durable, appropriate, suitable, not imitable and provide competitive superiority (Wanefelt, 1984). Whereas Porter's (1980) generic model classifies strategies based on market imperatives, Product differentiation or market segmentation resource based strategy emphasizes a dynamic development and leveraging of competencies and capabilities in order to set new business diversification strategies. Learning and culture can be co-opted with operations to become key sources of competitive advantage. (Gagnon, 1999). The essence of the resource-based view is to focus on the individual resources, competencies and capabilities of the company. (Lawson, 2002).

Johnson and Scholes (1999) hold that the importance of resources and capabilities in an organisation is that they make up its strategic capability while Gagnon (1999) argues that there is need to address the issue how competencies and resources can be developed, deployed and protected. Pierce & Robison (2003) advance the idea that organisational capabilities arise from tangible and intangible assets and the ability and ways of combining assets people and processes. Lawson (2002) calls for a configuration of resources in the operations function to provide competitive advantage.

Prahalad and Hamel (1990) say that, the success of operations strategy depends on how an organisations' resources are combined to create value for the customer. During the process of combination unique competencies and capabilities are developed that competitors find difficult to imitate. Gagnon (1999) also alludes that, in the unique combination of the resources, the process may take an emergent strategy approach that may help companies reach world class status and it is therefore necessary to ensure that investments in the organisational infrastructure support and generate operations excellence

where culture and organisational learning and knowledge creation is effectively diffused to create competitive advantage.

Gagnon (1999) shows that resource based competitive strategies are directly linked to strategic operations management which benefits increasingly from the dynamic processes established under resource view, to allow new competencies to be developed and leveraged. Resource based competencies enable a company to develop hard to copy or hard to diffuse capabilities.

2.1.7 Strategic Resources

Operations strategy reconciles the requirements of the market with the capabilities of operations resources. Hill (1989) holds that, the operations resources consist of tangible and intangible resources, operations capabilities and operations processes. An understanding of the resources and processes enables management to make strategic decisions. Johnson & Scholes (1999) have explained strategic resources to consist of the following:- Tangible assets constitute the physical possessions of the firm like real estate, production facilities, raw materials, machinery, equipment and plants. Intangible assets are the non-physical possessions of the firm like reputation, brand names, culture, technical knowledge and patents. Organisational capabilities are the complex combinations of assets, people and processes that firms use to transform inputs into outputs.

Prahalad and Hamel (1990) add that, strategic resources include the knowledge and skills actually applied throughout the processes and the technology which form the basis for delivering products and services. Hill (1989) has put it that the resource based view starts with an extensive analysis of those operating capabilities and competencies existing within the firm and then management selects a few core capabilities according to their superior returns potential. Operations strategy then reconciles the clash between the nature of external markets and the nature of internal resources. Note that resources are difficult to change, technically constrained and complex while market requirements are dynamic, heterogeneous and ambiguous.

2.1.8 Core Competencies and Capabilities

Core competencies are the unique resources and strengths that sustain a firm's competitive advantage and include collective knowledge and skills an organisation focuses

on to distinguish it from its competitors. They centre on an organisations ability to integrate a variety of specific technologies and skills in developing new products and form the building blocks of core capabilities. Capabilities reflect an organisations ability to use its competencies and refer to the dynamic routines acquired by the firm. This is the managerial capacity to improve continuously the effectiveness of the organisation. (Dilworth, 1996). Core capabilities are built along the lines of cost, quality, speed, flexibility, service support, innovation and customization.

Firms that recognise that a large segment of the market buys on the basis of price pursue Cost/price strategy. They therefore build in cost advantages that they use as a competitive weapon. Product quality/reliability is pursued by firms that recognise that a segment of the market will spend more to get quality. They design products and processes to provide quality and therefore gain a competitive advantage in quality or reliability. Delivery speed is followed by firms which observe that what customers need most is the speed at which they can get what they want and therefore configure their processes to capture the target customers. Flexibility/variety/volume is a strategy followed by firms that see customers as having varying needs due to the dynamic environment and choose to survive by being flexible to meet the customer's needs in either volume or variety. Service support/after sales service is a priority chosen by companies which see customers as valuing service support more. They therefore gain competitive advantage in superior service support which is usually crucial when regular maintenance of the product is required. Innovation – in some products and services, products change rapidly and firms develop innovative capacity to retain customers. Such firms deploy substantial R&D budget and human resources training to retain their position as leaders in innovation. Customization strategy is followed by firms which recognise that customers have different needs and therefore modify their goods or services to meet the varying customer needs from which they drive competitive advantage (Chase et al, 2001; Dilworth, 1996; Oakland, 1998).

2.2 Operations Strategy

2.2.1 Definitions

Operations strategy is the strategic reconciliation of market requirements with operations resources (Foster, 2001). When a firm understands its resources and processes it can form strategic decisions that can satisfy the performance requirements to meet market

needs. Kim and Lee (1993) have defined operations strategy as the effective utilization of production capabilities to achieve business and corporate goals. Foster (2001) defines operations strategy as the decisions which shape the long term capabilities of the company's operations and their contribution to overall strategy through the ongoing reconciliation of market requirements and operations resources, while Lawson (2001) states operations strategy as the strategic management of core competencies, capabilities, processes, technologies, resources and key tactical activities necessary in any supply network in order to create the value demanded by customers. Slack and Lewis (2002) definition is that operations strategy is the pattern of decisions, which shape the long-term capabilities of an operation and their contribution to strategy.

A firm's operations strategy defines how it will compete in its own best way and consists of policies and plans for how to use production resources to meet corporate strategic goals. In all cases operations strategy must be consistent with and supportive of the corporate strategy for success. Strategic decisions in the operations function involves competitive priorities like cost, quality, speed and flexibility. Hayes & Upton (1998) have argued that superior operations effectiveness can buttress a company's existing competitive position and when based on capabilities that are imbedded in the company's people and operation processes it becomes inherently difficult to imitate and provides sustainable competitive advantage. Schroeder (1984) argues that when companies omit operations from their strategy they become less successful. Instead operations strategy should be viewed as an integral part of business strategy. Further operations strategy should be integrated with the other functional strategies.

Kim and Lee (1993) define operations strategy as the effective use of production capability and technology for achieving business and corporate goals. Ahmed and Montagno (1994) agree with this definition. Armistead et al (1994) have proposed that the overriding concept in operations strategy is one of fit between the competitive intent and operational capability on the premise that no one operational configuration of resources can do everything.

2.2.2 Contribution of operations strategy to overall strategy

The operations management function is a process by which customer value is created from inputs and is a core function. (Chase et al, 2001). In fact the operations management function employs more personnel, has more investment in machinery and equipment attracts more expenditure and comes up with the product/service that will be delivered to the customer. Therefore the role played by manufacturing/operations towards achievement of competitive advantage is key and crucial.

The operations strategy must therefore be consistent with corporate and business strategy and fit with the competitive priorities of the firm (Boyer, 1998). The degree of fit between an organisation's competitive priorities and its key decisions on structural and infrastructural investments is instrumental in development of operations as a competitive weapon. Therefore the operations management decisions should not be discreet independent events but must support the business strategy of the firm (McLaughlin et al, 1991). There is also need for fit between the various functional strategies in order to realise success (McLaughlin et al, 1991). In some cases the production and delivery process of the product are not distinct especially in the service industry. In a manufacturing firm different functions can work independently and be coordinated to support the competitive strategy but in the service industry all functions must work very closely in the process of service delivery and there is need for joint decision making.

2.2.3 Linkage of Operations to Corporate Strategy

Operations strategy must be consistent with business strategy of the firm (Russel and Taylor, 1999). The decisions made at the business strategy level must fit with the competitive priorities identified for operations. Boyer (1998) argues that, the level of fit between a firm's competitive priorities and its key decisions regarding structural and infrastructural investments provide the key to developing the full potential of operations as a competitive weapon. The operations function must not be discrete or independent but must be consistent with and support the firm's business strategy. (Dilworth & Schroeder, 1984) argue that, business strategy drives operations strategy and operations strategy should be carefully integrated with the other functional strategies.

2.2.4 Linkage of Operations Strategy to Other Functions

There is need for a fit between the various functional strategies. This is especially so when you consider R&D or marketing or finance. All functions must be geared towards serving the same customer more coherently than the competition. Effective coordination between the various functions helps to attain success (McLaughlin et al, 1991). This requirement is more important in the service industry where there is no distinction between the production process and delivery of the product to the customer. While in the service sector the marketing and customer relations function often overlap with the operations function in the manufacturing sector the two function can be independent but they need to be coordinated to support the competitive strategy. In the service industry all functions must therefore work very closely in the process of service delivery (Dilworth, 1992). In the service industry, almost all activities involving customer contact and service provision must be the result of joint decision making for marketing, operations, finance and human resources. Operations strategy must therefore fit both vertically and horizontally (Heizer & Render, 1998). Dilworth (1996) argues that in the current competitive environment operations strategy must be aligned with corporate strategy and also be linked with other functional strategies in order to be supportive and generative of operating excellence.

2.2.5 Developing Operations Strategy

From strategic analysis operations managers will develop objectives, policies and decisions consistent with the overall strategy and coherent with other functional decisions. (Dilworth, 1996). In operations strategy cognisance is made of the fact that resources are difficult to change, technically constrained and complex while markets are dynamic, Heterogeneous and ambiguous (Porter 1995). Operations strategy seeks a reconciliation of the conflicting market requirements with the available operations resources bearing in mind the competitors capabilities. The decisions made therefore involve issues of capacity, supply networks, process technology, development and organization to meet the market requirements of quality, speed, dependability, flexibility and cost (Heizer & Render, 1998). The firm must therefore choose its competitive priorities (cost, quality, speed and flexibility).

There is also need for the firm to carry out a capabilities assessment of current, needed and planned capabilities to meet the market challenges which will lead to acquisition of the requisite resources and capacity (Heizer and Render, 1998). The expressed or achieved strategy of an organization is revealed by the pattern of decisions made over time (Dilworth, 1996) and these decisions shape the future and competitive ability of the firm. The operations strategy therefore involves planning how to develop, maintain and apply the capabilities required to satisfy customer needs better than competitors in the hyper-competitive environment (Dilworth, 1996). Operations strategy also focuses on developing, protecting and leveraging a firm's unique resources and advantages in order to change the rules of competition (Jarar et al, 2001).

A new operations strategy concept focusing on the knowledge based economy is developing where learning skills acquisition, culture and attitude change are gaining prominence and are getting aligned to operations (Heizer and Render, 1998). Operations strategy therefore manages these attributes integrally in order to make them supportive and generative of operations excellence. Porter (1995) alludes to this concept by holding that the architecture of operations strategy will be based on superior knowledge, resources and skills applied throughout the production process.

Management must analyse the operating capabilities and competencies from which the core capabilities and competencies are selected that can provide effective and sustainable competitive advantages to create coherent systems and processes comprising the right proportions of each capability that is needed to face hyper competitive markets (Dilworth, 1996). In developing an operations strategy management must understand how to be order winners and order qualifiers (Hill, 1993) for this is what will award pay back to the firm and ensure long term survival. Order winners must meet the market criterion on cost, quality, reliability, and flexibility and delivery speed of a product or service). Order qualifier criterion will ensure a firm's products are considered for purchase. Hayes & Upton (1998) say that in developing operations strategy a company must decide what kind of superiority it wants to achieve in the market place and then proceed to configure and manage its operations organisation in such a way that it can provide that form of advantage.

2.2.6 The Trade Offs Concept and Sandcone Model

Skinner (1969) propounded that it is impossible for firms to excel in all competencies of quality, cost, speed and flexibility as they are conflicting. As a result there is need to have a focused plant to exploit its chosen competence or have plants within a plant each of which will focus on one of the four competencies. In doing so a company will experience trade offs on the dimension not under focus. Trade offs must be made to coincide with the overall operational strategy and the dynamic market demands. However nowadays the dynamic market demands force companies to choose a competitive priority and also do well on all other priorities. Companies therefor no longer follow Skinner's (1969) model but are able to attain simultaneity of priorities improvement under the cumulative framework. Hence under the sandcone productivity frontier model, Ferdows & De Meyer (1990) have given the sequence to follow as quality, dependability, Flexibility and cost efficiency. Roth and Miller (1992) have given the improvement sequence as quality-dependability-flexibility-cost. While Noble (1995) has given the sequence as quality-dependability-speed of delivery-cost-flexibility-innovation.

We note here that world class manufacturers operate at the productivity frontier which is the total sum of values derived from a product at any given time. Trade offs are only possible if the productivity frontier were static. However the productivity frontier is dynamic through innovation and novel practices world class manufacturers are able to improve products and push the frontier into new horizons all the time. (Porter, 1996); Hill (1993) also advances the same argument and insists trade offs do not exist.

Recognising that the productivity frontier is a moving target Hill (1993) argues that trade offs do not exist. Factors leading to excellent performance on one priority also lead to excellent performance on the other priorities and world class firms are therefore able to outperform their competitors. Firms can only remain at the frontier through innovativeness and creativity and organisations must use operations strategy to develop competencies and capabilities that will propel and sustain them in world class status.

2.2.7 Implementation of Operations Strategy

Upton (1995) has said that, the most difficult challenge that faces operations managers is the building of appropriate infrastructure consisting of systems, policies and routines and

common values of understanding as these determine the effectiveness of operations strategy implementation. In order to achieve the required results the operation strategy requires that the requisite structural and infrastructural issues are built in to deliver the product or service to the market. The structural issues consist of the design of processes, technology selection, size and plant location, while the infrastructural issues consist of planning and control systems, quality assurance and organisation of operations function. It is then no wonder when Russel & Taylor (1999) remark that, strategy is as good as the results produced. Good results require that the corporate vision and strategic plan be converted into a series of consistent achievable action plans to be implemented throughout the firm. There must good planning for implementing strategy so as to convert strategy to measurable objectives. Communication and information systems and cross-functional team work is therefore crucial for proper implementation of operations strategy. Companies must execute their chosen strategy better than their competitors for long term success (Hayes & Upton, 1998).

2.2.7 Performance Measurement

Pierce and Robinson (1997) advance that during implementation there must be good measurement systems to help in the analysis of achievements gained. The action plans, objectives, functional tactics and policies must be documented and progress measured so as to assist in control and continuous improvements. Problems with strategies need to be identified and difficulties presented by the ever-changing environment need to be detected and appropriate adjustments made to ensure success of the process. The above perhaps underscores Ghalayini and Noble's (1996) call for a measurement system that is flexible, provides on time information for decision making, link the areas of improvement and that can be used as a strategic performance measure. Without such measurement, the gains made cannot be assessed and adjustments may come too late to ensure success.

2.2.8 Tools and Concepts of Operations Strategy

Operations improvement has often used concepts like total quality management, just in time systems, bench marking material resource planning, computer aided manufacturing and so on to improve their operations (Voss et al, 1997). However since management has treated the tools as quick fix systems the failure rate has been alarmingly high (Gagnon, 1999).

To overcome the high failure rate of the past, there is need to mobilize commitment both vertically and horizontally and effectively integrate the strategies into the organisation (Harrison and Story, 1996). It is also instructive for firms not to adopt too many tools at the same time as the benefits may not be dramatic and they may risk losing focus in the maze of many concepts. Instead it is recommended to pick two or three concepts at most if they must be implemented concurrently (Voss et al, 1997). Porter (1996) has confirmed that, operations effectiveness is necessary but not sufficient as operations improvement tools enhance operations effectiveness but they may fail to provide sustainable profitability. Upton (1995) has added that in order to achieve maximum benefit all components of equipment, information and people need to be managed properly. Bertlett and Ghoshal's (2002) assertion that sustainable competitive advantage can only be maintained through people in whom skills, knowledge and innovation reside may explain why adopting the available tools without people involvement has such a high failure rate.

2.2.9 Performance Measurement

Ghalayini & Noble (1996) have advanced that in order for companies to ensure achievement of their goals and objectives performance measures are used to evaluate, control and improve production processes. Performance measures are also used to compare the performance of different organisations, plants and departments. For a thorough knowledge of the results of any operations strategy or comparison with competitors good performance measurement is necessary. Heim and Compton (1992) have also said that world class manufacturers recognise the importance of metrics in helping define the goals and performance expectation for an organisation and therefore they adopt or develop appropriate metrics to interpret and describe quantitatively the criteria used to measure the effectiveness of the manufacturing system and interrelated components.

Ghalayini & Noble (1996) note that, traditional performance measures have many limitations that make them inappropriate in today's competitive environment as they are based on outdated cost management systems, lagging metrics, not related to corporate strategy, inflexible, expensive and contradict continuous improvement. As a result of the limitations, measures that provide managers with on line information necessary for daily decision making, are flexible, non-financial and dynamic are being advocated. Effective

performance measurements have a clearly defined set of improvement areas, are related to company strategy and objectives, treat time as a strategic performance measure, allow dynamic updating of the improvement areas, have performance measures and standards, link the areas of improvement and performance measurement to the shop floor, are used as an improvement tool rather than a monitoring and controlling tool, integrate process improvements as part of the system, guard against sub optimization and provide practical tools that can be used to achieve all objectives.

Appropriate performance measures will also assist in strategic analysis as it requires compilation of a set of data that facilitates a more comprehensive understanding of key processes for the business (Ghalyani & Noble, 1996). These measures will also help a firm to achieve its objectives in quality, cost, improve responsiveness to customers orders, enhance delivery, increase productivity, reduce risks, increase market share and profits. In this way firms ensure they are more competitive and gain continuous improvement. Thompson and Strickland (1993) have underpinned the role of performance measurement to cover the market, the product, employees and economic aspects so that a total perspective of the business can be evaluated and unify various strategies. Armistead et al (1994) have cautioned that, the debate about how to construct an appropriate performance measurement system has never been satisfactorily resolved.

2.2.10 Role of performance measurement in operations strategy

Performance measurement enables an organisation to evaluate its performance by determining the level of efficiency and effectiveness of its resources and functional procedures and processes and therefore helps in proper deployment or acquisition of strategic resources. It also contributes to the continuous improvement of the firm by identifying opportunities for improvement, comparing performance with targets to improve performance and comparing a firms performance with the competition in order to maintain a competitive edge (Oakland J. S., 1998).

A good measurement system will support proper decision making that will strategically position the firm in order to attain or maintain its market leadership position. The measurement system will enable the operations strategy to achieve its quality or cost

objectives or productivity and timeliness objectives. It will also enable a firm to develop, protect and leverage its resources to outdo the competition (Jarrar et al, 2001).

2.2.11 Stages of Operations Strategy

Hum & Leow (1996) have said that, the new manufacturing environment, characterized by intense global competition, rapid technological changes and product proliferation calls for a strategic management of the manufacturing function. They further observe that, manufacturing has been the missing link in corporate strategy which must be supportive and consistent with overall corporate strategy. Manufacturing can therefore be more proactive in leading other functional areas in contributing towards development of corporate strategy (Skinner, 1969). Consequently Hayes & Wheelwright (1984) have proposed a four stage framework for strategic manufacturing in view of the attained effectiveness of any given operation and manufacturing should not be content with a passive role of merely supporting the corporate level strategy but rather should contribute actively to corporate strategy. This thinking is affirmed by Hayes et al (1984) and Shroeder et al (1994).

The Hayes Wheelwright model measuring the degree of manufacturing effectiveness is evaluated on a continuum from stage 1 to stage 4. In stage 1 the level of effectiveness the manufacturing function is described as internally neutral and is expected to be neither proactive nor locked in to any other particular form of technology. Manufacturing does not therefore play a strategic role and is thus internally neutral. In stage 2 the manufacturing function will now seek to maintain parity with the rest of the industry and in this way industry practices are adopted and followed. Manufacturing therefore becomes externally neutral i.e. capital investment is pursued.

In level 3 manufacturing effectiveness becomes internally supportive of the overall corporate or business strategy. Manufacturing therefore purposefully pursues a manufacturing strategy, seeking to ensure that all its decisions are coherent and consistent, in support of the business strategy. This is the strategic role of manufacturing as postulated by Buffa (1994). In stage 4 manufacturing takes on the strategic role of being externally supportive of the organisation in its competitive stance against competitors in the external market place. This is where the manufacturing function is effectively managed

and provides manufacturing based strategy at the corporate level. Manufacturing gets in front of other functions and is continually seeking capabilities in anticipation of needs, allowing it to stay constantly ahead of the competitor. Gagnon (1999) holds that moving from stage 1 to 3 requires better alignment of operations with marketing but stepping to stage 4 requires fundamentally different perspective of operations from being active follower to active leader of strategy. Strategy then develops and leverages resources in order to create new order qualifiers and order winners.

2.3.3 Systems/coordination based strategies

System based strategies encompass areas of short lead times, broad range

2.3 Competing through Operations Strategy

In this section we wish to show broad areas in which operations strategy can be used to gain a competitive advantage.

Control as in CIM or CAD. This may also improve flexibility in meeting global customer

2.3.1 Process Based Capabilities

These capabilities are derived from activities that transform material or information to finished goods or services and may include a quality process and product strategies. Improved quality leads to higher prices, increased volume sales, improved reputation, large market share, lower warranty cost, reduces rework costs and increases productivity and hence increased profitability. In the quality objective firms need to choose whether to use TQM or lean manufacturing. It is necessary to remember that quality is a company wide drive towards excellence (Oakland, 1998). Process strategy ensures that the chosen processes provide a competitive advantage which have capabilities beyond the customer requirements of cost, quality flexibility and speed while ensuring flexibility needed for technological changes and volume. Process investments are efficient and effective and support long term and provide justifiable return on investment (Heizer & Render, 1998). To meet customer's changing demands product strategies selected outsmart competition and are appropriate to the product life cycle. Using JIT, CAD, FMS or CIM improve lead time and delivery speed and have a bearing in cost and quality. Successful competitors improve their products continually, are in constant communication with customers, process suppliers and provide quick response to market needs. They link product strategy to investment, global market share, productivity life cycle, product range and product development forms successful business strategy (Heizer and Render, 1998).

Market changes inventory is a major investment encompassing raw materials purchased

2.3.2 Organisational structure

Organisational structure has a direct impact on the competitiveness of an organisation. However there is no one appropriate structure in all situations. The structure must be suitable to the organisation's needs to allow optional decision-making, ensure cross-functional interaction and compatible with technology used. Companies are evolving from tall structures to organic structures (Robins, 2004).

2.3.3 Systems/coordination based strategies

System based strategies encompass areas of short lead times, broad range products/services/customization and new product development. State of the Art Technology is a major source of technological advantage. Technology can improve information system, transaction processing and decision support, advance machine controls as in CIM or CAD. This may also improve flexibility in meeting global customer requirements, higher quality and greater resource utilization. Competitive firms distinguish themselves by pursuing the latest technology to enhance their strategic objectives. They focus on return on investment, winning orders, human and financial resource development and achieve technological advantage that surpasses their rivals (Heizer and Render, 1998). Prokesh (1993) alludes that staying in the cutting edge of innovation is the only real source of competitive advantage that allows companies to cope with the rapid change and chaos in today's turbulent environment.

Purchasing and JIT strategy rationalizes purchase/make decisions giving consideration to quality, cost, delivery and innovation. It supports a symbiotic supplier/purchaser relationship in-view of the advantages of specialization. Consequently purchasing provides an opportunity for world class companies to develop competitive advantage in the purchasing portfolio by finding the right mix of vertical integration. Traditional selection and development of suppliers pairs the right partners in long term relationships seeking to satisfy the same customers. JIT is the norm in firms that practice supply chain management to build relationships that are mutually beneficial (Heizer & Render, 1998).

Inventory management and JIT aims at reducing inventory levels, meeting performance and customer schedules, optimal facility and labour utilization and faster response to market changes. Inventory is a major investment encompassing raw materials, purchased

components, work in progress and maintenance and repair (MRO) and finished products. World class firms manage inventory using JIT or Kanban systems, information systems forecast accurate customer requirements and hence inventory management becomes a competitive weapon. Material requirement planning (MRP) and scheduling becomes the preferred way to manage production inventory. Firms must have a master schedule, precise requirements, accurate inventory and accurate lead times. In so doing capital and floor space is freed for other use leading to better response to markets (Chase et al, 2001).

Maintenance and reliability strategies aim at avoiding system failure and consequent disruptive, inconvenient, wasteful and expensive outcomes. Good managers maintain systems while keeping maintenance and breakdown costs low. Maintenance and reliability protect both a firm's performance and its investment by designing systems and maintenance to meet expected performance and quality standards using appropriate plans, tools and resources. World-class firms have reliable systems attained through systems design and effective maintenance incorporate scheduling and warning systems. Such systems provide higher utilization improve quality and perform to schedule and hence retain their global customers (Heizer & Render, 1998).

2.3.4 Organisation based operating capabilities

Organisation based operating capabilities provide the ability to master new technology, design and market new products faster than competitors. They are the most powerful since they are difficult to replicate and include location, layout and human resource strategies.

Facility location strategy may determine the ultimate success of the venture. Errors made at this stage may overwhelm other efficiencies as location has a bearing on cost and revenue. Location strategy therefore aims to maximize the benefits of location which then becomes a competitive choice and should consider better international communications, ease of capital flow between countries, benefit from labour costs and required skills, benefit from proximity to markets, benefit from taxes and incentives and benefit from proximity to materials. Facility location decisions are critical and long term and chosen sites must be strategic and provide competitive advantage (Heizer and Render, 1998). Operations layout strategy determines the long run efficiency of operations that aims to

meet product design and volume capabilities, process equipment and capacity, quality of work life, building and site constraints, material handling requirements and information flow capabilities. Firms must strategically choose the operations layout to improve their efficiency and effectiveness (Chase et al, 2001).

Human resources strategy is important to operations as operations is the user of most people. Job design must be effective, safe and offer quality work life in an atmosphere of mutual respect and commitment and support growth, creativity and innovation. Learning, new skills, attitudes and appropriate culture must pervade the organisation to provide competitive advantage. Decisions that constrain human resource strategies include the product mix that may determine the seasonality and stability of employment, technology and processes may affect safety and job content while location may have an impact on the working environment. Good job design, manpower planning and supportive culture are recognized by stakeholders as critical to world class performance. The human resource strategy tends to match lean production to provide a competitive advantage (Heizer & Render, 1998). Managers need to consider the competencies to be developed in order to maintain excellence.

2.3.5 Three Ways to Apply Operations Strategy

Hayes and Upton (1998) have emphasized the importance of operations in three ways:- First, operations is used to create a competitive advantage by executing the strategy more effectively than competitors and the experience helps the firm get down the learning curve, develop unique organisational capabilities through conscious effort, experience and time which cannot be replicated by competitors. The capabilities can be developed in processes, systems/coordination and organisational capabilities. Competitive advantage derived from operations competitiveness is more sustainable as its effectiveness is more difficult to imitate or diffuse and imparts a dynamic quality as they can be improved through innovation. Secondly, a firm can attack its competitors by extending operations strategy to new areas that provide unique competitive advantage. When integrated systems of supporting value, skills, technologies, customer focus, human resources are advanced beyond competitors capabilities, then firms can emerge as clear market leaders. Finally a company can defend itself against attack by using operations strategy using its own strengths and resources to improve its capabilities, or by identifying and exploiting the

competitors weaknesses or by identifying and emulating competitors best practices before learning is perfected.

Dillworth (1996) concludes that the plans that result from strategy formulation shape the destiny of the company and the accomplishments can be astounding if all parts work towards the same goals but efforts are wasted if there is disharmony. If a company is to survive and prosper, it must consistently provide customer satisfaction through appropriate strategy that identifies customers and their needs. Operations strategy will therefore plan how to develop, maintain and apply the required capabilities to satisfy customer needs better than competitors (Dillworth, 1996). The operations function has a big influence on the cost, quality and availability of the company's goods or services and impact greatly on the success of the overall strategy. As noted earlier operations strategy identifies, acquires, develops, retains and leverages resources in order to create new order qualifiers and winners (Gagnon, 1999).

2.3.6 Incremental Vs Leap Strategies

Hayes (1985) in his article, strategic planning – Forward in Reverse? gives the dilemma managers face of choosing between incremental strategies and dramatic strategies. Incremental approach is the process by which companies make small improvements on their products continuously so that over time the cumulative improvements may have changed the product significantly. However the thrust of this approach is that the company's products have minor improvements that makes the company have a competitive advantage. The quantum approach aims at dramatic changes to the existing rules and may end up changing the existing paradigms and involves rethinking the entire business and even looking outside the business in order to come up with novel ways to gain a clear competitive advantage. Hayes (1985) recommends that, a company should adopt both approaches since the incremental approach will keep the company ahead of competition in the period it takes to change the paradigms while the quantum approach will help the company fit into the new operating environment. If a company sticks to the incremental approach alone it will be cast into oblivion when the paradigm shift occurs while companies sticking to quantum strategies will be left behind as they look for real breakthroughs which are rare to come by and cost substantial capital. In his argument about change Dale (1997) subscribes to this thought.

2.4 Sustaining and Enhancing Operation Strategy

Operations strategy needs to be sustained in order to ensure long term survival of the company. The 'once there, always there' approach has lead to high failure rate of about 66% for operations tools like TQM, BPR, and JIT. (Brown, 1994; Ramarapu et al, 1995). There is therefore need to maintain the competitive spirit through benchmarking, creativity and innovation and the learning organisation.

2.4.1 The Concept of Best Practices

Best practices are documented strategies and practices employed by highly admired companies. These companies are not 'best in class' in every area as it is impossible for any one company to excel in all areas. Due to the nature of competition and the desire for excellence the profiled practices have been implemented and honed to help their classification as the most admired, the most profitable or the strongest competitors (Schonberger, 1987). Companies employing best practices become world class companies and have a leading edge in business in a given industry. They use innovation to perfect their performance and have long term commitment to excellence, a consistent track record and can do spirit. They have lofty goals that they achieve time and again. Such firms have a proven reputation and not only meet customer expectations but also delight them. World-class firms have competitive advantages and have developed competencies to keep them at the cutting edge (Heizer & Render, 1998).

The best practices companies can use to attain world class status are quick product response, efficient customer response, time based competition, supply chain management including JIT, agile and flexible production, lean production and adopting state of the art technology (Lowson, 2002; Schonberger, 1987). Hill (1993) has alluded that order winners and qualifiers are those companies that employ best practices. Ferdows & De Meyer (1990) have given a sequence for companies to follow in their effort to become world class.

2.4.2 Benchmarking and Best Practices for Competitiveness

Nowadays certain firms are synonymous with certain competencies which they use to beat their competitors. For example Toyota is synonymous with lean production, Xerox is

synonymous with quality and Caterpillar is synonymous with delivery speed. It is not therefore appropriate for companies seeking competencies that reside in other firms to develop them from scratch. In order to work towards world class standards, there is need to benchmark, which is the search for industry best practices that lead to superior performance (Voss et al, 1997).

The world class organisations are then visited in order to gain a better understanding of their processes and ways of working which can be used to stretch the imagination and develop new goals as well as find new ways of operating. Benchmarking is therefore a means by which best practices are discovered and understood as well as the goal setting process. Benchmarking also increases a firm's understanding of its position relative to competitors, which is beneficial for performance improvement. Benchmarking is part of the learning organisation which has links to increased performance (Voss et al, 1997).

Benchmarking is, therefore, linked to operations strategy and is particularly important for firms wishing to narrow the gap between them and world class companies in a short time as they don't have to re-invent the wheel, but learn from existing best practices. Having achieved such status the company can then use creativity and innovation to extend the productivity frontier and enhance its competitive advantage. Benchmarking is the process of improving performance by continuously identifying, understanding and adopting outstanding practices and process found inside and outside the organisation and implementing the results. (American productivity and quality centre, 1997). Benchmarking is the process of learning lessons about how best performance is accomplished and focuses on how to improve a given business process by exploiting best practices and discovering the specific practices responsible for high performance, understanding how these practices work and adopting and applying them to the organisation (Jarrar & Zairi, 2001). Identifying and benefiting from best practices is an important tool for improving a firm's performance and can help firms to establish priorities, set goals and implement high performance business practices. Armistead et al (1994) have indicated that, the use of benchmarking to establish best practices for specific processes can be useful in changing paradigms and providing clues for a better way of working.

2.4.3 Creativity and Innovation

Creativity is the ability to connect and rearrange knowledge in the minds of people who allow themselves to think flexibly so as to create new, often surprising ideas that others judge to be useful. Due to the ability of competitors to copy past innovations, customers increasing demand for innovation and the need for superior long term performance there is a call for world class companies to maintain creativity and innovation (Robins, 2004). Innovation is the first practical implementation of an idea in a way that brings broadbased extrinsic recognition to an organisation and brings out a new and novel invention to the market. In order to realise creativity companies need to develop their capabilities over time, build knowledge by enhancing their core competencies and skills of their human resources and through strategic alliances that can combine the knowledge and resources of several partners (Robins, 2004).

While technology and capital can be copied, bought or acquired good ideas are hard to copy and hence form a good basis of building competitive advantage. Companies will find it hard to remain competitive without new ideas expressed as products or services and hence the need to be creative and innovative. Firms which sustain creativity and innovation are able to stretch out the productivity frontier which is the total sum of values derived from a product at any given time as proposed by Ferdows & De Meyer (1990). Creativity and innovation will propel a company into world class status by changing the paradigms of the game at any one time (Prokesh, 1993). Staying in the cutting edge of innovation is the only real source of innovation.

2.4.4 The Learning Organisation and Knowledge Management

A learning organisation is one that has developed the continuous capacity to adapt to change through an incremental or radical process. In a learning organisation people put aside their old ways of thinking, learn to be open with each other, understand how their organisation really works, form a vision that everyone can agree on and then work together to achieve the vision.

In addition members of a learning organisation look at the organisation as a system and not as functions and activities and therefore sublimate their personal interests to work together and achieve the shared vision. Learning organisation avoid fragmentation based

on specialization with its walls of warring fiefdoms. It also avoids competition emphasized in traditional organisations which undermine collaboration. Finally learning organisations eliminate reactivity that misdirects management attention to problem solving and instead adopt proactivity which forestalls crises (Robins, 2004). For a learning organisation to be realised there is need to instill an appropriate culture and structure with a commitment to change, innovation and continuous improvement (Robins, 2004).

Knowledge management is a process of organising and distributing an organisation's collective wisdom so the right information gets to the right people at the right time which imparts a competitive edge and improved organisational performance because it makes employees smarter. Knowledge management concept recognises that intellectual assets are as important as physical assets and organisations need to quickly and efficiently tap into their employees' collective experience and wisdom to outsmart competitors. Also baby-boomers who increasingly leave the work place have a wealth of knowledge that can be lost if no attempt is made to capture it. Knowledge management will reduce redundancy and make the company more efficient. Tasks undertaken previously can be accomplished more efficiently by tapping into the existing knowledge (Robins, 2004). Prokesch (1993) advocates for organisational boundaries to be demolished and free communication fostered. Bureaucracy should be minimized and simplicity encouraged for a learning organisation to thrive. Gagnon (1999) argues that, the heart of knowledge based economy is resource based operation strategy which includes issues like culture and learning that should be aligned and managed integrally with overall strategy in order to be supportive and generative of operating excellence.

In underscoring the importance of learning Hayes & Upton (1998) argue that, the most sustainable competitive advantages are those based on an organisations ability to learn. In their study Lapre and Wassen (2002) have found that, successful projects produced process knowledge that was well understood and broadly relevant and the knowledge was transferred to other parts of the factory thereby providing both conceptual and operational learning. Hamel and Prahalad (1994) have advanced that development of resources and capabilities would be more difficult to imitate and the core competencies perspective focuses attention on the importance of knowledge creation and building learning processes for competitive advantage. Burtlett and Goshal (2002) have held that capital is not the

strategic resource but talented people and the knowledge they possess. Companies should employ and retain talented, knowledgeable and innovative employees who should be recognised as the real scarce resource and treated as co-owners of the business. Unlike capital, scarce knowledge and expertise cannot be accumulated at the top and distributed to yield strategic advantage but it resides in the heads of individuals and imbedded in the relationships of work groups.

The knowledge based organisation starts with recruitment which should have well documented procedures so that the best persons are employed as recruiting a merely average individual results in loss of an opportunity to gain a competitive advantage through a hiring decision. Indeed, unless a company actively links, leverages and embeds the pockets of individual knowledge and expertise, it risks under-utilizing it or worse still, losing it. Voss et al (1997) have also argued that benchmarking is part of a learning organisation which has links to increased performance as it fosters an understanding of its strengths and weaknesses and thereby turn focus on effective improvement of its activities. Senge (1990) has perfected the concept of learning organisation by advancing that learning is necessary for a company to survive in the increasingly turbulent environment. Roth et al (1994) have coined the concept of the knowledge factory where an accelerated learning organisation driven by dynamic processes that create superior knowledge and translate that knowledge into competitive capabilities and core competencies. In their strategy to acquire knowledge organisations will adapt to and exploit knowledge from the environment and open their boundaries to ensure fresh flow of ideas. The predisposition for organisational learning indicates the capabilities that can be identified and leveraged within the organisation to bolster learning.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

The research design was an exploratory case study of an existing parastatal (KPLC) to find out the level of entrenchment of operations strategy and its contribution to the performance in the recent past. This was expected to reveal the extent to which operations strategy has contributed to the results achieved by the firm.

KPLC was noted to have a national spread but the highest concentration of business is in Nairobi, which contributes 53% of its business (KPLC Annual Accounts, 2003). For purposes of time, cost, and effectiveness of response and uniformity the research was conducted for Nairobi region and head office. Further, Nairobi was expected to be representative of the entire corporation due to its contribution to overall business. The need to open up the units for further research and come up with as much information as possible motivated the choice of case study.

Moreover most Kenyan companies have few publications from which desired information can be obtained.

3.2 Population, Sample Frame and Sampling Procedure

The population consisted of middle management and top management in central office and Nairobi area. The sample frame for KPLC was estimated to be about 120. Considering the size of the population and that a few non-response cases would be encountered the entire population was interviewed.

3.3 Data Collection Methods and Instruments

Data was collected by use of a questionnaire embodying closed-ended questions. The closed ended questions design was desired to overcome sensitivities associated with sharing of information on Kenyan firms. The questionnaire was hand delivered to all respondents, as they were within easy reach (within Nairobi).

To enhance the rate of response an acceptance letter was sought from KPLC and covering letter outlining the benefits of the study and the acceptance letter from KPLC was attached to each set of questionnaire.

The questionnaire was designed to address the objectives of the study, i.e. to establish the level of entrenchment of operations strategy at KPLC by seeking the opinion of KPLC managers on how they perceived the adoption or visibility of operations strategy at KPLC and by seeking the managers opinion on the extent to which operations strategy at KPLC contributed to the performance of the company. The managers were further asked to give their opinion on the extent to which operations strategy had improved KPLC performance on key performance indicators. The questionnaire used the 3-point likert rating scale.

3.4 Data analysis Methods

The collected data was edited for accuracy, uniformity, consistency and completeness. Coding of the data was done to allow analysis. Analysis was done by way of descriptive statistics, averages, percentages and frequency tables. The presentation was by way of statements, tables, graphs and charts. For this Analysis, Employees who had served more than 10 years constituted long serving employees while those who had served less than 10 years constituted newer employees.

4.2.1 Duration of working for KPLC

The respondents were asked to indicate the duration for which they had worked for KPLC, which was categorized into three blocks, i.e. 0-5 years, 6-10 years and above 10 years. From the 85 respondents 61(72%) had worked for longer than 10 years, 23(27%) had worked for 6-10 years and only 1(1%) for less than 5 years. This shows that majority of the respondents had worked for the organization for more than 10 years and were thus more likely to have an in-depth knowledge of the organization. Staff who work for an organization for long have a better understanding of its operations and its vision and mission. The above result is also a manifestation of the changes taking place at KPLC. Following KPLC has been undergoing successive staff reductions implying there are very few new staff.

4.2.2 Management Level

The respondents were to indicate whether they were in top management level or middle management level. The definition of top or middle level management was left open to the

CHAPTER FOUR: DATA ANALYSIS FINDINGS AND DISCUSSIONS

4.1 Introduction

This section presents the analysis, findings and discussion from the primary data that was gathered from the respondents. All completed questionnaires were edited for accuracy, uniformity, consistency and completeness. The response rate of 71 % (85 respondents) was achieved from the total target of 120 respondents. This response rate compares well with previous studies such as Opero (2002) with 73%, Njuguna (2004) with 74%, and Nyaoga (2003) 70%. Summaries of data findings together with their possible interpretations have been presented by use of percentages, frequencies, mean scores, standard deviations and cross tabulations.

4.2 Demographic Profiles of the respondents

The demographic profiles of the respondents i.e. duration of working for KPLC, management level, gender of the respondents, terms of employment and the extent of understanding and interpretation of the organizations vision statement were analyzed to determine the general classification of the respondents.

4.2.1 Duration of working for KPLC

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4.2.2 Management Level

The respondents were to indicate whether they were in top management level or middle management level. The definition of top or middle level management was left open to the

interpretation of the respondents as applicable in their organization. Of the 85 respondents 71(84%) were in middle level management while 14 (16%) were in top management. This response compares well with expectation as top management was anticipated to constitute 15% of the respondents. The rate of response for both top and middle level management was therefore similar.

4.2.3 Gender representation

The respondents were to indicate their gender. Of the 85 respondents 64(75%) were male while 21(25%) were female. There was no expectation of gender representation of respondents but the results show that while there is no gender parity in the management of KPLC there is a substantial representation of ladies.

4.2.4 Terms of employment

The respondents were to indicate whether they were on permanent employment or on contract. Of the 85 respondents 84(98.8%) were on permanent terms while 1(0.2%) was on contract terms. Once again this is a manifestation of the changes KPLC is undergoing, implying that formerly all staff were permanently engaged but following successive staff reductions new staff are engaged on contract terms. However, as KPLC cuts down on number of management staff there are very few engagements on contract terms.

4.2.5 Understanding and interpretation of the vision statement

Respondents were asked to rate their understanding and interpretation of KPLC vision statement on the 4 point likert scale. Of the 85 respondents 58(68%) had substantial knowledge, 26(31%) had average knowledge, 1(1.2%) had little knowledge and 0(0%) had no knowledge of KPLC mission. This shows that a majority of the respondents had substantial understanding and interpretation of KPLC vision statement. The vision creates unanimity of purpose that helps to galvanise the various functions in a common direction to help a company survive, prosper, provide customer satisfaction and maintain a competitive advantage which is crucial in operations strategy

4.3 Entrenchment of Operations Strategy (2.46) were observed. However, the other

Entrenchment of operations strategy is the extent to which strategy is developed, deployed, adhered to and recognized as crucial for the survival of the organization in a competitive environment. This was categorized into five mainly strategy execution, infrastructural support and tools, human resource policies, structure and customer focus. The respondents were to indicate the extent to which this aspect of operations strategy were recognized and invoked as a means of goal achievement in KPLC on a three point likert scale, where 1= Not at all, 2= Little and 3= substantial. A mean score of $M \leq 1.4$ would mean not at all, a mean score of $M \geq 1.5$ $M \leq 2.4$ would mean to little extent, while a mean score $M \geq 2.5$ would mean to a substantial extent. A standard deviation greater than 1 would imply that there were significant variations on the opinions of the respondents.

Table 4.1: Strategy Execution Response

Strategy Execution	Mean	Std. Deviation
Existence of appropriate performance targets and measurements that help in goals achievement	2.46	0.59
Existence and ownership of a vision and mission for the organization	2.35	0.53
Existence of regular strategy formulation and response to environmental changes	2.04	0.54
Determining of corporate objectives and targets that drive KPLC to goal acheivement	2.01	0.59
Existence of appropriate performance targets and measurements that help in goals acheivement	1.98	0.65
The change disposition of your organisation's staff in terms of readiness for change (as opposed to resistance to change).	1.96	0.62
	2.13	0.55

Source: Research Data

Strategy execution was measured in 6 dimensions as shown in the table above. Among these, existence of appropriate performance targets and measurements that help in goal achievement was rated highest at 2.46 and the change disposition of KPLC staff in terms of readiness for change was rated lowest at1.96. However the standard deviations ranged from 0.53 to 0.62 meaning that there were no significant variations. The findings indicate that to a substantial extent existence of appropriate performance targets and

measurements that help in goals achievement (2.46) were observed. However, the other dimensions were only present to a little extent

Table 4.2: Human Resource Policies Response

Human Resource Policies	Mean	Std. Deviation
Existence of investment budget in training and development to ensure continuous learning and acquisition of right skills	2.25	0.51
Existence of appropriate HR policies on hiring, training, development and retention of key staff.	2.18	0.62
The change disposition of your organization's staff in terms of readiness for change (as opposed to resistance to change).	1.92	0.60
Existence of satisfactory motivation and incentives that attract and retain competitive staff	1.86	0.64
Existence of supportive culture that helps propel your organization towards goals achievement	1.86	0.47
Existence of proper staff empowerment that inspires individual and group effort	1.78	0.62
Recognition given to creativity and innovation by all means including reward.	1.60	0.66
	1.92	0.59

Source: Research Data

Human resource policies were measured in 7 dimensions as shown in the table above, among which existence of investment budget in training and development was rated highest at 2.25 while recognition given to creativity was rated lowest at 1.60. Thus, all dimensions were rated “to a little extent” while the standard deviations ranged from 0.47 to 0.66 implying that there were no significant variations.

Table 4.3: Structure Issues Response

Structure	Mean	Std. Deviation
Existence of team work and harmony	2.34	0.59
Existence of an appropriate structure that enables better collaboration of all functions towards organizational goals	2.06	0.58
Existence of appropriate communication channels that enhance inter functional collaboration	2.05	0.65
Proactive investment in location of facilities to take advantages of resources, customers and infrastructure	2.00	0.62
Existence of JIT and supply chain management that avoids waste and excesses and adds customer value	1.71	0.57
	2.03	0.59

Source: Research Data

Structure was measured in 5 dimensions as shown in the table above among which existence of team work was rated highest at 2.34 while existence of JIT and supply chain management was rated lowest at 1.71. Thus all dimensions were rated “to a little extent” while the standard deviations ranged from 0.57 to 0.65 implying that there were no significant variations.

Market and customer focus dimensions were 3 of which existence of a maintenance policy to forestall disruptive failure was rated highest at 2.04, identifying new markets and poising KPLC to acquire and retain them was rated at 1.80 and contribution by R&D to development of new products was rated lowest at 1.74. Thus all dimensions were rated “to a little extent” while the standard deviations ranged from 0.56 to 0.59 implying that there were no significant variations.

Infrastructural support and tools was measured in 4 dimensions of which existence of appropriate ICT and other infrastructure that drive goal achievement was rated highest at 2.01, existence of appropriate tools and equipment was rated at 1.95, proactive investment in location of facilities was rated at 1.86 while design of infrastructure and other physical systems that support business was rated lowest at 1.71. Thus all dimensions were rated “to a little extent” while the standard deviation ranged between 0.56 and 0.59 meaning that there was no significant variation,

4.4 Contribution of Operations Strategy to achieved results

Contribution of operations strategy to achieved results is the extent to which employees feel that the achieved results are attributable to important aspect of operations strategy without which the results would be wanting. These were categorized as market and customer focus, structure, operations improvement tools, human resource policies, strategy execution and resource allocation. The respondents were to indicate the extent to which this aspect of operations strategy imperatives contributed to the results achieved by KPLC on a three point likert scale, where 1= Not at all, 2= Little and 3= substantial. A mean score of $M \leq 1.4$ would mean not at all, a mean score of $M \geq 1.5$ $M \leq 2.4$ would mean to little extent, while a mean score $M \geq 2.5$ would mean to a substantial extent. A standard deviation greater than 1 would imply that there were significant variations on the opinions of the respondents.

Table 4.4: Market & Customer Focus Response

Market & Customer Focus	Mean	Std. Deviation
Adequate customer focus and needs assessment	2.12	0.59
Adoption of products and processes that are customer friendly and that lead to customer satisfaction	2.09	0.65
Satisfactory response to customer’s changing needs	2.06	0.59
Adoption and management of quality to ensure customer satisfaction.	1.89	0.53
Adoption of flexibility to meet customer’s changing demands.	1.76	0.61
Entrenchment of dependability to avoid customer inconvenience.	1.69	0.57
Access to customer service and support.	1.68	0.56
	1.89	0.59

Source: Research Data

Market and customer focus was measured in 7 dimensions out of which adequate customer focus and needs assessment was ranked highest at 2.12 and access to customer service and support ranked lowest at 1.68. Thus all dimensions were ranked “to a little extent “ while the standard deviation ranged from0.53 to 0.65 implying that there were no significant variations.

Table 4.5 : Structure Issues Response

Structure	Mean	Std. Deviation
Adoption of ICT and other technology that aligns the organization to goal achievement.	2.48	0.61
Existence of appropriate structure that fosters interdepartmental collaboration and communication.	2.01	0.56
Proactive investment in location of facilities to take advantages of resources, customers and infrastructure.	1.89	0.58
Design of infrastructure and other physical systems that support the business.	1.88	0.54
	2.06	0.57

Source: Research Data

Structure was measured in 4 dimensions as shown above and adoption of ICT and other technology was ranked highest at 2.48 while design of infrastructure and other physical systems that support business was ranked lowest at 1.88. In this case the first dimension was rated “to a substantial extent” while the rest of the dimensions were rated “to a little extent”. The standard deviation ranged between 0.54 and 0.61 implying that there were no significant variations,

Table 4.6: Operations Improvement Tools Response

Operations Improvement Tools	Mean	Std. Deviation
Design of infrastructure and other physical systems that support the business	2.24	0.59
Existence of appropriate tools and equipment that ensure quality and productivity.	2.15	0.55
Commitment to continuous improvement by management and all staff and initiating operations improvement ideas.	2.09	0.59
Existence of appropriate structure that fosters interdepartmental collaboration and communication	2.00	0.53
Existence of a corporate culture that drives the organization to goals achievement	1.84	0.53
Adoption of JIT(just in time philosophy) and supply chain management to manage waste, pilferage, shortages and excesses	1.64	0.57
	1.99	0.56

Source: Research Data

Operations improvement tools was measured in 6 dimensions out of which design of infrastructure and other physical systems was rated highest at 2.24 while adoption of JIT and supply chain management was rated at 1.64. Thus all dimensions were rated “to a little extent” while the standard deviation ranged from 0.53 to 0.59 implying that there were no significant variations.

Table 4.7: Strategy Execution Response

Strategy Execution	Mean	Std. Deviation
Monitoring performance and service quality improvement.	1.98	0.53
The existence of creativity and innovation among staff that delights customers	1.94	0.58
Existence of visionary leadership and coordination of activities and prioritisation for best overall results.	1.89	0.54
The change disposition of your organisation’s staff in terms of readiness for change (as opposed to resistance to change).	1.85	0.59
	1.91	0.56

Source: Research Data

Strategy execution was measured in 4 dimensions out of which monitoring performance and service quality improvement was ranked highest at 1.98 while the change disposition of KPLC staff was ranked lowest at 1.85. Thus all dimensions were ranked “to a little extent” and the standard deviation ranged from 0.53 to 0.59 meaning that there were no significant variations.

The human resource policies were measured in 4 dimensions and existence of HR policy that hires, trains and developes appropriate staff was rated highest at 1.98, existence of creativity and innovation was rated at 1.94, existence of corporate culture was rated at 1.85 while existence of investment budget in training and development was ranked lowest at 1.79. All dimensions were ranked “to a little extent” and the standard deviation ranged from 0.54 to 0.59 implying that there were no significant variations.

Resource allocation was measured in 3 dimensions of which proactive investment in location of facilities was rated at 2.11, adoption of cost management and avoidance of waste was rated at 2.01 and design of infrastructure was rated at 1.98 A standard deviation of 0.56 indicates no significant variations.

4.5 Managers opinion on the extent to which operations strategy contributes to KPLC performance

The research sought to establish the managers opinion of the extent to which operations strategy contributes to the performance of KPLC in various performance indicators. The responses were categorized as product quality improvement, improved customer relations, improved financial performance, improved service quality, improved speed of response and improved human resource skills. A mean score of $M \leq 1.4$ would mean not at all, a mean score of $M \geq 1.5$ $M \leq 2.4$ would mean to little extent, while a mean score $M \geq 2.5$ would mean to a substantial extent. A standard deviation greater than 1 would mean that there were significant variations on the opinions of the respondents.

Table 4.8: Improved product quality Response

Improved product quality	Mean	Std. Deviation
Improved response to customer calls	2.19	0.57
Improving quality of electricity supplied to customers	1.98	0.60
Reduced power failure complaints.	1.94	0.56
Timely power supply restoration	1.87	0.61
Timely connection of new customers	1.61	0.60
	1.92	0.60

Source: Research Data

Product quality was measured in 5 dimensions of which improved response to customer calls was ranked highest at 2.19 while timely connection of new customers was ranked lowest at 1.61. Thus all dimensions were ranked “to a little extent” while the standard deviation ranged from 0.56 to 0.61 meaning that there was no significant variation.

Customer relations was measured in 3 dimensions of which improved customer service was ranked highest at 2.25, response to customer calls was rated at 2.19 and improved communication with customers was ranked lowest at 2.15. Thus all dimensions were rated “to a little extent” and the standard deviation ranged from 0.57 to 0.65 implying that there were no significant variations.

Table 4.9: Improved financial performance Response

Improved financial performance	Mean	Std. Deviation
Improved debt/revenue collection	2.48	0.55
Increased profitability	2.45	0.50
Reduced operational costs	2.11	0.64
Reduced system losses.	2.08	0.62
	2.28	0.58

Source: Research Data

Financial performance was measured in 4 dimensions of which improved debt collection was ranked highest at 2.48 while reduced system losses was ranked lowest at 2.08. Thus the first two dimensions were rated “to a substantial extent” while the last two were rated “to a little extent”. The standard deviation ranged from 0.50 to 0.64 implying that there were no significant variations

Table 4.10: Improved services Response

Improved services	Mean	Std. Deviation
Improved quality of meter reading and billing	2.40	0.69
Reduced power failure complaints	1.94	0.56
Timely power supply restoration	1.87	0.61
Increased new supply connections	1.79	0.64
	2.00	0.63

Source: Research Data

Improvement of services was measured in 4 dimensions of which quality meter reading and billing was ranked highest at 2.40 and increased new supply connections was rated lowest at 1.79. Thus all the dimensions were rated “To a little extent”. The standard deviation ranged from 0.56 to 0.69 implying that there were no significant variations

Cost management was measured in 3 dimensions of which reduced operational costs was rated highest at 2.11, reduced system losses was rated at 2.08 while making electricity affordable to more customers was ranked lowest at 1.88. Thus all the dimensions were ranked “to a little extent” while the standard deviation ranged from 0.62 to 0.66 implying that there were no significant variations.

Speed of response was measured in 2 dimensions of which timely power supply restoration was ranked higher at 1.87 while timely connection of new customers was ranked lower at 1.61. Thus both dimensions were rated “to a little extent” and the standard deviation range of 0.61 implies there were no significant variations.

Table 4.11: Improved human resource skills Response

Improved human resource skills	Mean	Std. Deviation
Improved quality meter reading and billing	2.40	0.69
Improved customer service	2.25	0.65
Improved response to customer calls	2.19	0.57
Improved communications with customers	2.15	0.57
	2.25	0.62

Source: Research Data

Human resource skills were measured in 4 dimensions of which quality meter reading and billing was rated highest at 2.40 while communication with customers was rated lowest at 2.15. Thus all dimensions were ranked “ to a little extent” and the standard deviation ranged from 0.57 to 0.69 implying there were no significant variations.

4.6 Discussions

A firm’s mission is best achieved through systematic and comprehensive assessment of both its internal capabilities and external environment. Evaluation of the opportunities leads to choice of long-term objectives and operating strategies which must be implemented, monitored and controlled (Thompson & Strickland, 1993). During strategy formulation top management craft a mission and vision to create unanimity of purpose that help to galvanize the various functions in a common direction by means of which a company survives and prospers as well as provides customer satisfaction and maintains competitive advantage (Dilworth, 1996). The findings indicate that, to a substantial extent existence of appropriate performance targets and measurements that help in goals achievement were observed. However, to a little extent the existence and ownership of a vision and mission for the organization and existence of regular strategy formulation and response to environmental changes were deployed, adhered to and recognized as crucial for the survival of the organization in a competitive environment

In strategy formulation firms do a strategic analysis taking into account the internal and external environment. The internal environment encompasses the resources of the firm that may be tangible or intangible, the processes, skills and attitudes, suppliers, customers, culture, and people from which the company will identify its strengths and weaknesses. Human resource policies such as existence of investment budget in training and development to ensure continuous learning and acquisition of right skills, existence of appropriate HR policies on hiring, training, development and retention of key staff, the change disposition of the organization's staff in terms of readiness for change (as opposed to resistance to change), existence of satisfactory motivation and incentives that attract and retain competitive staff, existence of supportive culture that helps propel an organization towards goals achievement; Strategy also provides a common vision that provides unanimity of action in an organization (Pierce & Robinson, 1997). Existence of proper staff empowerment that inspires individual and group effort and the recognition given to creativity and innovation by all means including reward were observed to a little extent.

Gagnon (1999) shows that resource based competitive strategies are directly linked to strategic operations management which benefits increasingly from the dynamic processes established under resource view, to allow new competencies to be developed and leveraged. Resource based competencies enable a company to develop hard to copy or hard to diffuse capabilities. The resources held can be intangible assets, tangible assets or organizational capabilities. Resource based strategy provides competencies that are durable, appropriate, suitable, not imitable and provide competitive superiority (Wanefelt, 1984). To a substantial extent existence of appropriate ICT and other technology that makes goal achievement possible were adhered to. On the other hand existence of appropriate communication channels, team work and harmony, existence of appropriate tools and equipment that ensures quality and productivity, existence of an appropriate structure that enables better collaboration of all functions towards organizational goals, existence of appropriate communication channels that enhance inter functional collaboration, proactive investment in location of facilities to take advantages of resources, customers and infrastructure and the existence of JIT and supply chain management that avoids waste and excesses and adds customer value were recognized to a little extent.

Johnson and Scholes (1999) hold that the importance of resources and capabilities in an organization is that they make up its strategic capability while Gagnon (1999) argues that there is need to address the issue how competencies and resources can be developed, deployed and protected. Pierce & Robison (2003) advance the idea that organizational capabilities arise from tangible and intangible assets and the ability and ways of combining assets people and processes. Lawson (2002) calls for a configuration of resources in the operations function to provide competitive advantage.

Market and customer focus dimensions of operations strategy such design of infrastructure and other physical systems that support the business as, existence of a maintenance policy (MRO) to forestall disruptive failure and enhance customer satisfaction, identifying new markets and poising the organization to acquire and retain them and the contribution by R&D to development of new products that help retain and attract customers were developed, deployed, adhered to and recognized to little extent. The employees to a little extent felt that market and customer focus dimensions of operations strategy; adequate customer focus and needs assessment, adoption of products and processes that are customer friendly and that lead to customer satisfaction and satisfactory response to customer's changing needs contributed to the achieved results.

The respondents to a substantial extent felt that the adoption of ICT and other technology that aligns the organization to goal achievement contributed to the achieved results.

Operations improvement tools dimensions of operations strategy such as the design of infrastructure and other physical systems that support the business existence of appropriate tools and equipment that ensure quality and productivity existence of HR policy that hires, trains and develops appropriate staff , existence of appropriate structure that fosters interdepartmental collaboration and communication , existence of a corporate culture that drives the organization to goals achievement and the adoption of JIT(just in time philosophy) and supply chain management to manage waste, pilferage, shortages and excesses contribute to a little extent to the achieved results.

Creativity is the ability to connect and rearrange knowledge in the minds of people who allow themselves to think flexibly so as to create new, often surprising ideas that others judge to be useful. Due to the ability of competitors to copy past innovations, customers

increasing demand for innovation and the need for superior long term performance there is a call for world class companies to maintain creativity and innovation (Robins, 2004). Innovation is the first practical implementation of an idea in a way that brings broadbased extrinsic recognition to an organization and brings out a new and novel invention to the market. In order to realize creativity companies need to develop their capabilities over time, build knowledge by enhancing their core competencies and skills of their human resources and through strategic alliances that can combine the knowledge and resources of several partners (Robins, 2004). The existence of creativity and innovation among staff that delights customers contributed to a little extent to the achieved results.

Ghalayini & Noble (1996) have advanced that in order for companies to ensure achievement of their goals and objectives performance measures are used to evaluate, control and improve production processes. Performance measures are also used to compare the performance of different organizations, plants and departments. For a thorough knowledge of the results of any operations strategy or comparison with competitors good performance measurement is necessary. Good performance measurements exist in KPLC and appropriate performance targets that help in goal achievement contribute substantially to the achieved results.

Facility location strategy may determine the ultimate success of the venture. Errors made at this stage may overwhelm other efficiencies as location has a bearing on cost and revenue. Location strategy therefore aims to maximize the benefits of location which then becomes a competitive choice and should consider better international communications, ease of capital flow between countries, benefit from labour costs and required skills, benefit from proximity to markets, benefit from taxes and incentives and benefit from proximity to materials. Facility location decisions are critical and long term and chosen sites must be strategic and provide competitive advantage (Heizer and Render, 1998). Proactive investment in location of facilities to take advantages of resources, customers and infrastructure contributed to a little extent to the achieved results.

Maintenance and reliability strategies aim at avoiding system failure and consequent disruptive, inconvenient, wasteful and expensive outcomes. Good managers maintain systems while keeping maintenance and breakdown costs low. Maintenance and reliability

protect both a firm's performance and its investment by designing systems and maintenance to meet expected performance and quality standards using appropriate plans, tools and resources. World-class firms have reliable systems attained through systems design and effective maintenance incorporate scheduling and warning systems. Such systems provide higher utilization improve quality and perform to schedule and hence retain their global customers (Heizer & Render, 1998). Existence of maintenance policy (MRO) to forestall disruptive failure and enhance customer satisfaction and existence of appropriate tools and equipment that ensure quality and productivity in KPLC contribute little to the performance of the organization.

The perception of managers on performance improvement on various performance indicators was that to a little extent there was improved revenue/ debt collection, reduced operational costs, reduced system losses and making electricity affordable to more customers. To a substantial extent there was increased profitability; improved customer service and improved quality of electricity supplied to customers were observed to a little extent. To a little extent there was improved meter reading and billing and improved communication with customers, to a little extent there were reduced power failure complaints. However there was not one area of excellence or dramatic improvement that KPLC can use to its advantage to ward off competition. It is important for KPLC to find one area in which it can develop its competencies to excellence and outdo competitors so as to lock in its customers as is espoused by operations strategy. Failure to do so leaves it vulnerable to competition and it calls for little from an innovative competitor to outperform KPLC as long as it does not have distinct competencies that the competition find hard to cope with.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the findings as well as the conclusions gathered from analysis of data. Findings have been summarized alongside the objectives of the study, conclusions have been drawn from the study and the recommendations for actions are also given.

5.2 Summary

This paper sought to investigate the status of operations strategy in KPLC and more specifically the extent to which operations strategy is entrenched in KPLC, the extent to which operations strategy contributes to the performance of KPLC the extent to which the performance of KPLC has improved in certain performance indicators. This was expected to illustrate the level of competitiveness of KPLC in the era of emerging liberalization and is in line with Skinner's (1986) assertion that competitive firms should concentrate on quality, reliable delivery, short lead times, good customer service rapid product introduction, flexible capacity and efficient capital deployment. Operations strategy reconciles market requirements with a company's resources and capabilities since resources are difficult to change, technically constrained and complex while market requirements are dynamic, heterogeneous and ambiguous.

Entrenchment of a proactive operations strategy provides better guidance to the organization, makes management alert to winds of change and opportunities presented by the dynamic environment. It also provides a rationale to evaluate competing resource requirements and to unify the numerous decisions managers make and finally helps to create a more proactive management posture (rather than defensive and reactive posture) that can propel a company into market leadership. (Thompson & Strickland, 1993)

In this study KPLC was found to have entrenched operations strategy in its activities only to a little extent in all dimensions. This would then imply that KPLC can achieve the benefits of operations strategy to a little extent and KPLC has not developed the competencies necessary to outdo its competitors and stand out as a market leader in a

competitive environment. It would require KPLC to excel in some dimensions of operations strategy if it were to stand out as a clear market leader.

A proactive operations strategy plays a crucial role in improving the performance of organizations as it calls for management to analyse the operating capabilities and competencies so as to select those appropriate for providing effective and sustainable competitive advantage that can create coherent systems (Dilworth, 1996). Strategy provides a common vision and culture necessary to provide unanimity of purpose that leads to increased productivity and excellence. If strategy fails then the desired performance and excellence will not be achieved as the driving force towards improved performance and excellence will be curtailed. In this study it was found that operations strategy has contributed to the performance of KPLC only to a little extent in all dimensions. This would therefore imply that KPLC has not developed its operations strategy to a level where operations strategy drives the achievements of the company. It can thus be said that KPLC is not competitive enough to ward off competition and stand out as a clear market leader and KPLC is not using fully the advantages accruing from operations strategy to become order qualifiers and order winners.

Since a proactive operations strategy leads to improved performance and excellence, there will be improved performance in certain key performance indicators of a firm that has entrenched operations strategy in its activities. In the case of KPLC it was expected that there would be a marked performance improvement in product quality, customer service, financial performance, service quality, cost management, speed of response and human resource skills. This is in line with Skinner's (1986) assertion that, competitive firms concentrate on quality, reliable delivery, short lead times good customer service, rapid product introduction flexible capacity and efficient capital deployment. However in the study it was found that the improvement experienced at KPLC on the selected indices was only to a little extent. Once again this underscores the fact that operations strategy is not fully entrenched at KPLC and the expected outcomes are not fully realized. It also implies that KPLC has not come out as a clear market leader that can ward off competition. In order to actualize its vision of attaining world class status in a competitive environment, KPLC needs to entrench the principles of operations strategy in its activities and seek to be more competitive than it is presently. In order to ward off competition and ensure long

term survival of KPLC it is imperative that operations strategy is well developed and implemented and must go beyond execution of routine objectives. It must be proactive and also fit vertically with the overall strategy and horizontally with other functional strategies.

5.3 Conclusions

In the entrenchment of operations strategy KPLC had the appropriate performance targets and measurements that help in goals achievement, had a vision and mission for the organization, regular strategy formulation and response to environmental changes, investment budget in training and development to ensure continuous learning and acquisition of right skills, appropriate HR policies on hiring, training, development and retention of key staff, appropriate ICT and other technology that makes goal achievement possible, appropriate communication channels, team work and harmony, appropriate tools and equipment that ensure quality and productivity, Proactive investment in location of facilities to take advantages of resources, customers and infrastructure, design of infrastructure and other physical systems that support the business, maintenance policy (MRO) to forestall disruptive failure and enhance customer satisfaction. However little was done on contributions by R&D to development of new products that help retain and attract customers, identifying new markets and poising the organization to acquire and retain them, existence of JIT and supply chain management that avoids waste and excesses and adds customer value, existence of proper staff empowerment that inspires individual and group effort, creativity and innovation by all means including reward. Generally KPLC was not found to excel in any one attribute.

The contribution of the achieved results were attributed to adequate customer focus and needs assessment, adoption of ICT and other technology that aligns the organization to goal achievement and design of infrastructure and other physical systems that support the business. However this was limited by the adoption of JIT (just in time philosophy) and supply chain management to manage waste, pilferage, shortages and excesses which was not adequately covered. Once again KPLC did not excel in any one attribute.

The results achieved as a result of adoption of operations strategy showed that there was improved response to customer calls, timely power supply restoration, increased new

supply connections, improved revenue/debt collection, reduced operational costs, reduced system losses, increased profitability and reduced power failure complaints. On the other hand timely connection of new customers and making of electricity affordable to more customers were seen as the major drawbacks.

5.4 Recommendations

In order to actualize its vision KPLC needs to build its competencies in a particular area and ensure it has a competitive edge in an area where competitors will not catch up. This is what has propelled world class companies into market leadership like Xerox and Toyota have excelled in quality. Some have used the same technique to lock in their customers such that it is difficult for competitors to sway them. Also the management of KPLC should improve on; R&D to development of new products that help retain and attract customers, identifying new markets and poising the organization to acquire and retain them, existence of JIT and supply chain management that avoids waste and excesses and adds customer value, ensure the existence of proper staff empowerment that inspires individual and group effort, creativity and innovation by all means including reward. Not to mention that the management should ensure timely connection of new customers and making of electricity affordable to more customers.

5.5 Limitations of the study

The research was carried with the help closed questioned questionnaire which might have limited the response as the respondent were not in a position to give personal views on the factors which were not in the questionnaire. It is possible there are some important factors that the researcher was not aware of. The research was also conducted only in Nairobi which comprises 53% of KPLC. It is possible that if the research was extended companywide the overall views of the wider section of employees may present a different perspective. At any rate it is not possible that performance is uniform company wide.

5.6 Suggestions for further research

A similar research should be carried out which should also incorporate KPLC customers and the supportive staff in KPLC as this would give a better perception on what is actually on the ground. Another perspective can be obtained by extending the research company wide to see how the results would change.

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5. How much would you rate your understanding and interpretation of your organisation's vision statement			
substantial	average	little	Not at all

6. To what extent are the following aspects of operation strategy recognised and invoked as a means of goal achievement in KPLO? Respond on a continuum of 1 to 3 where 1 = Not at all, 2 = Little, 3 = Substantial

No	STRATEGY ASPECT	RESPONSE
6.1	Existence and ownership of a vision and mission for the organisation	
6.2	Existence of regular strategy formulation and response to environmental changes	
6.3	Existence of appropriate communication channels team work and harmony	
6.4	Existence of appropriate HR policies on hiring, training, development and retention of key staff	
6.5	Recognition given to creativity and innovation by all means including reward	
6.6	Existence of a maintenance policy (MRO) to forestall disruptive failure and enhance customer satisfaction	
6.7	Contribution by R&D to development of new products that help retain and attract customers	
6.8	Existence of supportive culture that helps propel the organisation towards goal achievement	
6.9	Existence of JIT and supply chain management that provide waste and expenses and adds customer value	
6.10	Existence of appropriate communication channels that enhance inter functional collaboration	

QUESTIONNAIRE

The Research Questionnaire

1. Please indicate how long you have been working for KPLC
☐ 0-5 years ☐ 6-10 years ☐ above 11 years
2. Please indicate whether you are in top management or middle level management
☐ Top Management ☐ Middle Management
3. Please indicate your gender
☐ Male ☐ Female
4. Please indicate your terms of employment
☐ Permanent ☐ Contract
5. How much would you rate your understanding and interpretation of your organisation's vision statement.

substantial	average	little	Not at all

6. To what extent are the following aspects of operations strategy recognised and invoked as a means of goal achievement in KPLC? Respond on a continuum of 1 to 3 where 1 = Not at all, 2 = Little, 3 = Substantial.

No.	STRATEGY ASPECT	RESPONSE
6.1	Existence and ownership of a vision and mission for the organisation	
6.2	Existence of regular strategy formulation and response to environmental changes	
6.3	Existence of appropriate communication channels, team work and harmony.	
6.4	Existence of appropriate HR policies on hiring, training, development and retention of key staff.	
6.5	Recognition given to creativity and innovation by all means including reward.	
6.6	Existence of a maintenance policy (MRO) to forestall disruptive failure and enhance customer satisfaction.	
6.7	Contribution by R&D to development of new products that help retain and attract customers.	
6.8	Existence of supportive culture that helps propel your organisation towards goals achievement.	
6.9	Existence of JIT and supply chain management that avoids waste and excesses and adds customer value.	
6.10	Existence of appropriate communication channels that enhance interfunctional collaboration.	

6.11	Existence of appropriate tools and equipment that ensure quality and productivity.	
6.12	Existence of investment budget in training and development to ensure continuous learning and acquisition of right skills.	
6.23	Proactive investment in location of facilities to take advantages of resources, customers and infrastructure.	
6.14	Design of infrastructure and other physical systems that support the business.	
6.15	The change disposition of your organisation's staff in terms of readiness for change (as opposed to resistance to change).	
6.16	Existence of appropriate ICT and other technology that makes goal achievement possible.	
6.17	Existence of an appropriate structure that enables better collaboration of all functions towards organisational goals.	
6.18	Existence of appropriate performance targets and measurements that help in goals achievement.	
6.19	Existence of satisfactory motivation and incentives that attract and retain competitive staff	
6.20	Existence of proper staff empowerment that inspires individual and group effort.	
6.21	Identifying new markets and poising the organisation to acquire and retain them.	
6.22	Determining of corporate objectives and targets that drive KPLC to goal achievement.	

7. To what extent have the following operations strategy imperatives contributed to the results achieved by KPLC? Respond on a continuum of 1 to 3 where
1 =Not at all 2 = Little 3 =substantial

NO.	STRATEGY IMPERATIVE	RESPONSE
7.1	Adequate customer focus and needs assessment.	
7.2	Satisfactory response to customer's changing needs.	
7.3	Adoption of products and processes that are customer friendly and that lead to customer satisfaction.	
7.4	The existence of creativity and innovation among staff that delights customers.	
7.5	Adoption of ICT and other technology that aligns the organisation to goal achievement.	
7.6	Adoption of JIT(just in time philosophy) and supply chain management to manage waste, pilferage, shortages and excesses.	
7.7	Existence of a corporate culture that drives the organisation to goals achievement.	
7.8	Existence of HR policy that hires, trains and developes appropriate staff.	
7.9	Existence of appropriate structure that fosters	

	interdepartmental collaboration and communication.	
7.10	Existence of appropriate tools and equipment that ensure quality and productivity.	
7.11	Existence of investment budget in training and development to ensure continuous learning and acquisition of right skills.	
7.12	Proactive investment in location of facilities to take advantages of resources, customers and infrastructure.	
7.13	Design of infrastructure and other physical systems that support the business.	
7.14	The change disposition of your organisation's staff in terms of readiness for change (as opposed to resistance to change).	
7.15	Existence of visionary leadership and coordination of activities and prioritisation for best overall results.	
7.16	Adoption and management of quality to ensure customer satisfaction.	
7.17	Adoption of cost management, avoidance of waste and increased customer value.	
7.18	Adoption of flexibility to meet customer's changing demands.	
7.19	Entrenchment of dependability to avoid customer inconvenience.	
7.20	Access to customer service and support.	
7.21	Monitoring performance and service quality improvement.	
7.22	Commitment to continuous improvement by management and all staff and initiating operations improvement ideas.	

8. In your opinion to what extent has operations strategy improved KPLC performance in the following performance indicators? Respond on a continuum of 1 to 3 where
 1=Not at all 2 = Little 3 = substantial

NO.	PERFORMANCE INDICATOR	RESPONSE
8.1	Improved customer service	
8.2	Improved communication with customers.	
8.3	Improved response to customer calls.	
8.4	Improved quality of meter reading and billing.	
8.5	Reduced power failure complaints.	
8.6	Timely power supply restoration.	
8.7	Increased new supply connections.	
8.8	Timely connection of new customers.	
8.9	Reduced system losses.	
8.10	Improved revenue/debt collection	
8.11	Reduced operational costs.	
8.12	Increased profitability.	
8.13	Making electricity affordable to more customers.	
8.14	Improving quality of electricity supplied to customers.	