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MARKETING

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MARKETING

DETERMINANTS OF MORTGAGE UPTAKE IN KENYA USING THE CAPITAL MARKET APPROACH

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Abstract

Interest rates are the single critical factor that drives the mortgage market and access to more middle income housing. However, the mortgage market can be viewed as a larger capital market where investors can assess the risk and returns of alternative investment relative to the mortgage market to determine their uptake. Therefore, the objective of the study was to analyze the determinants of mortgage uptake in Kenya using the Capital Market Approach. To achieve this objective, the study examines the Mortgage Uptake of the three Major mortgage institutions i.e., Housing Finance, Kenya Commercial Bank and Standard Chartered Bank independently and further considers the trend in the Kenyan Mortgage Industry while incorporating the 44 mortgage institutions and was restricted to period 2006 to 2011 based on the data available since the developing mortgage industry is said to have tripled from period 2006 to 2010 according to the Central Bank Survey 2010.The study utilized a longitudinal design of Ordinary Least Square techniques in analyzing available macroeconomic time series to estimate the model. This method was chosen because of its simple and straight forward ability to show the linear relationship between the independent and the dependent variables. The regression has been done using the E-views Software on the secondary data and the interpretation done based on the output provided. From the results, it can be concluded that return on saving and the returns on stocks have an insignificant negative influence on the mortgage uptake in Kenya for the period under study. In addition, in the Case of Standard Chartered Bank, Central Bank Rate had an significant Inverse Relationship on Mortgage Uptake. However, Inflation and Central Bank Rate on the other hand depicted a significant positive influence on the Kenyan Mortgage Uptake, which led to the conclusion from the study that Inflation and Central Bank Rates could be taken as signals for the mortgage uptake rather than the determinants of mortgage uptake. Policy makers should dwell their energies on regulation of the mortgage market since the responsiveness of change in the mortgage rates due to the macroeconomic factors is still slow based on the low development and uptake of this sector.

Key words*:* Capital Market, Mortgage Uptake, Return on savings, Inflation, Return on stocks and Central Bank Rate.

Introduction and Research Objectives

Housing comes under the Social pillar in Kenya's Vision 2030.The fifth section of the social pillar, on Housing and Urbanization aims to address the problem of affordable housing, social equity and a secure living environment for the people of Kenya. It is this particular challenging need of Housing that have witnessed the rise and growth of Housing financing market.

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Utilization of mortgage financing has been the most common method of financing the purchase of real estate worldwide. Real Estate is generally regarded by lenders as excellent security for a loan and lenders acquire a secured interest in the real estate with a mortgage. (William, 2008).

In Kenya in particular, the mortgage industry has recorded a steady growth over the last decade, with commercial banks entering into the mortgage market with various products. This has resulted in total portfolio growth from Kshs 19 billion in 2006 to Kshs 61 billion in 2010 as per Central Bank Survey 2010. However, there is a low level of home ownership which is of 16% and the demand of low income residential housing outstrips the supply. (Ruitha, 2010).

It is from these results that policy makers are paying greater attention to the economic conditions applied in this segment of the banking market besides the implication that these conditions have on the financial stability of households and taking into consideration the prudent monetary policy of the Central Bank that has contributed to the performance of the financial sector, sustaining a stable macroeconomic environment, introducing long-term debt instruments for government borrowing, reducing inflation and interest rates.(Chris, 2005).

Statement of the problem

Interest rates are the single critical factor that drives the mortgage market and access to more middle income housing. With the call for the enlargement of the Mortgage Market so as to help more people qualify for mortgage loans in Kenya, many Commercial banks have always based their Mortgage rates on the volatility of the CBR just as their lending rates.

Mambo, (2012), when investigating effects of Monetary Policy on private sector investment in Kenya recommended studies on mortgage industry that could assist policy makers in understanding the mortgage market. This is as a result of the ballooning of this particular sector but driven by scanty information and increased funding and whose decisions are primarily guided by the financial sector policy that encourages investment.

Several studies have been made on the mortgage market and in particular, the mortgage rates in different geographical context. Carlo, (2010), Lynn, (2003) and Jayantha, (2012), used multivariate analysis on the determination of the mortgage rates in different geographical context, using the demand side of the mortgage market. However, Chang, (2010) and Mulokac, (2012) considered the supply side of the mortgage market using the probit model on their topics determinants of household loans in Korea and Slovakia respectively. Other than looking at the mortgage market as an efficient market determined by the forces of demand and supply, this paper therefore wishes to fill the knowledge gap by analyzing the mortgage market as a larger capital market, considering the determinants influencing the mortgage uptake where lenders and investors evaluate returns on mortgages and all competing forms of investment and their associated risks (William, 2008).Hence the study wishes to analyze the influence of the CBR rate, inflation, bond rates, return on stock and return on savings as competitive forces in the mortgage market.

The General Objective of the study was to investigate the determinants of mortgage uptake in Kenya using the Capital Markets Approach under the following specific Objectives:-

To determine the relationship between Central Bank rate and mortgage uptake in Kenya.

To determine the relationship between inflation and mortgage uptake in Kenya.

To determine the relationship between bond rates and mortgage uptake in Kenya.

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To determine the relationship between rate of return on stock and mortgage uptake in Kenya.

To determine the relationship between the rate of return on Savings and mortgage uptake in Kenya.

Justification of the study

Policy makers have been paying greater attention to the economic conditions applied in this segment of the banking market besides the implication that these conditions have on the financial stability of households in Kenya.

Therefore, It is out of this basis that my research findings would be useful in the decision making for the players and stake holders in the mortgage industry, for instance; The Monetary policy Committee, a 'Think Tank' of the Central Bank, the study would assist in meeting Macroeconomic Objectives such stabilization of interest rates that determines the uptake of the mortgage products considering how developed Nations like Canada have been controlling the mortgage market. (Cameron, 2012).

The interests of Scholars in the mortgage industry more so the mortgage consultants whose primary job is to try and give informed decision to the general public about Housing investments and further analyzing the mortgage market considering they have been instrumental in the industry and have always pegged the mortgage uptake on the movement of interest rates. The Study also seeks to break the ground for the potential Commercial Banks that have direct or indirect interests in mortgage business in Kenya.

Limitation of the study

The developing nature of the mortgage industry in Kenya can lead to the restriction of mortgage uptake data from individual Mortgage providers which could not be avoided, however the data provided by the Central Bank supervision reports could be used instead for the study. In addition there are other variables that may influence the mortgage uptake for example the Loan to Value ratio and credit reference bureaus; but due to lack of enough time and the underdevelopment of the Kenyan mortgage market, to allow for a more comprehensive study to be made this was assumed. Secondly, models are just estimates and approximations and cannot capture the full complexity of the economy. Additionally, no single model can capture the whole economy and give an accurate presentation. However, this has served to give an insight on how mortgage uptake can be influenced by Return on savings, Bond Rates, Inflation, Return on stocks and Central Bank Rate.

Theoretical Background and Literature Review

It is based on four theoretical literature i.e The interest rate theory, The loanable funds Theory, Liquidity preference Theory of interest and The Market Segmentation Theory. Further, the paper has reviewed the works of others relevant to the problem statement and has identified the knowledge gap.

The study looks at the relationship between the Capital market forces as my Independent Variables and mortgage uptake in Kenya as my Dependent Variable. The study conceptualized that Capital Market forces would form the independent variables and their inverse relationship on the mortgage uptake was expected which are explained as follows.

Mortgage uptake and central bank rate

In the framework the Central Bank rate affects the mortgage uptake since mortgage rates are pegged towards the Central Bank rate. Increase in the Central Bank rate leads to a consistent increase in the mortgage rate which tends to slow down mortgage uptake since the Central bank rate act as a signal for commercial banks to tighten their lending .This subsequently leads to an increase in the Commercial bank lending rates which is consistent with the mortgage rates. (Central Bank Survey report, 2010). A higher mortgage rate leads to an increased cost of borrowing from both surplus income side of the demand of housing which further leads to defaults and foreclosures to the extreme cases. However, higher mortgage rates may also be seen as an opportunity for investment by mortgage investors and therefore could assess the risk return tradeoff and evaluate other competing investment in order for them to make a business out of it.(William, 2008).

Mortgage uptake and inflation

Inflation has an inverse relationship with the mortgage uptake since it directly affects the mortgage rates. The rate of inflation is of particular importance to investors and lenders making or purchasing loans made for the rate of interest over a long periods of time. Hence when deciding whether to make such commitments, lenders and investors must be convinced that interest rates commitments are sufficiently high to compensate for any expected loss in purchasing power during the period that the investment or loan is outstanding; otherwise, an inadequate real return will be earned. Therefore a consensus of what lenders and investors expect inflation to be the time that their loans and investment and outstanding is also incorporated in the interest rates at the time investments and loans are made.

Mortgage uptake and return on savings

The demand for and supply of savings determine the rate of interest. In theory, at equilibrium rate of interest, level of savings is equal to the level of investment. Whereas, savings increases with the rate of interest, investment in theory is a decreasing function of interest rate. According to this theory, interest rates need to be high to induce savings. Most investors will assess the returns on savings and those of mortgage investment to determine whether to acquire a mortgage or not. If the saving rate is high then investors will consider saving as an alternative for the mortgage returns.

Mortgage uptake and bond rates

There has been less literature on the relationship between mortgage rates and the government bond rates, in the U.S in particular, mortgage rates are affected by the mortgage backed securities which includes bonds. However, bonds can be taken as an alternative investment according to (William,2008), which calls for the assessment of the returns on mortgages and the relative risk associated with each. Should lenders believe that a greater return could be earned by making more mortgage loans than would be the case if they invested on bonds then an informed decision has to be made.

Mortgage uptake and stock returns

There has been limited literature of the relationship between mortgage uptake and stock returns this explain the unclear relationship between banking sector development and stock market development. Garcia and Liu, (1999) and Nacuer et al., (2007), found support to a positive relationship between banking sector development and stock market development. Yartey, (2008) also found support to a positive relationship; however, it was found that a very high level of bank sector development may have negative effects because stock markets and banks tend to substitute one another as financing sources. Higher mortgage rates can have a negative effect on the stock market. For instance, if banks decided to raise their rates as a result of changes in Central Bank rate, then it becomes more difficult for buyers to get loans. Borrowers must pay higher monthly rates and will have less interest in investments which further slows the economy and causes stock market prices to drop.

Research Methodology

The study used a longitudinal design using Ordinary Least Square techniques in analyzing available macroeconomic time series data. This method is chosen because of its simple and straightforward ability to show the linear relationship between the dependent and the independent variables.

On the target population, the Study had intended to cover a Ten year period from 2003-2012 but the data available was only for the period 2006-2011 which has been used throughout the study and all the variables have been measured based on the data available for the dependent variable by the Central Bank of Kenya, Bank Supervision Reports and has incorporated 44 mortgage institutions in the Country, based on both the mortgage survey 2010 and 2011 which accounts for the whole mortgage industry in Kenya. However, the study has focused on the overall mortgage industry and has factored in some analytical analysis of the three major mortgage institutions Housing Finance, Standard Chartered Bank and Kenya Commercial Bank, which were chosen based on the number of loans issued during the period.

On Research Procedures, Hussian, (2009), observed that most macroeconomic data are non-stationery and that Ordinary least square (OLS) method may suffer from spurious regression. Therefore, converting the variables into natural logarithm form lessens the occurrence of heteroscedacity and exhibits a nonlinear trend as a linear trend which is said to follow a log linear trend. In addition, autocorrelation has not been assumed and the first difference was adopted to minimize chances of autocorrelation. The E views Software has been used to analyse and interpret the results Obtained.

Research Findings and Discussions

The study has concentrated on the assessment of the Determinant of mortgage uptake in Kenya whose interest is on the distinct independent variables i.e. return on savings, bond rates, return on stocks, inflation and Central Bank rate. The following are our findings:-

Mortgage uptake and central bank rate

In consideration for the major players in the mortgage institutions in Kenya, we deduced that there is a positive relationship between the number of mortgage loans issued by the Housing Finance and the Central bank rate. In addition, the Kenya Commercial Bank had a similar outlook explaining the positive relationship. This signals the trend in the mortgage industry while considering the other 44 mortgage institutions. The overall mortgage industry show a positive relationship between Central Bank Rate and mortgage uptake which tend to contravene our hypothesis of the inverse relationship between mortgage uptake and Central Bank Rate.

However, in the case Standard Chartered Bank, CBR has a significant inverse relationship to the mortgage uptake which supports our theory that there is an inverse relationship between CBR and Mortgage uptake. This further support our basis that an increase in the Central Bank rate results to an increase in the mortgage rates that has direct impact on the mortgage uptake, which is reduced

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mortgage uptake by potential mortgage investors since there is a consistent mutual relationship between mortgage uptake and Central Bank Rate.

Mortgage uptake and inflation

In this case the mortgage uptake and inflation postulates a significant positive relationship. This observation is dominant in both the Standard Chartered Bank and Housing finance Scenarios which hints the same trend in the mortgage industry .In this case, Mortgage investors seems to overlook the rate of inflation factor as a basis of investment in the industry meaning that the rate of inflation is insignificant on part of the mortgage investor. In addition the mortgage investor will basically base his decision on the risk return trade off in order for him to decide whether to take up a mortgage or not. All this could be attributed to the underdevelopment of the mortgage sector where information is scanty for investment purposes.

However, in the case of the Kenya Commercial Bank as one of the leading mortgage actor in the mortgage industry, there is an insignificant inverse relationship between the mortgage uptake and inflation. This indicates the trending maturing of part of the industry to sensitivity in the macroeconomic indicators and as a basis of decision making by the mortgage investor. Consequently, this supports our hypothesis that inflation has an inverse relationship with the mortgage uptake since it directly affects the Mortgage rates. This means that the rate of inflation is of particular importance to investors and lenders making or purchasing loans made for the rate of interest over a long period of time. Hence, when deciding whether to make such commitments, lenders and investors must be convinced that interest rates commitments are sufficiently high to compensate for any expected loss in purchasing power during the period that the investment or loan is outstanding; otherwise, an inadequate real return will be earned.

Mortgage uptake and return on savings

The study objective also examined the influence of the return on savings on the mortgage uptake. The insignificant explanation based on the trend of the mortgage industry indicate that there is a slight truth on our hypothesis that states that there is an inverse relationship between returns on savings by commercial banks and mortgage uptake in Kenya. This can be said to be influenced by the interaction of both the supply and the demand of savings that determine the level of the rate of interest. In theory, at the equilibrium rate of interest, level of savings equals to the level of investment. Whereas, savings increases with the rate of interest, investment in theory is a decreasing function of interest rate. According to this theory, interest rates need to be high to induce savings. Therefore, most investors will assess the returns on savings and those of mortgage investment to determine whether to acquire a mortgage or not. If the saving rate is high then investors will consider saving as an alternative for mortgage returns. However, in the case of the Kenya Commercial Bank, the significant reverse proves to be the trend with a positive relationship between the mortgage uptake and the returns on savings this perspective support the scanty information in the industry in which the mortgage investors tend to overlook when making their informed decisions on whether to invest on mortgages or keep their savings with the Commercial banks where there are nice returns.

Mortgage uptake and bond rates

The study objective also was meant to investigate the relationship between bond rates and mortgage uptake. An insignificant positive relationship between mortgage uptake and the bond rates on the overall mortgage industry could attribute the underdevelopment of the mortgage market. However, the insignificant inverse relationship in the case of Standard Chartered Bank supports our hypothesis

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that there is an inverse relationship between mortgage uptake and the bond returns. In the developed economies like the U.S, mortgage rates that have subsequent effect on the mortgage uptake by investors are influenced by other instruments like bonds. According to (William, 2008), bonds can be taken as an alternative investment where an investor can assess the returns on mortgages and the relative risk associated with each. This means that if lenders believe that a greater return could be earned by making more mortgage loans than would be the case, if they invested on bonds, then an informed decision has to be made whether to invest in the mortgages or bonds. The recent trend in the issue of bonds by the Central Bank with attractive coupon rates therefore could influence the level of sluggishness and growth of the mortgage market.

Mortgage uptake and stock returns

Lastly, the objective of the study was also to determine the relationship between the stock returns and the mortgage uptake. The significant relationship between mortgage uptake and stock returns support the hypothesis that there is an inverse relationship between mortgage uptake and stock returns as per the log linear trend. This supports the basis that the development of the banking sector may have the negative effects on the stock markets and the banks may tend to substitute one another as financing sources. In addition, the analysis further supports the basis that high mortgage rates can have negative effects on the stock markets i.e. if banks decided to raise their rates as a results in of changes in Central Bank rates, then it becomes more difficult for buyers to get loans. Borrowers must pay high monthly rates and will have less interest in investments which further slows the economy and causes stock market prices to drop.

Policy Implications and Recommendations

The results obtained in this study have important policy implication both for local policy makers and financial sector players in Kenya with rising growth in Real estate loans that has outpaced that of credit to businesses and households in the recent trend thus emerging as a new driver to the banking sector's profitability. First, considering the growth of the unregulated mortgage market in Kenya, the market has been hampered by lack of information that would enable buyers to make more informed decisions. Consequently, potential mortgage takers have been discouraged by scant information on the best mortgage offers available, the best terms and on how to ensure that one comes out with good returns on their house buys even after servicing their mortgage loans. In this study, we have analyzed probable and possible causes of lower mortgage uptake considering most potential home buyers have kept off mortgage loans afraid of the negative equity in the long term and the high interest rates that have impacted heavily in the short run on both the supply of new homes and the mortgage uptake. The Mortgage industry has been lucrative for investors, besides increased capital market forces in the financial sector. The Interest rates are the single most critical factor in driving the mortgage market and access to more middle-income housing and as foreign investors continue to enter Kenya's property market; it will be easier to get funding for projects. There are many challenges facing our current mortgage industry based on the availabilit y of funds for lending and the issues of defaults leading to other mortgage lending institutions selling mortgage insurance to diverse its revenue streams by seeking approval from the Insurance Regulatory Authority an arrangement called banc assurance.

However, with the mortgage rates still very high, the lowering of lending rates by the Central Bank of Kenya has spurred activity in the construction sector as developers anticipate a fall in commercial banks mortgage rates as the commercial lending rates keep on falling. This ma y encourage more developers to start developments that cater for low-income earners in an effort to bridge the housing gap. Consideration of other investment instruments such as bonds, stock and return of savings from commercial banks should also be seen as competing forces in the mortgage industry that could have effects on the mortgage uptake.

All in all, policy makers should dwell their energies on regulation of the mortgage market since the responsiveness of change in the mortgage rates due to the macroeconomic factors is still slow based on the low development and uptake of this sector. Further, consideration of utilization of pension funds and ability of the mortgage institutions borrowing long term funds from the Capital market should be seen as an effort of regulating the industry and improvement in the sector.

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FACTORS AFFECTING CUSTOMER LOYALTY IN THE JUICE INDUSTRY: THE CASE OF CERIO DEL MONTE KENYA LIMITED

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Abstract

Customer loyalty is a very complex process in most organizations and remains relevant amidst cut-throat competition that has become evidenced by the current turbulent business environment. However, the challenge is the fact that the interventions are so many and interrelated, making it difficult to identify their impact and effectiveness in isolation. The main objective of the study was to determine the relationship between customer satisfactions and customer loyalty in the juice industry the case of Del Monte Kenya Limited. The researcher used the descriptive research design. Convenient random sampling technique was used where sampled outlets were visited and questionnaires administered. Then the researcher analyzed data by use of qualitative and quantitative methods. Statistical methods by use of frequencies and percentages were used and data presented in tables and graphs. The results of this study provided an insight in the development of new products and maintaining customer loyalty among its brands. As regards the scope on customer loyalty, the expansive focus in demographics, the findings illustrated that customer loyalty was as well influenced by such dynamics as age, income, gender and educational level.

Key words: Customer loyalty, Juice Industry, Customer satisfaction.

Introduction

Customer loyalty in business, engineering and manufacturing has a pragmatic interpretation as the totality of feelings or attitudes that would incline a customer to consider the re-purchase of a service or brand or re-visit a particular company, shop or website. Customer loyalty has always been critical to business success and profitability. Customer loyalty is a perceptual, conditional and somewhat subjective attribute and may be understood differently by different people.

Numerous definitions and methodologies have been created to assist in managing the customer loyalty aspect of business operations. Engendering and enhancing customer loyalty is a core objective of loyalty marketing – a strategy employed by businesses in order to increase the loyalty of customers and other stakeholders in the drive to meet and exceed commercial objectives (Darrell et al., 2003).

Recent years have shown a growing interest in customer loyalty. The globalization of competition, saturation of markets, and development of information technology have enhanced customer awareness and created a situation where long-term success is no longer achieved through optimized product price and qualities. Instead, companies build their success on a long-term customer relationship (Darrell et al., 2003). The increase and retention of loyal customers has become a key factor for long-term success of the companies. The main emphasis in marketing has shifted from winning new customers to the retention of existing ones. Customer loyalty is one of the most important issues organizations face today. Creating loyal customers has become more important due to significant increase in competition and concentrated markets. Businesses are trying to attract and satisfy customers and to build long-term relationship through building loyalty among customers

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(Ndubisi, 1996). In the juice industry it is more important to determine factors affecting customer loyalty due to the stiff competition of their brands in the growing markets (Anderson et al., 2010).

Research problem

Customer loyalty studies are often considered key strategic type of research that should be done by any company to ensure a firm's competitive position. Many large companies closely track customer loyalty to catch potential issues before they spread. As competition in Kenya's juice sector becomes fierce, many companies are launching new products every month in a bid to attract customers from the Chief Executives to the small trader. In the recent past, many juice processing companies have been established. As players increase, things have changed and juice processing companies are providing what the customers want by taking a proactive approach innovating on their products to retain customers (Kibera, 1998). Having loyal customers has been identified as a strategic tool crucial to the economic success and survival of firms, a potential strategic weapon, a creative force, and new products are even capable of revitalizing the organization (Ndubisi, 2005).

The juice sector has traditionally been known for its tight multinational companies control and high entry barriers. In many developing countries like Kenya, however, the juice sector has changed from a fairly closed sector, with conservative operating companies to an extremely dynamic one. Inside these dynamically growing companies, customer retention is gradually acquiring status as a separate, identifiable activity. Due to the rapidly increasing level of competition there is a growing need for customer retention (Kibera, 1998).

Given the emerging rivalry with the multinationals, Del Monte market share as leader in the fruit juice manufacturing is to at stake. Customer loyalty is a very complex process in most organizations and remains relevant amidst cut-throat competition that has become evidenced by the current turbulent business environment. Moreover, as is widely recognized that customer loyalty is critical to the success for any organization (Shepher and Ahmed, 2000), managers and other decision makers must ensure that there is a link between customer retention and the overall organization performance.

Del Monte's ability to survive in turbulent market depends on the customer retention capability and loyalty. Whereas there are numerous factors that affect customer loyalty, it is not clear how each of these affect this industry, so as to access how customer retention plays a role in enhancing organization's market share through customer acquisition, satisfaction and retention which Del Monte is a representative case. What strengths in customer loyalty does Del Monte employ to ensure it retains leadership in fruit juice manufacturing industry?

Objectives of the study

The objectives of this study are evaluated from a general perspective as well as a specific perspective.

The general objective was to evaluate the factors that affect customer loyalty in the juice industry focusing primarily on Del Monte Kenya Limited.

The specific objectives of the study were;

To determine the relationship between customer satisfaction and customer loyalty in the juice industry.

To establish the relationship between packaging and customer loyalty in the juice industry.

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To examine the relationship between quality of juices and customer loyalty in the juice industry.

To determine the relationship between juice prices and customer loyalty in the juice industry.

Significance the study

Whereas there are numerous empirical and theoretic expositions on customer loyalty, the literature is not clear on how the various customer loyalty factors affect the juice industry. Although significant empirical effort has focused on the service and manufacturing industries, none has focused on the juice industry particularly in Kenya.

Literature review

The chapter contains literature material to appreciate what other researchers have contributed towards this field and access what possibly need be researched and to understand what other writers have written on the factors affecting customer loyalty. Many studies have been made by different authors on customer satisfaction, price, competition, packaging, and quality which seems to be critical issue yet looked as if of less important. The literature provided background information necessary for this article.

The concept of customer loyalty

The need for customer loyalty in business has been recognized by many scholars. Customer loyalty is one of the most frequently discussed subjects in the marketing and service literature (Darrell et al., 2003). There is a plethora of definitions of loyalty and/or customer loyalty in the extant literature. Customer loyalty is customer repeating purchase intention to some specific products or services in the future (Darrell et al., 2003).

The customer retention rate is the rate at which customers are kept and is expressed as the percentage of customers at the beginning of the year that still remain at the end of the year. Therefore, the average life of a customer relationship doubles from five to ten years as a company’s retention rate goes from 80 to 90 per cent (Kibera, 1998).

Review of Past Studies

The impact of satisfaction on loyalty has been the most popular subject of studies. Several studies have revealed that there exists a direct connection between satisfaction and loyalty: satisfied customers become loyal and dissatisfied customers move to another (Anderson et al., 2000). Customer satisfaction is the most important factor that affects customer loyalty (Anderson et al., 2000). It is an important theoretical as well as practical issue for most marketers and consumer researchers (Anderson et al., 2000). If customer is satisfied he/she buys the product again and again. It is one of the very important factors that affect customers. Satisfaction is an element which fulfills the need of the customer associated with that product: e.g. Lux soap is positioned as beauty care product thus can only satisfy the customer if it enhances fairness of the skin of a user. Unsatisfied customers tend to convey their negative impression to other consumers.

Kotler and Armstrong (2000) felt that before setting the price, company must decide on its strategy for the product. Packaging literature indicated that perceptions of high packaging and high service satisfaction resulted in a very high level of purchase intentions Perrault and Jerome (1998) claimed that customer loyalty was affected by product quality, packaging, and retailer image. They also

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suggested quality (of product and service) is directly related to customer satisfaction, and leads to the loyalty of the customer.

The research on factors influencing customer loyalty has been conducted focusing mainly on other countries and organization in general. It would seem that no one has studied this topic in a juice industry context in Kenya.

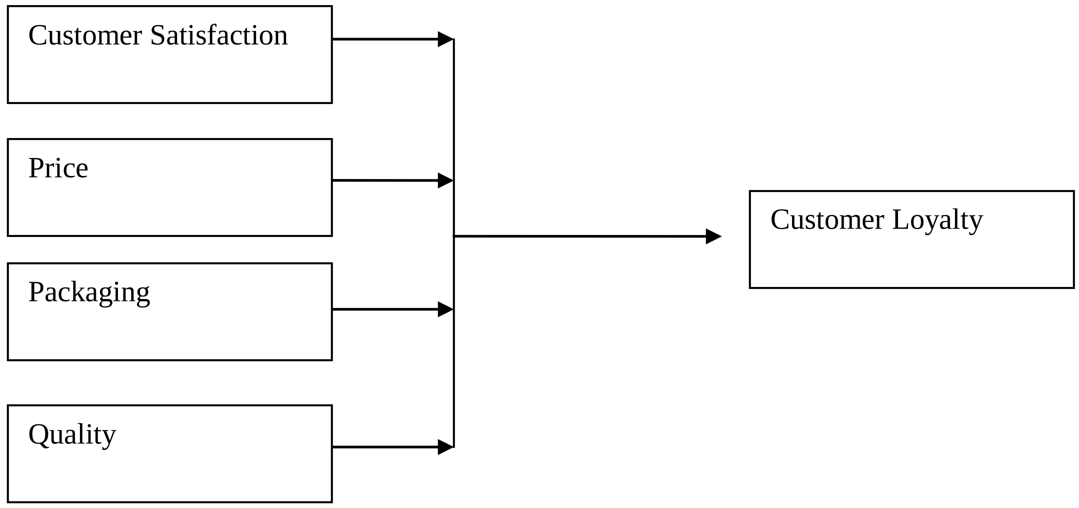

Figure 1: Conceptual Framework

Research Methodology

A descriptive study design was used to collect quantitative and qualitative data. . The reason for using this design is because it deals with the aggregate of all responses using descriptive statistics such as, percentages, frequency distribution through self-administered questionnaires.

Convenient random sampling technique was used where sampled outlets were visited and questionnaires administered because it saved on time, resources and also due to the fact that the research took place in some convenient places. The total population of Del Monte customers includes all consumers of Del Monte juice products derived from the retail and wholesale outlets. The study made the assumption that because of the large size of the population of the customers, the proportion of satisfied customers (p) is equal to that of the dissatisfied ones (1-p). Using normal distribution, a confidence interval of 95% and an error of 6.73%, the sample size was obtained as follows:

$$n = \left[\frac{Z^2 p(1-p)}{e^2}\right] = \left[\frac{1.96^2 * 0.5(1-0.5)}{(0.0673)^2}\right] = 212$$

In this study, the primary data collection method utilized was questionnaires. Questionnaires are one of the most efficient ways to collect data (Cooper and Schindler, 2006). The questionnaires were designed based on the research questions having open-ended and closed-ended questions. Data was analyzed using statistical methods by use of frequencies and percentages.

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Findings and discussion

Switching to another brand

The switching characteristics of consumers were examined. According to the findings, 25.8% contemplated switching while 74.2% never contemplated switching to another brand.

Influence of customer satisfaction on customer loyalty

On attractiveness of the products features, 11.0% strongly disagreed, 14.8% disagreed that the products features were attractive, 12.3% of the respondents were not sure, 30.3% agreed that indeed the product features were attractive and 31% strongly agreed.

Further on the study findings indicate that 3.2% of respondents strongly disagreed that the products influenced them to switch from another brand, 8.4% disagreed, 3.9% were not sure if the product influenced their switch from another brand, 61.3% of the respondents agreed and 23.2% strongly agreed that Del Monte products influenced them to switch from other brands.

On whether Del Monte's customer services influenced them to buy the products, 7.1% strongly disagreed, 21.3% disagreed, 4.5% were not sure, 49.0% agreed and 18.1% strongly agreed that Del Monte's customer services influenced them to buy the products.A cross-tabulation was done between customer satisfaction levels across customer loyalty which was measured by the customer switching to another brand. Table 4.1 shows the customers' tendencies to switch to another brand across satisfaction levels.

Table 4.1: Switching to another brand across customer satisfaction levels

	Customer satisfaction levels					
Switching to another brand	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Total
Yes	1	3	5	21	10	40
No	8	8	17	56	26	115
Total	9	11	22	77	36	155

As shown in Table 4.1, customer satisfaction had an effect on customers' tendencies to switch to another brand. The table reveals that satisfied customers switched to another brand less frequently than those who were dissatisfied. This therefore means that customer satisfaction had an effect on customer loyalty with regards to switching to another brand. This finding is in line with a previous study conducted by Anderson et al., (2000) which established that there exists a direct connection between satisfaction and loyalty: satisfied customers become loyal and dissatisfied customers move to another.

Similar to these findings, a study conducted by Kibera, (1998) established that long-time, satisfied customers are likely to provide free, word of mouth advertising referrals. Long-time customers are likely to purchase additional products or services. It therefore emerges that satisfied customers will be loyal customers.

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Influence of packaging on customer loyalty

The study sought to establish the relationship between packaging and customers' loyalty. To establish this, a cross-tabulation was done between customers' satisfaction levels with Del Monte products and the length of consumption as well as switching to another brand. Table 4.2 shows the cross-tabulation.

Table 4.2: Length of consumption across customer satisfaction with packages levels

	Customer satisfaction levels					
Lengthof consumption	Very Dissatisfied	Dissatisfied	Not sure	Satisfied	Very satisfied	Total
Less than 1 year	0	2	0	11	3	16
1 – 5 years	3	5	1	17	11	37
5 – 10 years	3	8	2	34	0	47
Above 10 years	4	11	4	36	0	55
Total	10	26	7	98	14	155

As shown in Table 4.2, customer satisfaction with a product's packaging had an effect on their loyalty based on the length of consumption of the product. The table shows that the clients who were more satisfied with the packaging of Del Monte products used the products for longer periods of time, revealing that when a client likes the packaging of a product, they are more likely to keep buying the product. In this case, the Del Monte clients liked the product packaging and were therefore loyal to the organization.

Influence of quality on customer loyalty

A cross-tabulation was also done for the quality of juices across switching to another brand as shown in Table 4.3.

Table 4.3: Switching to another brand across quality of Del Monte products

	Quality of Del Monte products				
Switchingto another brand	Poor	Average	Good	Excellent	Total
Yes	3	5	28	4	40
No	22	6	66	21	115
Total	25	11	94	25	155

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As shown in Table 4.3, the quality of Del Monte products did not influence the customers' switching to another brand since even when the quality is poor, the customers did not switch to another brand. This shows that the quality of products has no effect on switching to another brand. In agreement, Reichheld and Sasser (2003) posited the importance of determining the nature and strength of the relationship between perceived service quality and loyalty for a firm and/or different industry levels.

Influence of Price on Customer Loyalty

The study sought to establish the relationship between pricing and customers' loyalty. To determine this, a cross-tabulation was done between the overall prices of products and customers' loyalty based on their length of consumption and their tendencies to switch to another brand. The cross-tabulations are as shown in Table 4.4.

Table 4.4: Length of consumption across overall prices of Del Monte products

	Overall prices of Del Monte products					
Lengthof consumption	Very expensive	Expensive	Average	Affordable	Very affordable	Total
Less than 1 year	1	5	0	3	7	16
1 – 5 years	2	9	1	15	10	37
5 – 10 years	5	10	2	26	4	47
Above 10 years	5	23	4	20	3	55
Total	13	47	7	64	24	155

As shown in the table, price did not have a big effect on the length of consumption hence customer loyalty. This was revealed in the fact that even the customers who rated the products as expensive and very expensive still used them for many years. This is an indicator that the price of Del Monte products did not affect their customer loyalty.

Conclusion

As regards the scope on customer loyalty, the expansive focus in demographics, the findings illustrate that customer loyalty was as well influenced by such dynamics as age, income, gender and educational level. On the factors affecting customer loyalty in the juice industry, findings revealed that the majority of the respondents agreed that they buy Del Monte because of the superior quality. On the influence of price promotions on customer loyalty, the majority of the respondents agreed that they buy more during special offer promotion periods. On the quality factors affecting customer loyalty in the juice industry the findings revealed that the majority of the respondents agreed that they want high quality products.

Recommendations

The study recommends that organization should carry out a good market research to ensure they understand the customer needs and know if they are well satisfied. The study recommends that organization should follow on each sold products to know the level of customer satisfaction of the products sold.

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The research recommended that the labeling that is made in the organizational products should be very appealing on the eyes of the customers and should arouse a buying appetite within the customers. The study recommends that the organization should come up with the best labeling strategies and designs and make the packaging more attractive as compared to competitors

Del Monte Kenya Limited and juice companies should come up with the best pricing strategy to ensure that the prices are fair and in accordance with the market and customer strength. The research recommended that all prices for the products should be revised to ensure increased sales volume in the organization or better still come up with smaller quantities that are at lower and affordable prices to take care of all customers in the market

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FACTORS CONTRIBUTING TO STOCK OUT OF DRUGS IN THE PUBLIC SECTOR: A CASE STUDY OF KENYA MEDICAL SUPPLIES AGENCY (KEMSA)

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Abstract

The stock outs of drugs do not meet good Supply practices (NTF, 2008) a situation that significantly threatens the services rendered at the Public Health facilities. In addition, lack of mainly highly sensitive commodities like anti-biotic, anti-anesthetics among others eats into the cost sharing income generated by the Public Health facilities. Coupled with this KEMSA does not inform the facilities of the shortages until the point of receipt of drugs at the facilities. This creates crisis for the facilities for they have to sort to emergency procurement systems which are very expensive compared to Open Tendering.The research proposal is aimed at examining the effect of stock out of drugs in the Public Sector with reference to Kenya Medical Supplies Authority (KEMSA). The purpose of the study is showcase of the factors contributing to stock out of drugs in the Public Sector. The research will contain past studies that have been done according to the study, that is, causes of pending bills, irregular supply of drug to Public Health Facilities, the unpredictable order fill rates and inconsistency of delivery to Public Health Facilities. Various assessments have been done to establish KEMSA's performance, with the result showing outright failure to fulfil its mandate. The objective of this study is to establish how funding and flow of funds, the tendering process (use of Public Procurement Act/guidelines), delivery lead times, and forecasting and quantification exercise affect the performance of Kenya Medical Supplies Authority (KEMSA).The population of this study will be made up of senior departmental heads of KEMSA, that is, from the supervisor level upwards. The research will adopt a case study design. The target population will consist of 94 employees in Warehouse, Procurement, Customer Service, Distribution, Quality Assurance, Finance and Administration departments. Stratified random sampling will be used where a sample in the six departments will be taken. Structured questionnaire will be used to capture information from the staff. Due to the relative size of the population, a census approach will be used to collect data from the respondents. Data will be collected with the aid of a structured questionnaire which will be divided into six sections. Section one will present the respondent's general information about the respondent and the organization while the rest of the section two to six to help bring out clear relation between the hypothesized factors and factors affecting drug supply performance at KEMSA . The questionnaires will be examined for completeness once they are received from the field. They will then be coded and entered into SPSS.Summary statistic will be used to check the accuracy of data entry by checking for others for outliers and missing entries. Descriptive statistics will be used to summarize the responses for each of the hypothesized factors. This will include mean standard deviation. On the basis of mean, point of consensus on the various factors will be determined. Standard deviation on the other hand will give an estimate of the variability of the responses. Correlation analysis will be used to evaluate the relationship between the conceptualized factors and stock out situation.

Introduction

KEMSA was established as a state corporation under the State Corporation act Cap 446 on 11th February 2000 under legal notice No. 17 with the mandate to procure, warehouse and distribute medical commodities to Kenya's Health facilities. KEMSA works to support the National Health Strategic Plan (NHSP), Kenya Health Sector Support Program (KHSSP) and the Kenya Health

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Package (KHP) for Health in providing public health facilities with the "right quantity and quality of drugs and medical supplies" at the best market value". The primary responsibilities of KEMSA included: Develop and implement a distribution system that effectively and efficiently deliver medical commodities to all public health facilities; Develop a harmonized national procurement system in collaboration with the Ministry of Health and other stakeholders; and to develop and evolve a world class integrated medical supply chain encompassing selection, forecasting, quality assurance, procurement planning, warehousing, logistics and customer service, among others (KEMSA, 2007).

KEMSA's procurement, receipt and distribution of drugs is riddled with gaps and challenges that deter effective performance of the prescribed tasks. The organization distributes drugs and medical supplies to over 5,000 health facilities located across the country, in quarterly cycles. The Public procurement regulations or system does not meet the demands of the population on timely basis and this has significantly threatened the quantity of drugs supplied to Public Health Facilities. In addition, the budget and flow of funds to Kemsa majorly contributes to stock outs as the budget received is approximately 65%, leaving a gap of 35% and the same funds flow to KEMSA erratically. Since procurement cannot be started without funds, late flow of funds makes the start of procurement method to start late, hence late receipt, leading to stock outs. Findings indicate under budgeting and poor flow of funds to KEMSA. This leads to the inefficiency and unresponsiveness of KEMSA distribution system compared to competitors in the market exemplified by the high and persistent stock outs (NTF, 2008).

Statement of the problem

KEMSA was established in year 2000 with one of its key mandates being to procure, warehouse and distribute drugs to all public health facilities. However, according to NTF (2008), KEMSA's drugs distribution is riddled with gaps and challenges that deter effective performance of the prescribed tasks. The persistent stock outs of drugs do not meet good Supply practices (NTF, 2008) a situation that significantly threatens the services rendered at the Public Health facilities. Coupled with this KEMSA does not inform the facilities of the shortages until the point of receipt of drugs at the facilities. This creates crisis for the facilities for they have to sort to emergency procurement systems which are very expensive compared to Open Tendering.

Studies on KEMSA have been done by USAID (2008). The study never carried out a thorough review of the factors contributing to drug stock outs in Public Health Facilities. It did not therefore specify factors that affect stock levels like long procurement process that takes between 6 to 9 months, poor contract management, under funding, poor flow of funds, lack of records from facilities hence poor quantification exercise among others. A study carried out in 2008, by a National Task Force (NTF) on KEMSA appointed by the minister of medical services looked into operations of KEMSA and made recommendations for improvement. This study did not take an in depth look at the stock out issue or the factors affecting drugs distribution at KEMSA.

General objective of the study

The main objective of the study is to examine the main factor contributing to stock out of drugs in the public sector, a case study of KEMSA.

Specific objectives

To explore the extent to which funding and flow of funds affect stock outs

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Research question

To what extent does funding and flow of funds affect stock outs of drugs?

Literature review

PETS, (2008) established that about 25 percent of health facilities experience stock outs of key drugs, kits and other commodities; stock outs of key medical supplies and contraceptives and stock outs of non-pharmaceutical items therefore prompting the facilities to engage in direct purchase of the out of stock items. The duration for these stock outs averaged one month to six months. This could have far reaching implications on service delivery, procurement and supplies process in the ministry therefore impacting on governance and corruption in the sector (KACC, 2008). However, the studies never took adequate interest to look at the root cause of stock outs a part from merely mentioning the problem as being grave and negatively impacts on the government.

Conceptual framework

Dependent variable is drug and medical supplies stock outs. Various past studies (NTF, 2008; PETS, 2008 and USAID 2008) have indicated this as a major area of concern at KEMSA but none of them comprehensively examined the factors that influence it.

The independent variables are: Funding and flow of funds, tendering processes, delivery lead times; and forecasting and quantification exercise. These variables were identified by past studies (NTF, 2008; KACC, 2008; PETS, 2008 and USAID 2008) which investigated the general performance of KEMSA. However, none of the said studies specifically demonstrated how each of the variables contributed to stock outs. This is because their scope was wide covering procurement, warehousing and distribution of medical supplies. Other studies done outside Kenya have also pointed at these variables as possible determinants of stock outs.

Figure 2.1: Conceptual framework

Research gap

Past studies have pointed out success factors in Health Care delivery. However, most of these studies were carried out in private sector. Few have examined drug stock position in public sector. Those studies conducted on KEMSA have examined procurement processes and procedures at KEMSA with respect to the law that created it. Some of the studies have pointed out that the KEMSA in general has performed poorly in discharging its mandate.

However, there has been no definite attempt to examine the factors that specifically contribute to stock outs at facilities and in KEMSA. This is the research gap that this study seeks to fill.

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Methodology

Research design: The study adopted the descriptive research design. This entailed description of the state of affairs as it is without interfering with the subjects. This research design is appropriate for this study because data required to meet the stated objectives can easily be obtained using questionnaires.

Study population: The population of this study was made up of the management team of KEMSA i.e. the from supervisor level upwards. The total population was therefore 94

Data collection instruments: Data was collected with the aid of a questionnaire which was divided into six sections. Section one presented the respondent's general information about the respondent and the organization while the rest of the sections addressed each of the main variables. Section two contained both open-ended and close-ended questions. The close-ended questions will be likert type questions. Likert type questions helped bring out clear relations between the hypothesized factor and drug performance at KEMSA. The open ended questions enabled the respondents to bring out other key factors not captured in the questionnaire.

Data analysis: The questionnaires were examined for completeness once they are received from the field. Descriptive statistics used to summarize the responses for each of the hypothesized factors. This included mean and standard deviation. On the basis of mean, a point of consensus on the various factors was determined. Standard deviation on the other hand gave an estimate of the variability of the responses. Spearman correlation coefficient was used to evaluate the relationship between the conceptualized factor and drug stock out. Correlation analysis is deemed appropriate because the correlation coefficient indicates both the strength and direction of relationship between drug stock out and the independent variables. The correlation coefficient ranges between -1 and +1 with -1 indicating perfect negative correlation, 0 indicates no correlation and +1 indicates perfect positive correlation between the variables. The significance of the correlation was estimated using p-values at 5% significance level.

Research findings

The study targeted 55 respondents drawn from different cadres of management. Only 3 respondents failed to respond and 52 representing approximately 96% of desired sample responded. All the strata had over 93% response rate, which is a very good response rate.

Table 4.1 : Response rate

	Expected number	Actual responses	Percentage achieved
Supervisor	18	17	94%
Assistant manager	15	14	93%
Manager	15	14	93%
Director	4	4	100%
Advisor	3	3	100%
Total	55	52	96%

From the response received, it was found that majority (65%) of the respondents were male while only 35% were female. This finding is shown by the pie chart below.

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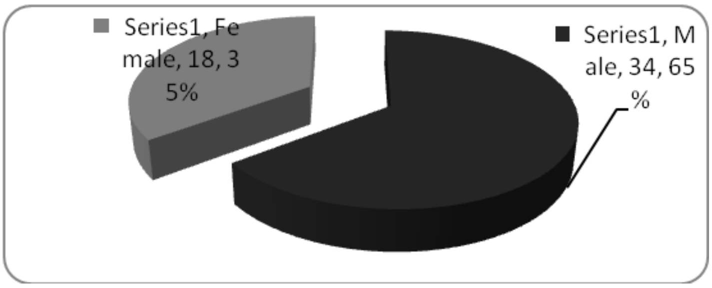

Figure 4.1 : Respondents analysis

The researcher was also interested in finding out the level of education each respondent had. From the finding, it was clear that majority of the respondents (36.50%) had undergraduate degree. This was followed by those who had tertiary education/college (34.60%), those with post graduate degrees (25.00%) and finally (3.8%) did not indicate their education levels. This is shown by the table below.

Table 4.2 : Level of education

	Frequency	Percent
Tertiary	18	34.62%
Undergraduate	19	36.54%
Postgraduate	13	25.00%
Not indicated	02	3.84%
Total	52	100%

The researcher carried out research on all the 15 departments in KEMSA. From the finding, it was clear that supply chain formed the majority of the workforce in KEMSA. Procurement (21.20%), Warehouse (15.4%), Customer Service (11.5%), Distribution and Quality Assurance (5.8%) respectively, while the rest were below 5% as indicated below.

Table 4.3 : Work department in KEMSA

	Frequency	Percent
Procurement	11	21.20%
Warehouse	8	15.40%
Customer Service	6	11.50%
Distribution	3	5.80%
Quality Assurance	6	5.80%
Others	21	40.38%
Total	52	100.00%

The researcher was also interested in finding out the number of years respondents have worked in KEMSA. From the findings, it was realized that 0.25 year – 5 years (57.70%), 6years – 10 years (36.50%), above 10 years (5.80%).

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Table 4.4 : Years worked At KEMSA

	Frequency	Percent
0.25 YR – 5 YRS	30	57.70%
6 YRS – 10 YRS	19	36.50%
Above 10 YRS	03	05.80%
Total	52	100%

Performance of KEMSA in drug and medical supplies (distribution)

With the key mandate to procure, warehouse and distribute, KEMSA has shown tremendous improvement in terms of reach as deliveries are made at the door steps of all facilities. Drugs are also delivered under safe conditions and of high quality. Delivery schedules also have been maintained, quality and quantity of drugs have also improved. The procurement is above reproach, effective, efficient and transparent. KEMSA also operates an outsourced transport system making it reliable and dependable.

The response therefore on whether KEMSA has been able to charge its mandate, attracted an overwhelming majority (96.2%) said YES while (3.8%) said NO as shown below.

	Frequency	Percent
No	2	3.8%
Yes	50	96.2%

Total 52 100%

Funding and flow of funds and stock out of drugs and medical supplies

The objective here was to investigate the influence of financial capacity on order fill rate performance at KEMSA. First, the respondents were asked to indicate whether they considered KEMSA financially capable to procure and distribute drugs and medical supplies in the country.

An overwhelming majority (92.3%) felt that KEMSA is financially capable to procure and distribute drugs and medical supplies to Kenyan population. 5.8% felt that it does not have adequate funds while 1.9% was undecided. This is shown in the table below;

Table 4.5 : Response Of KEMSA'S financial capability

	Frequency	Percent
No	3	5.8
Yes	48	92.3
Undecided	1	1.9
Total	52	100

Under the same research objective, respondents were also asked whether financial capacity does influence drug and medical supplies stock out situation. A majority (69.3%) of the employees felt that it does affect to a high extent. This is shown here below;

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Table 4.6 : Extent of funding and funds flow on stock out of drugs and medical supplies.

	Frequency	Percent
Capable to a very small extent	1	1.9
Capable to a small extent	1	1.9
Average capability	12	23.1
Capable to a high extent	20	38.5
Capable to a very high extent	16	30.8
Undecided	2	3.8
Total	52	100

The influence of funding and funds flow on stock out of drugs and medical supplies at kemsa

The respondents were asked to rate the extent of influence by some financial indicators that are directly related to stock out of drugs. Majority (82.6%) of the respondents felt that KEMSA faces frequent challenges in meeting its obligations to acquire adequate stocks. (54.9%) disagree that inadequate finances have hampered performance evaluation of Order Fill Rates. It was also realized that (67.3%) of the respondents felt that there is adequate funds to procure sufficient drugs. Finally, (61.6%) felt that funds were adequate to maintain the order fill rates throughout the year. This is shown in the table and graph below;

Table 4.7 : Funding and funds flow Influence on Stock Out of Drugs and Medical Supplies.

	Disagree	Indifferent	Agree to a small extent	Agree to a moderate	Strongly agree
	%	%	%	%	%
KEMSA faces frequent challenges in meeting its obligations to acquire adequate stocks	11.5	5.8	34.6	28.8	19.2
Due to lack of finances, there is no performance evaluation mechanism to gauge the performance of order fill rates	54.9	5.9	17.6	19.6	2.0
There is adequate funds to procure sufficient drugs for the country	25.0	7.7	26.9	30.8	9.6
There is sufficient funding to maintain order fill rates of drugs throughout the year	28.8	9.6	32.7	23.1	5.8

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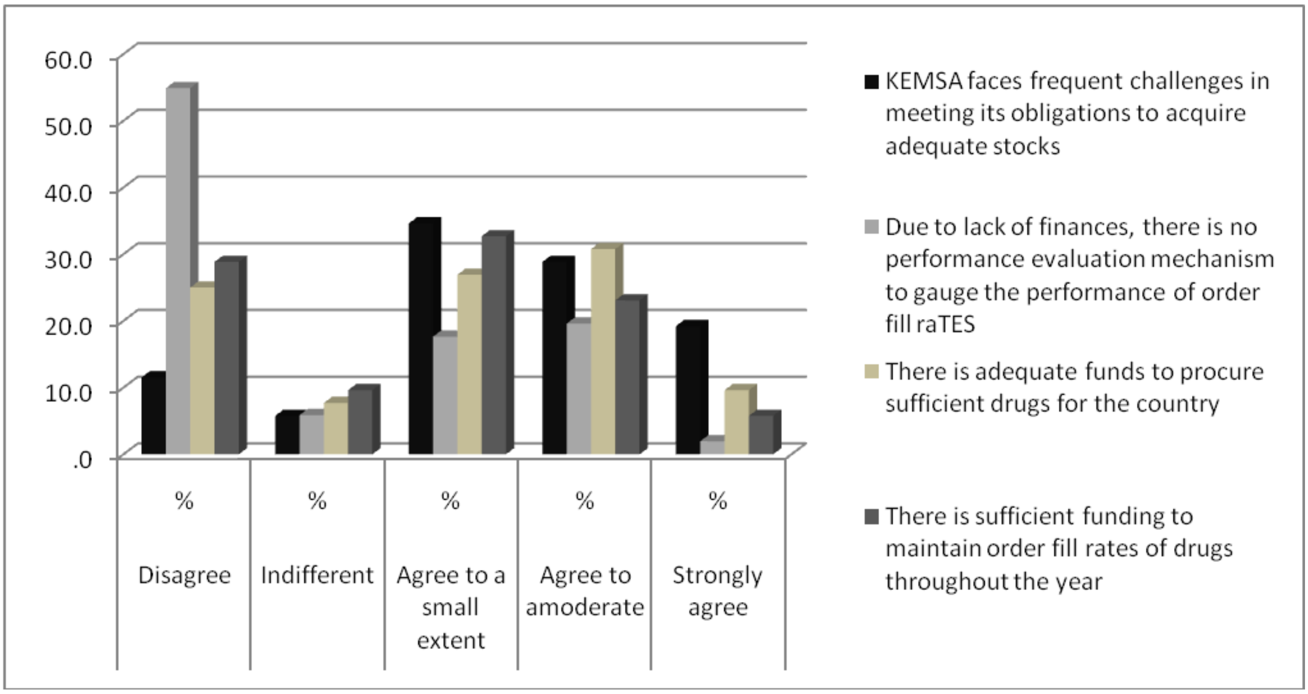

Figure 4. 2 : Respondents Analysis

The relationship between Funding and Flow of Funds, and drugs and medical supplies stock out was estimated using nonparametric Spearman's correlation coefficient. It was established that financial capacity has a negative correlation with drugs and medical Supplies stock out ($r = -0.027$). This correlation was found to be significant at the 5% significance level (p-value = 0.848). The analysis results are shown in the table below.

Table 4.8 : Correlation Analysis between Funding and flow of funds and Stock Out of Drugs and Medical Supplies.

		Drugs and Medical Supplies Stock Out
Funding and Flow of Funds	Spearman's Correlation	-0.027
	Sig. (2-tailed)	.848
	N	52

Conclusion

Funding and flow of funds and stock out of drugs and medical supplies

It was realized that the funding and flow of funds for healthcare is wanting as real financial allocations to the public sector have declined or remained constant. Reviews of public expenditure and budgets show that total health spending constitutes 8.6% of total government expenditure showing that health spending remains far below the WHO recommended level of US DOLLARS 34 per capita. It also falls short of the GOK commitment to spend 15% of the total budget on health, as agreed in the Abuja declaration. The under-financing of the health sector has therefore reduced the sector's ability to ensure an adequate level of service provision to the population.With 65% of drugs and medical supplies requirements financed by government, which flows erratically to KEMSA, there is high possibility of stock out of drugs at one point in time.

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It was also revealed that the bureaucratic nature of funds flow that characterizes funds low to KEMSA today contributes to stock out. This is because it takes too long for KEMSA to start procurement as money from treasury goes toministries before being channeled to KEMSA.It is therefore true that if the funds are inadequate, stocks will not be enough and if the money flows in late, procurement will commence late and hence stock out.

Recommendations:

KEMSA needs full autonomy and capitalization so that she gets her funding direct from the exchequer. This will eliminate the time lapse of money going to the parent ministries then KEMSA causing delays in commencing procurement process.

KEMSA also needs to start the commercialization process, where they require a seed capital to kick start the wing. This will enable KEMSA to bridge the gap that the ministry cannot fill due to lack funding as the commercial wing will supplement the shortage from the exchequer. This will ensure that facilities access to adequate stocks throughout the year at cheaper prices hence value for money.

The government funding for drugs and medical supplies that stands at between 6% and 8.6% of the national budget should be addressed to reach 15% as declared in Abuja. The government should then therefore create a direct budget line for procurement of drugs and medical supplies to KEMSA. This will lead to improved funding to KEMSA hence on time procurement.

KEMSA needs to come up with a model that will make is a supermarket where you walk in with your cash or LPO and walk out with what you require. This will create a revolving fund that will ensure there are funds available for replenishment of drugs at reasonable times hence elimination of stock outs.

KEMSA has to open her doors and enter into Private and Public Partnerships where they should be able to charge some fee for procurement, Warehousing and Distribution of drugs and medical supplies. The fee charged will improve the activities of the authority.

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BUSINESS STRATEGY

THE ROLE OF KENYA POWER'S SERVICE INNOVATION STRATEGIES IN DISTRIBUTION OF ELECTRICAL POWER: A CASE OF KENYA POWER, NAKURUBRANCH.

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Abstract

The energy sector as outlined in vision 2030, is one of the key pillars of economic growth .In Kenya the role of this sector is placed in the hands of Kenya Power, formally Kenya Power and Lighting Company (KPLC).The overall purpose of the project therefore was to establish the role of Kenya Power's service innovations strategies in the distribution of electrical power..This would help the Central Rift management to weigh the effectiveness so far achieved in implementation of vision 2030. The target population for the study was the management team of Kenya Power, Nakuru. The population size for the management team was 150 from which a sample size of 60 was selected. Data was collected from both primary and secondary sources. Data was collected via the use of closed ended as well as open ended questionnaires. Both qualitative and quantitative analysis of data was done. Microsoft excel and Minitab programs were used in data analysis. The research found out that the most outstanding service innovation was prepaid meters. This was due to the fact that the respondents were more used to the post paid meters. It was also identified that the skills required in the implementation of the service innovation strategies were not complex and thus they were easy to integrate into work. The service innovation strategies assisted in the faster accomplishment of tasks, performance as well as enhancing effectiveness. The recommendations for the study were to train all the employees on any new service innovation at the initial stages for better customer service delivery. Customer training programs on service innovations would help improve the impact of the service innovations in the distribution of electrical power. This way resistance to change will be overcome. Improvement of the communication networks to ensure that the breakdowns and delays of the networks in use by the agents is minimized or eliminated would also be critical in distribution of electrical power. The delays especially in payments could cause customer dissatisfaction and thus failure of blossoming service innovation strategies. The organization should work at improving the service innovations implementation for better effectiveness in distribution of electrical power.

Key Words*:* Innovation strategies, adoption of strategies, service innovation, pre- paid metering.

Background of the study

For any organization that values change, innovation is the only sure direction to go. This is because, through innovation, organizations are able to benchmark, be creative and imaginative. Many service oriented firms have strived to integrate novel features in to their service offerings. Dawson & Horenkamp (2007) commented, "How can a service firm best respond to overwhelming market forces? It must find new ways to deliver its services, and it must surpass client expectations. The overall national development objectives of the Government of Kenya were accelerated economic growth, increasing productivity of all sectors, equitable distribution of national income, poverty alleviation through improved access to basic needs, enhanced agricultural production, industrialization, accelerated employment creation and improved rural-urban balance. The Government of Kenya had encouraged the Kenya Power to adopt affordable connection policies so as to boost the number of customers in the rural areas. The company had come up with attractive

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customer connection policies that included transformer maximization and Umeme Pamoja which had seen the number of connections rising significantly. Furthermore, the company had come up with a more flexible mode of settling the connection fee where a customer was connected upfront upon payment of a deposit while the balance was settled in installments which was known as stima loan. The vision of the company was "to provide world class power that delights our customer" while the mission statement was "powering people for better lives".

Statement of the problem

Kenya envisaged the achievement of vision 2030 through a series of five years Medium Term Plans (MTP). The first of this MTP's started in 2008 running up to, 2012.The main focus of the current MTP was to raise the economic growth to 10% and initiate the transformation envisaged in the foundations of the economic, social and political pillars of Kenya Vision 2030. In the social perspective electricity was a crucial component especially in the hospital's intensive care units, schools and in the society, it was a means of creating social equity as well as poverty reduction.

The energy sector, one of the foundations of Vision 2030 stipulated that by the year 2020 at least 40% of households should have been connected to the national grid. This was not achieved due to lack of awareness of the services being provided by Kenya Power. Power demand especially during the peak hour period was on the rise in terms of Watts consumption per household. of Kenya Power's service innovation strategies in the distribution of electrical power.

Research objectives

The general objective of the study was to determine the role of Kenya Power's service innovation strategies in the distribution of electrical power.

The specific objectives of the study were:

To assess the various service innovation strategies in the distribution and retailing of electrical power at Kenya Power, Nakuru .

To determine the impact of service innovation strategies on service delivery at Kenya Power, Nakuru.

To assess the extent to which the service innovations have been adopted at Kenya Power, Nakuru.

Theoretical framework

The Service Delivery Innovations included: Accelerated customer connection for groups people groups, settlements and maximization of transformer usage known as umeme pamoja, New customer connection financing in partnership with commercial banks and Kenya Power revolving fund recognized as stima loan, expanded payment of electricity bills at commercial banks, supermarkets, post Offices, M-pesa and ZAP countrywide known as easypay, electricity bill balances, short messages alert to customers for disconnections and scheduled outages given the name e- bill, efficient lighting project entailing free distribution of 1.25 million bulbs to electricity customers-badilisha bulb campaign and pre paid meters among others.

Stima loan innovation

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This service innovation entailed providing credit facilities to low income customers for electricity connection .There were three models at Kenya Power: Equity stima loan which was introduced three years ago and was wholly managed by Equity Bank; Kenya Power stima loan wholly managed by Kenya Power started in 2011 and National bank stima loan wholly managed by National Bank which commenced in January 2012. Reasons for three different stima loan options included: Legislation challenges with Kenya Power model gave banks head start, need to offer customer choice and free market policy – with many banks keen to give diverse loans. A National Revolving Fund (RF), targeting the low income segment of the market was recommended, following a socio-economic survey in 2006, that found majority of the target customers (around 640,000) could not afford to pay the average connection fee of Kshs 31,500 upfront.

Various initiatives were underway to facilitate more pay points for the customers to make their loan repayments including through mobile phones. Comprehensive rollout of Kenya Power stima loan utilizing Euro 31 million scale-up funds was underway. It was perceived that stima loan via banks was processed faster than that of Kenya Power. The key drawback of bank's stima loan was high interest rates compared to Savings and Co-operative Societies. Kenya Power stima loan on the other hand delays in processing. Stima loan success factors included: high market appetite/demand for product.

Easy pay innovation

Electricity users all over Kenya can now electronically pay their bills in the more than 200 postal offices located in all major towns in the country, thanks to a new partnership agreement signed by the Kenya Power and the Postal Corporation of Kenya (PCK). The agreement, geared towards achieving high levels of customer satisfaction and service, provided Kenya Power customers with a convenient platform to pay electricity bills, accounts deposits, connection charges and reconnection fees to their accounts through the wide PCK network of outlets at no transactional charge.

Unlike other payment outlets, such as those provided by mobile phone companies and banks, the new service will be offered at no charge to the customers. The new arrangement will rein in the time-consuming queues in Kenya Power banking halls. Furthermore, the company is seeking ways to cater for its increasing customer base especially with the ongoing rural electrification projects in the country. It was intended that the new system under 'easy pay' would provide avenues for Kenyans in the diaspora to pay their connection charges and also their bills in future by expanding the collection points available with other agents outside the country.

Customer service delivery

The theory of customer service is based on identifying and satisfying your customers' needs and exceeding their expectations. A company must be totally committed to delivering consistently high standards of service to gain and retain customer loyalty. Everyone from top management on down must be tuned into what the customer wants.

Adoption of the service innovations

According to Hall and Khan (2003), diffusion results from a series of individual decisions to begin using the new technology, decisions which are the result of a comparison of benefits and costs of adopting the new invention. In their own words, "Diffusion can be seen as the cumulative or aggregate result of a series of individual calculations that weigh the incremental benefits of adopting a new technology against the costs of change, often in an environment characterized by uncertainty

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and by limited information about both the benefits and costs and the very existence of the technology.

Research methodology

Research Design: The research adopted a qualitative and quantitative approach in which data was collected via use of questionnaires. Primary data was collected from management team members via use of questionnaires. Secondary data was collected from documents, journals, literature and records from Kenya Power, Nakuru town. The data was processed, organized, analyzed and interpreted. The data was used to identify the role of Kenya Power's service innovations in distribution of electrical power.

Target Population: The target population for the study was the 150 management team members of Kenya Power. The departments included but not limited to projects, design, distribution customer service, security, stores, procurement, finance and marketing. This constituted the sampling frame.

Sampling frame: From the target population, a sample of 60, which was a true representative of the population, was selected. The size was selected based on the time, budget allocation, population distribution among other factors. The sampling frame of thE study included 60 management team members in Kenya Power, Nakuru office.

Sample and sampling technique: Simple random sampling technique was be used to select the sample .Simple random sampling was most suitable because with the simple random sample, there was an equal chance (probability) of selecting each unit from the population being studied when creating the sample.

Research instruments: Data collection was done by use of questionnaires. Semi structured questionnaires were used to collect information from the management team. Open ended questions were used to giving the respondents room to explain their answers in detail.

Data collection procedures: The study used primary and secondary data .Primary data was collected from management team members via use of questionnaires. Secondary data was collected from documents, journals, literature and records from Kenya Power, Nakuru town.

Data processing and analysis: Qualitative data was systematically analyzed and information obtained used to make conclusions. The findings of the study were based on the analysis of data collected from respondents in the field. The researcher used the analyzed information to establish trends, patterns and relationships.

Research findings and discussions

Management team roles

The respondents identified various roles of management which included policy creation and implementation, ensuring quality service delivery to the customers, supervision, budgeting, setting targets, enforcing safety rules, performance management and handling customer complains. The observation here was that the roles of the management team supported the core values of the organization which were customer first, one team, passion, integrity and excellence.

Services offered at Kenya power Nakuru

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It was identified that customer connection was the major service offered at Kenya power, Nakuru, gathering 100% of responses. The other services such as marketing ,meter reading, material issues maintenance, route survey and emergency services had the least response at 2.3% .These were supportive services that helped in reinforcing distribution and retailing of electrical power. They were also services limited within certain departments in the organization. For example, materials issues was only limited to the stores department.

Service innovation availability

The availability of service innovations at Kenya power was well established from the responses received from the respondents with a 97.7% response. However 2.3% denied the existence of service innovations. This gave a clear picture that the concept of service innovation strategies was homogeneous across all departments.

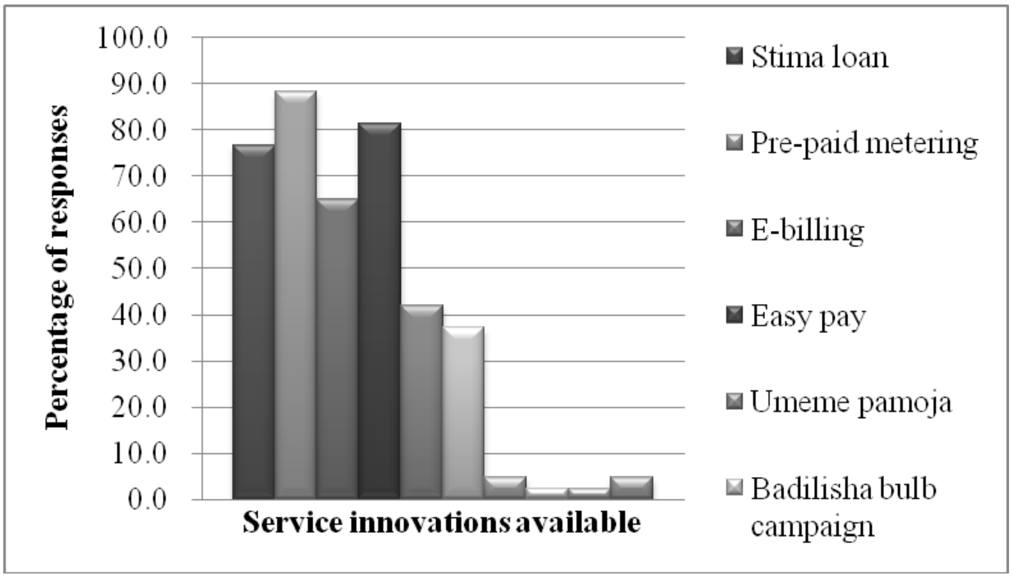

Figure 4.1 Service innovations being implemented at Kenya Power Nakuru

Benefits of service innovations

The respondents identified various benefits accrued from the use of the service innovations. One of the benefits was the ease of congestion in the finance halls. This had been a problem especially to the finance department which had to deal with long queues in the banking halls and lot of customer complains in delays .Introduction of service innovations had quickened customer queries via e-billing. Customers no longer had to go to the office for their queries but could do so at comfort anytime anywhere. Efficient, quick and convenient payment was facilitated by easy pay. Prepaid metering had helped control electricity usage and reduced meter tampering .This had eventually brought about the effect of energy conservation. Stima loan had more people being connected especially low income earners who needed to raise Ksh.9,000 for connection, and pay the rest in bits. This eventually had helped the organization in meeting the aspirations of vision 2030.

Usefulness of service innovations strategies

The respondents identified that the service innovation strategies had proved useful in the distribution and retailing of electrical power. The responses were rated on a likert scale with 5 being strongly agreed and 1 being strongly disagree. The respondents attributed various successes to the service

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innovation strategies. The highest rating was given to faster accomplishment of tasks with a mean of 4.140, median and mode of 4.With a positive relationship between increased performance, and faster accomplishment of tasks, then faster accomplishment of tasks helped improve performance. The respondents had a neutral stand to the statement that the strategies have affected control over their work with a mean of 3.047.This meant that the implementation of the service innovation strategies did not interfere with the control of work.

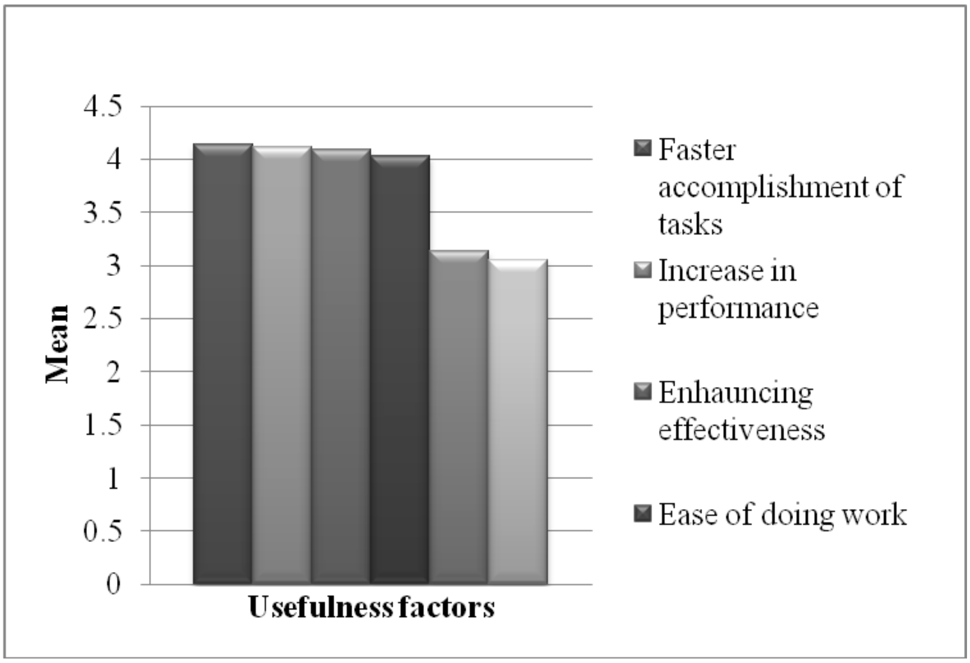

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Figure 4.1: Usefulness of service innovations

Conclusions and recommendations

Services offered at Kenya power Nakuru

The main services offered at Kenya Power Nakuru as identified by the respondents included customer connections, electricity application payments, electricity bill payments, electricity bill dispatch and revenue collection. The other supporting services included marketing, meter reading, material issues, metering, and maintenance .These services clearly spell out that distribution of electrical power is the core business at Kenya Power Nakuru.

Service innovations strategies being implemented

The respondents identified the presence of service innovation strategies at Kenya Power Nakuru. The service innovations identified in this respect included pre paid metering, Easy pay, E-billing, Umeme pamoja, Badilisha bulb, Mulika mwizi campaign, setting delivery targets, reduction of connection time and facilities data. Easy pay was an improvement of the electricity bill payments which used agents to collect money on behalf of the organization. It had eased congestion in the banking halls .However various challenges were identified in relation to easy pay.

Influence of service innovation strategies on customer service delivery

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The service innovation strategies had resulted in reduction of complaints from customers, training of managers on service innovations, and customer's appreciation of service innovations. Due to the improved service delivery caused by the service innovation strategies, there was a reduction in the number of complaints from the customers. The reduction of complains had been mainly due to the easy pay innovation where the customers paid their bills through agents who were distributed far and wide and within the peripheries of the customers.

Adoption of the service innovation strategies

The adoption of the service innovation strategies was gauged using relative advantage or usefulness, compatibility or adoption attitude and complexity. Relative advantage is the degree to which an innovation is perceived to be an enhancement of the current offerings. Compatibility refers to the extent to which an innovation is perceived to fit together with potential adopters' habits and practices. Complexity refers to the degree to which an innovation is perceived as being complicated to use.

Conclusions

Service delivery innovations were present at Kenya Power Nakuru. Verma et al. (2008) argued that service innovation could refer to newness in the delivery of a benefit, the service concept, the business model, operations, technology, employee behavior, or the customer experience. The service innovation strategies had fitted well at Kenya Power, Nakuru as was evident from the influence and the adoption of the service innovation strategies. These variables combined had contributed greatly in the distribution of electrical power.

Recommendations

The research study has established that there are various roles that the service innovations strategies play in the distribution of electrical power. Based on the findings of the study the following recommendations were made:

Train all the employees on any new service innovation at the initial stages for better customer service delivery. Also include programs for customer training on the service innovations to improve the impact of the service innovations in the distribution of retailing of electrical power. This way resistance to change will be overcome.

Improve the communication networks to ensure that the breakdowns and delays of the networks in use by the agents is minimized or eliminated. The delays especially in payments can cause customer dissatisfaction and thus failure of blossoming service innovation strategies.

The organization should work at improving the service innovations implementation for better effectiveness in distribution of electrical power.

Further research

Further research would be done on each of the service innovations and evaluate its impact and adoption of the service innovation strategies.

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STRATEGIC EVALUATION OF E-WASTE MANAGEMENT IN PROCUREMENT AND DISPOSAL OF MOBILE PHONES, A CASE OF MOBILE PHONE DEALERS IN NAIROBI COUNTY, KENYA

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Abstract

E-waste has become one of the worst disasters in recent times. This waste comes from old unwanted electronics such as mobile phones, computers and other appliances e.g. electric cables, and machines that are not properly disposed of. The waste in turn leads to various health problems such as such as inflammation and oxidative stress, precursors to cardiovascular disease, and possibly cancer. Measures to tackle this problem have so far not been effective in eliminating e-waste. In Kenya, the problem of e-waste disposal needs to be addressed seriously and with utmost sincerity. The need for e-waste disposal arises from the fact that, old electronic items are not bio-degradable. In Kenya, these e-waste materials are collected through scrap dealers. From them, they end up in the unorganized recycling places. This paper evaluated strategic e-waste management in procurement and disposal of mobile phones, in Nairobi, Kenya. The data used was secondary data. The paper reviewed the theoretical and the empirical studies done on the e-waste management to establish the levels, the dangers, threats posed by the e-waste. The study found that the levels of e-waste are increasingly threatening. Most of the companies and shops dealing with electronics have no policies and measures put to ensure that there is proper disposal of the e-waste. This has led to an influx of e-wastes which leads to damage of the environment making it unsafe for human life.

Key words: strategy, evaluation, e-waste, procurement, disposal, mobile phones**.**

Introduction

Rapid technology change, low initial cost, and even planned obsolescence have resulted in a fast-growing surplus, which contributes to the increasing amount of electronic waste around the globe. Recyclers consider electronic waste a "rapidly expanding" issue. A cell phone’s shelf life is only about 3 years for the average consumer. This means that newer cell phone models are constantly put up on the market to replace older ones. This is as a result of the rapid progression of technology in the mobile industry. Most cell phones contain precious metals and plastics that can be recycled to save energy and resources that would otherwise be required to mine metals or manufacture new phones. When placed in a landfill, these materials can pollute the air and contaminate soil and drinking water. Cell phone coatings are typically made of lead, which is a toxic chemical that can result in adverse health effects when one is exposed to it in high levels. The circuit board on cell phones is made of copper, gold, lead, zinc, beryllium, tantalum, coltan that would require significant resources. This is why it is important to recycle old cell phones and source these increasingly scarce materials whenever possible (Alan, Kevin, Melissa & Madeleine, 2010). Today the electronic waste recycling business is in all areas of the developed world a large and rapidly consolidating business. Part of this evolution has involved greater diversion of electronic waste from energy-intensive down-cycling processes (e.g., conventional recycling), where equipment is reverted to a raw material form. This diversion is achieved through reuse and refurbishing. The environmental and social benefits of reuse include diminished demand for new products and virgin raw materials (with their own environmental issues); larger quantities of pure water and electricity for associated manufacturing; less packaging per unit; availability of technology to wider swaths of society due to

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greater affordability of products; and diminished use of landfills (Alan, Kevin, Melissa & Madeleine, 2010).

Global perspective

Economically, urbanization and the growing demand for consumer goods in different regions of the world have increased the demand and supply of electronic products. This will lead to increased volume of e-waste. For example Robinson (2009), shows that computers, mobile telephones and television sets will contribute 9.8 million tons in e-waste stream by 2015. These figures indicate that there will be a rise of 4.2 million in e-waste stream from 2010 to 2015 resulting from only computers, mobile telephones and television sets.

E-waste regulation in Kenya

The Government of Kenya, under the Ministry of Environment and Mineral Resources signed two Memorandum of Understanding instruments with the University of Northampton on e-waste capacity building (CCK, 2012).The two documents which were signed by the Ministries of Environment and Mineral Resources and Higher Education, Science and Technology with the Northampton University seeks to train Kenyans on how to manage electronic and electrical appliances waste. According to CCK, (2012), Kenya is generating an average of 3,000 tonnes from computers, monitors, printers, mobile phones, batteries and fridges with a national increase of 20% each year. Lack of separation of E-waste and poor disposal systems has led to mixing of ordinary e-waste in dumpsites. A clean and healthy environment is of the utmost importance to all citizens, and that proper handling and disposing of E-waste requires a comprehensive mechanism to address it through stronger national coordination

Procurement

Procurement may be defined as the acquisition of goods and services (i.e. Purchasing) and hiring of contractors and consultants to carry out works and services (Alan, et al, 2010) .Procurement includes rental, lease, hire purchase, license, tenancy, franchise or any other contractual acquisition of works, services and supplies. Procurement is the process of buying goods, services and works from external suppliers. The procurement process begins when a need to buy something is identified and will generally end after the contract is awarded. Contracts must be awarded through genuine and effective competition unless there are exceptional reasons to the contrary (Thuo, 1998). Procurement also embraces clearing out unnecessary acquisitions. In essence, the subject of procurement runs at all times alongside that of disposal of public assets which once acquired may need to be discarded in accordance with the principles of their purchase (KIPPRA, 2006).

Statement of the problem

The telecommunication sector is one of the fastest growing sectors in the country; it has witnessed continued growth due to the introduction of wireless systems for providing fixed telephones services and heavy investment in the mobile sub sector. E-waste poses serious negative health and environmental impacts. Many electronic devices contain high enough levels of toxic materials such as lead, barium, cadmium, and mercury that render them hazardous when not properly disposed. Mobile phone dealers in Kenya procure and dispose of electronics more than any other group in the electronic or ICT sector. These wastes end up accumulating and may lead to an environmental disaster if measures are not taken to manage the waste e.g. by recycling (CCK, 2007).

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Mureithi et al (2007), estimate the annual tonnage of e-waste in Kenya at about 2 984.35 per year. A study by UNEP (2007), indicates that electronic equipment in the Kenyan markets is at 5 650 metric tonnes per year. According to (CCK, 2012), an average of 250-300 tonnes per day consists of mainly recyclable and/or reusable material (i.e. 8-15% of waste stream. According to industry research, Kenya is already well on the way to becoming a major e-waste producer and runs the increased risk of corresponding health, implications e.g. diseases like cancers. According to the statistics by 2010, 41.88% of Kenyans had mobile phones. Kenya has the highest increase in usage of mobile phones in East Africa from 2003 to 2010 (UNPAN, 2010).

In Kenya, previous studies did not effectively cover e-waste management in procurement and disposal e-waste of mobile phones. For example, Mwendwa, (2006) conducted a study on municipal solid waste management strategy selection model. Thuo, (1998) did an appraisal of solid waste management in small towns in Kenya: a case study of Othaya town, Nyeri District. Another study by Kamunde, (1991) studied the influence of infrastructure on the pattern of urban growth: a case study of waste management in Chuka Town. Previous studies have not effectively addressed strategic evaluation of e-waste management in procurement and disposal of mobile phones. This project therefore intends to bridge the gap in knowledge by answering the following what is the effect of technology on the procurement and disposal of e waste of mobile phones, how does cost and availability of resources affect e-waste management of mobile phones, what mechanisms are used by mobile phone dealers to manage e-waste in Nairobi County?

Research objectives

The main objective of this study is to evaluate the factors influencing e -waste management of mobile phones in Nairobi, Kenya. This was to be achieved by determining the effects of technology on the procurement and disposal of e-waste of mobile phones in Nairobi County, establishing the effect of cost and availability of resources on e-waste management of mobile phones in Nairobi County and determining the mechanisms for effective management of e-waste disposal, by mobile phone dealers in Nairobi County.

Theoretical and informing literature

Waste management theory (WMT)

The purpose of this theory is to provide knowledge in internalizing environmental issues into product or process design. WMT can suggest tools to be used to achieve set goals by environment management systems. For example, design for environment is recommended to develop such equipment assembly from which the most valuable components are easy to recover at the end of its useful life. This procedure will also help to define more practical categories and classes of waste, specify the role of waste prevention, waste minimization and waste management actions and their mutual relationships. Environmental management systems development, and policy-making activities that can be carried out through demonstrations. In the attempt to conceptualize waste management theory as an object for the basis of a new system, modeling the theoretical parts of the existing knowledge. The structural decomposition has been done to enlighten the formation of the waste management hierarchy but still with the aim of not locking any individual objects from moving freely from one category to another. By applying the conceptual model of WMT, the interaction between these two can be both monitored and further developed. This aims for a systematic approach to generate both better WMT development combining present theories dealing with environmental engineering able also to coordinate their development as independent objects each having a target set by environmental management system purpose, as well as developing the multidisciplinary evaluated best practices for the whole field of environmental technology (Rogers, 1995).

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Empirical review

According to a study conducted by (Edgar, 2011), the usefulness of Information and Communications Technologies (ICTs) has led to an overwhelming elastic demand for electronics most especially computing devices such as mobile phones and computers. Individuals and government institutions worldwide are adopting ICTs at a fast pace. He continues to say that widespread consumption has resulted into huge amounts of Waste of Electrical and Electronic Equipment (WEEE) or e-waste generated from non-usable or old electronics. In addition, e-waste contains chemical elements that have adverse effects on the environment and human health.

There are environmental regulations which are not specifically designed for e-waste. These include the waste management regulations of 2006 enforced by NEMA-the institution that implements all policies relating to the environment. These laws help in controlling generation, handling, transportation, storage, or disposal of waste that threatens public health, the environment or natural resources. There is also an ICT policy instituted by Ministry of Information and Communications in 2006 (CCK, 2012).

According to a study by (Satyabrata & Nanjundappas, 2012), developing countries are expected to triple their e-waste production over the next five years. It is not only the developed countries that generate e-waste; Asia discards an estimated 12 million tonnes each year. The lifespan and lifecycle of electronic products are fast changing because of rapid technological advancements and of people's changing lifestyles and aspirations. The shortened lifespans of these products tend to generate more waste than before.

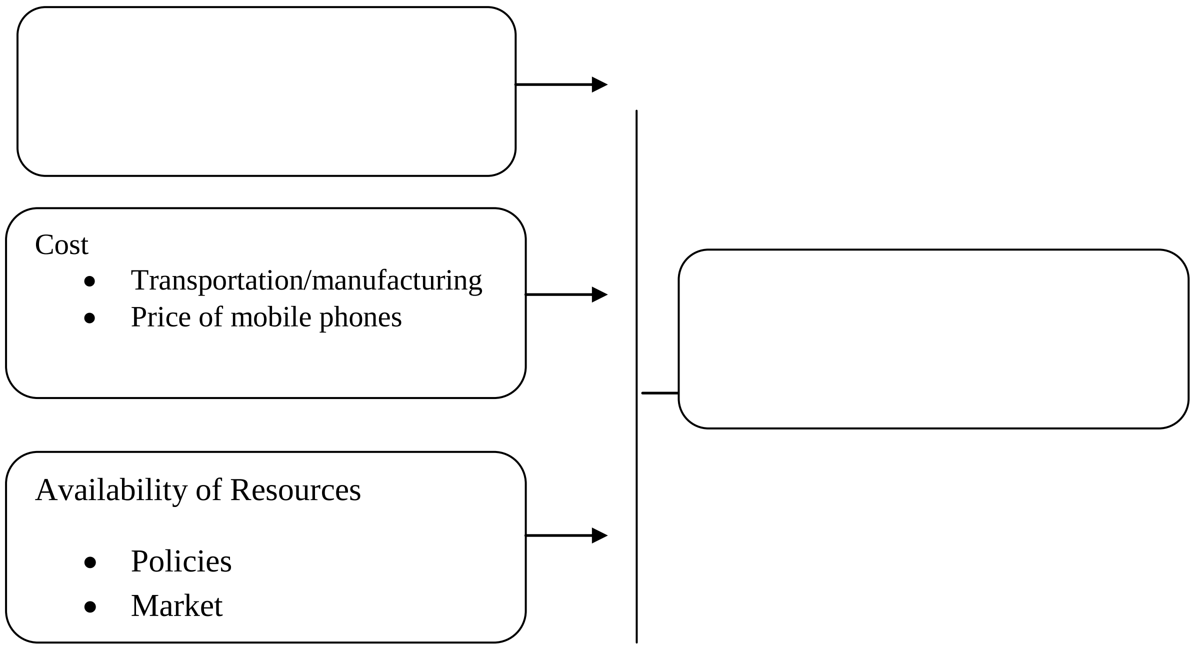

Figure 1: Conceptual framework

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Effects of technology on the procurement and disposal of E-waste of mobile phones

The recent uptake of technology, coupled with the advent of new design and technology at regular intervals in the recent years has given rise to several electronic gadgets and mobile phones that have a short life span. At the end of life, they need to be disposed in an environmentally friendly manner. A 2010 United Nations Environmental Programme report shows that Kenya is responsible for more than 17,000 tonnes of e-waste every year. Out of this, mobile phones contribute in excess of 150 tonnes. Many mobile phone handsets that are dysfunctional will worsen the challenge of e-waste. Rapid growth of mobile phone industry to some extent is responsible for e-waste crisis. E-waste contains more than 1,000 different substances. These include toxic metals such as lead, arsenic, cadmium, hexavalent chromium and flame retardants used in the plastics which cause adverse socio-economic, public health and environmental impact. The low cost and easy availability of electronic gadgets has further facilitated e-waste accumulation in homesteads, firms, and mobile dealer shops (UNEP, 2010).

Management of E-waste by mobile phones dealers

Solid waste management services in Kenya is characterized by poor solid waste management services, uncontrolled dumping leading to serious pollution problems, unregulated private sector participation because most of the waste collection in Kenya has been privatized, lack of solid waste management infrastructure .Emotional attachment to old electronic equipment is proving to be an impediment to disposal of e-waste in the country. Kenyans and mostly mobile phone dealers are clinging on to old and at times obsolete computers, TV sets and hi-fi systems because they may have been their first items and have a degree of attachment. Others do not want to part with old electronic equipment that includes tonnes of earphones, chargers and other mobile phone accessories (UNEP, 2007). They want incentives including money to give them away, not because they are using them but for sentimental value while others want incentives to give them up. ICT firms like Safaricom has attempted to address the issue of e waste disposal by putting in place collection points at Safaricom shops where consumers can dump their obsolete mobile handsets and mobile phone accessories. Other companies that have running programmes expected to help in handling the e-waste include mobile handset makers Nokia and Samsung that have had disposal campaigns where counterfeit and obsolete phones are collected (and recycled) in exchange for genuine ones at discounted prices (UNEP, 2007).

The NEMA regulations are implemented alongside the Environment Act that is deemed as not adequately addressing the issue of e-waste. The Act has a general penalty for poor waste management as fine of up to Sh300,000 and hazardous waste penalty goes up to Sh1 million, which is seen to be limited to firms with plants that generate industrial waste but silent on e-waste. The problem of e waste is made worse by the lack of laws that govern the management of e-waste especially for institutions including Government bodies and corporates that hold turns of such waste in terms of computers, TV sets and other obsolete electronic equipment. There is a need for laws compelling equipment manufacturers and large consumers of electronics to have in place policies for the safe disposal of e-waste is lacking. Also, there is a necessity for adequate infrastructure, expertise and financial resources to scale up e-waste recycling in Kenya (NEMA, 2009).

As the number of ICT users grows, e-waste will increasingly become an environmental/health hazards and also discredit ICT as a tool for development especially in poor regions. In relation to the above background, drastic measures are required to prevent e-waste from escalation. It is estimated that 75% of electronic items are stored due to uncertainty of how to manage it. These electronic junks lie unattended in houses, offices, warehouses etc. and normally mixed with household wastes, which are finally disposed off at landfills. This necessitates implementable management measures. Governments must encourage research into the development and standard of hazardous waste management, environmental monitoring and the regulation of hazardous waste-disposal (UNEP, 2007). Governments should enforce strict regulations against dumping e-waste in the country by outsiders. Where the laws are flouted, stringent penalties must be imposed. In particular, custodial sentences should be preferred to paltry fines, which these outsiders / foreign nationals can pay. Governments should enforce strict regulations and heavy fines levied on industries, which do not practice waste prevention and recovery in the production facilities (NEMA, 2009).

Research design

The paper reviewed the theoretical concepts to get logical explanations and deeper understanding of the e-waste. Studies done on e-waste have been reviewed to establish the practicality of the theoretical concepts in real life. The empirical studies have been studied on e-waste to establish the aspects of e-waste and compare the findings with the theoretical explanations. The study thus used secondary data which was collected from various abstracts, documents, journals, books and papers written on e-waste.

Conclusions

Electronic waste, commonly known as e-waste, comprises of obsolete and discarded electronics from mobile phones, and other electronics such as, televisions, microwaves and other such appliances. Managing e-waste is becoming a priority, in many countries including Kenya, as the countries are evolving systems for the collection and environmentally sound disposal of this waste. As electronics have become more reasonably priced, the volume of electronics in society has increased exponentially, as a larger section of the society is able to purchase them.

Since affordability has increased, so as the replacement rate, with the speed of technological innovation offering more functionalities, smaller sizes and newer designs. Given the time lag between the purchase of the product and its end-of-life means that products purchased five, seven or even ten years ago, are being discarded now. Already, the quantities of electronic waste discarded annually have been creating disposal problems for municipalities, especially in the developed world for some time. The technology boom of the last decade is being reflected in an e-waste boom now and even developing countries are waking up to the problem. E-waste management is more complex than household solid waste for municipal waste systems because of the high concentration of toxic compounds prevalent in these appliances. Their disposal requires special treatment to prevent the leakage and dissipation of toxins into the environment.

E-waste is an issue that poses serious threats to our environment and even though some companies have tried to deal with the issue much needs to be done, so as to manage the disposal of electronics. The government should come up with more stringent laws that govern e-waste disposal in the country. Even more important is the education and sensitization of the public about the importance of disposing electronics properly.

Recommendations

The paper has found that e-waste is a major problem which is increasingly being encountered in Kenya.Governments should enforce strict regulations against dumping e-waste in the country by outsiders. Where the laws are flouted, stringent penalties must be imposed. In particular, custodial sentences should be preferred to paltry fines, which these outsiders / foreign nationals can pay.

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Governments should enforce strict regulations and heavy fines levied on industries, which do not practice waste prevention and recovery in the production facilities.

Governments must encourage research into the development and standard of hazardous waste management, environmental monitoring and the regulation of hazardous waste-disposal.

Purchase of electronics need to be regulated to ensure that electronics which are brought into the country are those which meet a certain standard. This will prevent dumping of used up electronics which have shorter life.

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FACTORS AFFECTING FORMULATION OF STRATEGIC PLANS IN SECONDARY SCHOOLS IN KENYA: A SURVEY OF GATUNDU NORTH SUB- COUNTY, KIAMBU COUNTY

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Abstract

Despite the benefits of strategic planning and the Kenyan government having put it in its policy document, many public secondary schools have not adopted it. In order to ensure it is adopted, there is need to know the factors which are hindering its adoption. The study aimed at finding out factors that affect formulation of strategic plans in public secondary schools. The survey was carried out on all the 36 schools in Gatundu North District of Kiambu County. Data was collected by use of questionnaires, and was analyzed using descriptive statistics which include frequencies and percentages. Cross tabulation was done between strategic planning and the independent variables. The study found that training principals on strategic planning and the academic qualification of the board chair played a critical role in the formulation of strategic plans in public secondary schools. Ninety one percent of secondary school principals who had been trained on strategic planning had formulated strategic plans for their schools while only 33% of the untrained had adopted strategic planning. The study also found that 90% of schools with a chairperson of the board holding a degree had strategic planning in place, while only 60% of diploma had adopted strategic planning. Gender of the principal and the school, category did not have significant impact on strategic planning in public secondary schools. The study recommended training of principals on strategic planning to be emphasized and appointment of graduates to chair BOGs of secondary schools to enhance strategic planning.

Key words: Strategic Planning, Training, Education of board chairman, Gender.

Introduction

In order for a business to be successful, there needs to be a roadmap for success. A strategy is a set of activities or processes that an organization intends to use in order to achieve its set goals and aims (Pearce, 2009). A strategic plan helps to provide direction and focus for all employees. If an organization has little idea where it is headed, it will wander aimlessly with priorities changing constantly and employees confused about the purpose of their jobs.

Clive (2005) defines strategic planning as setting out decisions and actions that result in the formulation and implementation of actions designed to achieve an organizations objectives. Strategic planning points to specific results that are to be achieved and establishes a course of action for achieving them. A strategic plan also helps the various work units within an organization to align themselves with common goals. Arguably, the leading cause of business failure is not having a strategic plan in place but is being well implemented. Management needs a well developed strategic plan in order to effectively establish expectations for their organization. Without a plan, expectations are developed in a void and there is little or no alignment with common goals.

The development of the education sector has been a long standing objective of the Government of Kenya since independence in 1963. Education is considered as a basic need and a basic right. The Kenyan Education Sector has since the year 2003 embarked on plans to institute reform at all levels.

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This has therefore led to development of strategic plans to help them to develop strategic orientation and execution of strategies capable of moving the schools to their desired future states. Strategic planning and thinking involves making choices and decisions about the long–term future of an organization (Pearce, 2009). The process results in strategic plans that require execution or implementation under the stewardship of strategic behavior norms.

Despite the importance of a good strategic plan and the Kenyan government having put in policies and guidelines on strategic planning in public secondary schools, very few schools have adopted it (Achoka, 2007). In order to ensure it is adopted there is need to know the factors which are hindering its formulation. This will provide public secondary schools with a strategic road-map toward successful strategic planning, organizational development, and school effectiveness (Neville, 2002). According to Eldridge (2001), strategic plans implemented at 70% and above level results in different products: improved performance, collaborative relationship and understanding between participants and all stakeholders.

Objectives

The general objective of the study was to determine factors affecting formulation of strategic plans in public secondary schools.

To achieve the general objective, the following specific objectives guided the study:

To determine how the academic qualification of chairperson of the BOG affect formulation of strategic plans in public secondary schools.

To determine how training of principals on strategic plans affect formulation of strategic plans in public secondary schools.

To determine how gender of the principal affect formulation of strategic plans in public secondary schools.

To determine how the school category affect formulation of strategic plans in public secondary schools

Research questions

The following research questions were employed to guide this study.

How does the academic qualification of the chairperson of the BOG affect formulation of strategic plans in public secondary schools?

How does training of principals on strategic planning affect formulation of strategic plans in public secondary schools?

How does gender of the principal affect formulation of strategic plans in public secondary schools?

How does school category affect formulation of strategic plans in public secondary scho

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Literature review

Schools are faced with the task of implementing various strategies or plans. Eldridge, (2001) observe that programs involving all the people in a school have definite benefits. One of the main challenges countries around the world face is to equip their young people to become active citizens, to find employment in constantly changing workplace environments, and to cope with and respond to change throughout their lives. Countries need to respond to this challenge with approaches that are appropriate to their capacities and long-term development objectives. In this context, secondary education takes on special significance. According to the World Bank (2005), historically, in the developed countries secondary education was subsidiary to higher education, and this relationship has influenced policy, choice of providers, curriculum decisions, teacher recruitment and training, evaluation, accreditation, and certification. Many other countries have embraced the goal of extending and expanding the notion of basic education to encompass much of what used to be restricted-access, elitist secondary schooling (Jeynes, 2010). Education faces a lot of challenges thus prompting the need to ensure efficiency and effectiveness through the introduction of strategic planning into the public secondary schools system. Strategic planning in schools has been widely acknowledged in both developing and developed countries (Mutuku and Mutuku, 2010) because it is associated with school effectiveness and improved performance in general.

Andrews (1980) argues that boards of governors are in a great position to contribute on the strategic planning and formulation. He associates an effective board strategic contribution to board involvement in the critical strategic issues as generating alternatives and supporting schools imagination, over viewing innovative processes and reviewing head teachers and other stakeholder's propositions. The overall role and participation of board members is making non-routine, organization-wide resource allocation decisions that affect the long-term performance of an organization. The board roles involve interaction and interdependence during the steps of the strategic process. John (2007) argued that the role of adviser and counselor is linked to the strategic role of board members. Members in the reality do not distinguish between these two functions. They consider them related to the same responsibility of determining the schools policy.

Strategic control requires a thorough understanding of corporate strategy and involvement in the formulation step. That may lead to an effective strategic advice on the one hand, and an effective strategic control and aid in problem solving within the strategic formulation and implementation, on the other hand. Board members should have substantial expertise in analyzing and solving problems through their past professional experiences. They can then make their cognitive contributions to serve school management not only in strategic formulation but also in the strategic implementation

In order for formulation of strategic plans to be effective in public secondary schools in Kenya, there is need for school principals to undergo training in the strategic planning process. Training will go well towards empowering the principals with skills necessary to formulate strategic plans for their schools. Increased interest, leadership preparation and development are based on the fact that school principals can make a difference in both the effectiveness and efficiency of schooling (Hung, 2000).

Women in educational leadership are few in Kenya and in many other parts of the world as well. Historically, leadership has carried the notion of masculinity and the belief that men make better leaders than women is still common today (Kamba, 2006). There has been a continued gender imbalance in the leadership of various sectors including secondary school level. Currently, in Gatundu North, the percentage of female principals is 47% while that of male principals is 53%. Evidently, there are fewer female principals than there are male principals. Most of the females who are principals head girls' only schools with only a few heading mixed secondary schools. This low

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participation of women in teaching is due to the fact that female access to education is at a lower level than that of the males (Bronfenbrenner, 1994). Several reasons have been cited for the absence of girls and women in education, and these include poverty, cultural traditions and insecurity. Others reasons are the fact that women grow up in a patriarchal society where they are taught that a woman's place in the at home where she does performs her role as a mother and wife. In fact few women with appropriate teaching experience and qualifications are willing to take up leadership positions. Most of them feel comfortable in lower ranks.

Public secondary schools have categories namely: National schools, County schools and District schools. The schools may be day schools or boarding schools mixed or same gender. The category of the school determines the financial adequacy required for formulation and implementation of strategic plans. Management of all school financial activities, which involve the disbursement of money, is vital. The money is obtained through various sources such as fees, government grants, and sponsors among others. According to Orlosky (1984), financial management determines the way the school is managed and whether or not the school will meet its objectives. The schools management is therefore responsible for budgeting, accounting and auditing functions of financial management. Since independence education was recognized as a basic human right and a powerful tool for national development. Policy documents have reiterated the importance of Education in eliminating poverty, disease and ignorance. The Kenyan government has committed to provision of quality education to guarantee the right to every learner an education that offers a competitive edge in a global market. Such commitment has been realized through the Government's efforts in financing education, reviewing the education sector like the introduction of strategic plans

The conceptualized relationship between the dependent and the independent variables is shown in figure 1.

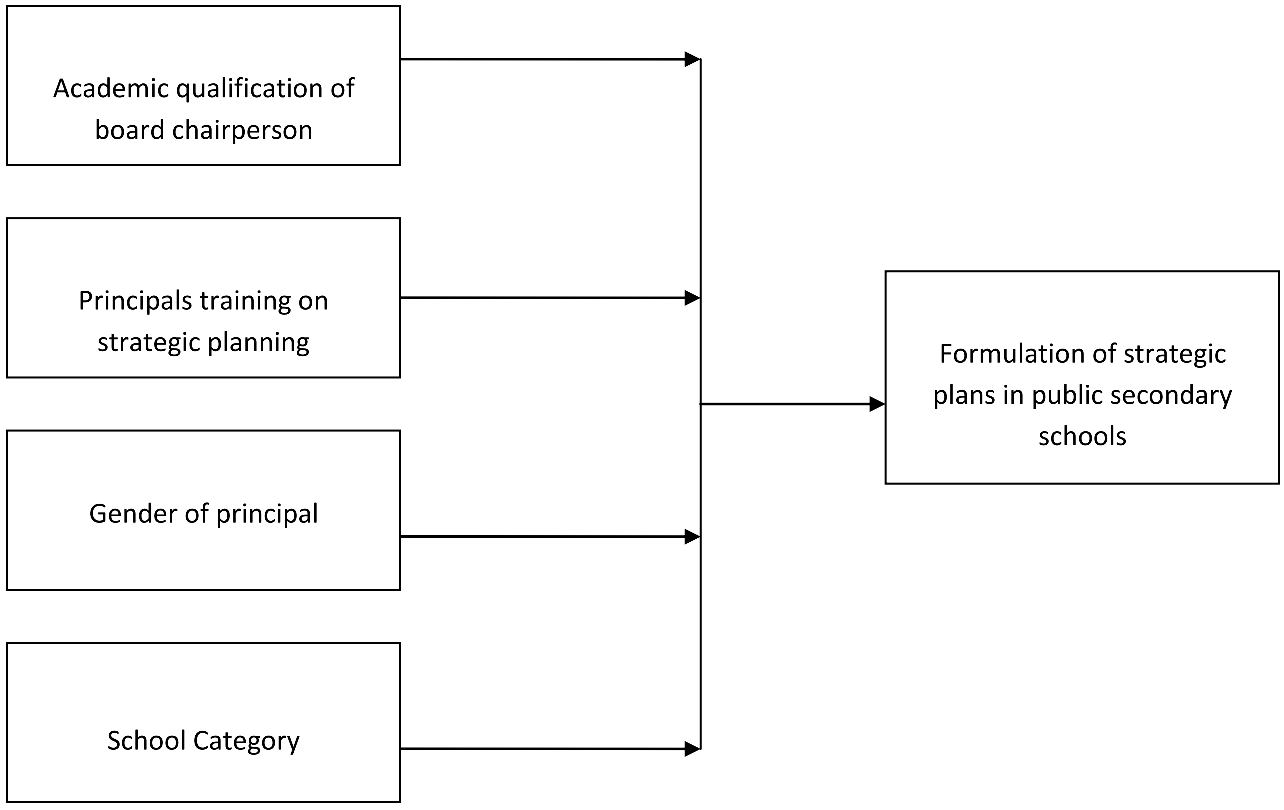

Figure 1: Conceptual framework

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Research methodology

This study used both qualitative and quantitative methods. Descriptive survey research designs is used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2002). Mugenda & Mugenda (1999) on the other hand give the purpose of descriptive research as determining and reporting the way things are. Borg & Gall (1989) noted that descriptive survey research is intended to produce statistical information about aspects of education that interest policy makers and educators. The study fitted within the provisions of descriptive survey research design because the researcher collected data and reported the way things are without manipulating any variables.

The study was carried out in public secondary schools Kiambu County. The ideal setting for any study should be easily accessible to the researcher and should be that which permits instant rapport with the informants (Singleton, 1993). Gatundu North Sub County was chosen because it was within reach by the researcher.

Target population is defined as all the members of a real or hypothetical set of people, events or objects to which a researcher wishes to generalize the results of the research study (Borg & Gall, 1989). The target population for this study consisted of 36 school principals

Sampling means selecting a given number of subjects from a defined population as representative of that population. Any statements made about the sample should also be true of the population (Orodho, 2002). Since the schools in the selected district are few the researcher conducted a census.

The main tool of data collection for this study was questionnaires for primary data. The questionnaire was used for data collection because it offered considerable advantages in the administration. Gay (1992) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions. The questionnaires was used to collect data from principals

Some secondary data was obtained from the county and district education offices. Mugenda & Mugenda (1999) define secondary data as any publication by an author who was not a direct observer or participant in the events described.

The data collected was analysed using descriptive statistics. As observed by Gray (2004), qualitative data provides rich descriptions and explanations that demonstrate the chronological flow of events as well as often leading to chance findings. Quantitative data was analysed using percentages. The results of data analysis will then be presented using frequency distribution tables

Results and discussions

Table 1: Academic qualification of the board chair & strategic planning

Academic Qualification	Does your school have a strategic plan			
	Yes	**%**	**No.**	**%**
Diploma	3	60	2	40
Degree	28	90	3	10

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From the above table, 90% of schools chaired by degree holder had formulated a strategic plan while 60% of schools chaired by diploma holders had formulated a strategic plan. Also 40% of the schools with a non graduate board chair had not formulated strategic plans while 10% of those headed by graduate chair had not formulated their plans.

Table 2: Principals training and strategic planning

Strategic Training	Does your school have a strategic plan			
	Yes	**%**	**No.**	**%**
Trained	30	91	3	9
Untrained	1	33	2	67

91% of the principals trained on strategic planning had formulated strategic plans while 9% of those trained had not. Similarly, 33% of principals untrained in strategic planning had formulated strategic plans while 67% of the untrained had not formulated the plans.

Table 3: Principals gender and strategic planning

Principals Gender	Does your school have a strategic plan			
	Yes	**%**	**No.**	**%**
Male	17	89	2	11
Female	14	82	3	19

From the study, it was evident that the numbers of female and male principals who have strategic plan in place were almost equal. Similarly, those who did not have are also almost equal.

Table 4: School category and strategic planning

School Category	Does your school have a strategic plan			
	Yes	**%**	**No.**	**%**
County	3	75	1	25
District	28	87	1	13

The study revealed that 87 % of the district schools that were interviewed agreed on having formulated strategic plans while 75% of county schools had formulated strategic plans.

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On academic qualification of chairperson of the board of governors, the study established that their academic qualification assist in having knowledge on strategic planning and spearheading formulation of strategic plans in the schools they represent. 90% of schools board of governors chaired by degree holders had formulated strategic plans while only 60% of those chaired by non graduates had strategic plans in place.

On the objective of training of principals on strategic planning, the study found that the training of the principals equip them with the knowledge and skills necessary for formulation and implementation of a strategic plan. 91% of schools headed by principals who were trained on strategic planning had adopted strategic planning in their schools while only 31% of schools headed by untrained principals had adopted strategic planning.

Male and female principals were found to be at almost equal level in strategic planning. On the other hand, the school category was not significant due to the small number of county schools compared to district schools

Conclusion

The study aimed at finding out factors affecting strategic planning in public secondary schools in Kiambu County. Based on the findings, the study revealed that academic qualification of the board chairperson played a critical role in strategic planning for one must have previous knowledge to assist them in formulating and implementing a beneficial strategic plans.

On the objective of principals training on strategic planning, the study concluded that the training the principals enables them mitigate factors in strategic planning. Principals trained on strategic planning are statistically more likely to formulate strategic plans for their schools than the untrained ones.

With regard to the gender of the principal, the study reveals that principals' gender is not statistically significant in strategic planning. Both male and female principals were found to have almost equal probability of formulating strategic plans for their schools.

The study also revealed that the category of the school had little impact on formulation of strategic plans.

Recommendation

In light of these conclusions, policy recommendations that would follow include;

Academic qualification to be a consideration when appointing the chairperson of the school board of governors

On principals training on strategic planning, the study recommended that principles should be taugth on an annual course that enables them to keep up to date with emeginig issues relating to strategic planning to equip them with adequate knowledge and skills to be applied in strategic planning.

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TEXT MINING FOR BUSINESS INTELLIGENCE: A Survey of the Current State of the Art

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Abstract

Text Mining is the discovery and extraction of interesting, non-trivial knowledge from free or unstructured text. Text mining encompasses everything from information retrieval (i.e., document or web site retrieval) to text classification and sentiment analysis. Text mining is a special case of data mining. With the increased use of and recent adoption of large-scale, Internet-based information systems, business professionals now face large volumes of unstructured data, including detailed purchase and service transactions, social network links, click streams, blogs, comments and inquiries. The goal of this paper is to provide a review of the current state of the art role of text mining techniques, such as classification, in business intelligence applications using text classification technique.Text mining and predictive analytics are increasingly being used as popular business intelligence information systems because of the substantial contributions they can make in converting information to knowledge. Marketing is among the most frequent applications of the techniques. Others are: product development, advertising, distribution and retailing, or marketing research and business intelligence. Text mining and predictive analytics increasingly are being applied. Business firms should increasingly use Text mining techniques such as classification, as a business intelligence tool, to mine knowledge from large amount of information given by customers about product and service quality and characteristics in social networks. This will enable them to use current and up to date information to make intelligent decisions about product quality and service delivery in today's knowledge economy. Text Mining can be used to improve business intelligence and firms can use it to gain competitive advantage.

Key Words: Text Mining, Business Intelligence, Sentiment Analysis.

Introduction

It has been argued that social computing technologies have still to encounter widespread use in organizations. However, some organisations such as International Business Machines and Microsoft have been quick to realize the benefits of using blogs. Research into the organizational uses of blogs is growing with several types of organizational blog being identified by use: employee blogs; group blogs; executive blogs; promotional blogs and newsletter blogs (Gavin et al, 2010).
Making informed decisions in the information age requires timely and comprehensive analysis of large volumes of both data structured and unstructured data. While plenty of tools exist for the analysis of structured data, relatively few systems can satisfactorily enable the analysis of natural language due to its complexity. Business Intelligence (BI) solutions allow decision makers to query, understand, and analyze business data in order to make better decisions. Nowadays, it is not enough to use only the information from the own organization and making isolated decisions, but rather requiring also to include information present in the web like opinions or information about competitors, while using collective intelligence, collaborating through social networks, and supporting the BI system with cloud computing (Juan Trujillo and Alejandro Mate, 2012). Business Intelligence and business Intelligence systems play more and more important roles in business operational analysis and decision support. In practice, business intelligence has emerged as a relatively mature field with plenty of tools and techniques available. It has been widely used in areas such as telecommunications, banking, retail and education for reporting and data analysis (Longbing et al, 2007).

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Market Intelligence is a specific functional form of Business Intelligence. Kumar and Bandopadhyay (2005) defines Business Intelligence as systematic and ethical program for gathering, analyzing, and managing external information that can affect a company's plans, decisions, and operations. It is also defined as the result of acquisition, interpretation, collation, assessment, and exploitation of information.

The growing volume of textual data presents genuine, modern day challenges that traditional decision support systems, focused on quantitative data processing, are unable to address. The cost of competitive intelligence, customer experience metrics, and manufacturing controls are escalating as organizations are buried in piles of open-ended responses, news articles and documents. The emerging field of text mining is capable of transforming natural language into actionable results; acquiring new insight and managing information overload (Josh Froelich and Sergei Ananyan, 2008).

The remaining sections are organized as follows. Section 2 of this document is a review of text classification concepts and technologies used in mining text data. Section 3 discusses text mining for business intelligence and two text classification algorithms. In section 4, we discuss the different business application areas and how text mining has been used. Then we conclude and present future work in section 5.

Text Classification

Text classification (TC) is the act of taking a set of related labeled text documents, learning a correlation between a document's contents and its corresponding labels, and then predicting the labels of a set of unlabeled test documents as best as possible (Gabriel et al, 2011). Classical statistical TC approaches are based on well-known machine learning models such as generative models e.g. Naïve Bayes or discriminant models such as Support Vector Machines. The opinion mining and sentiment analysis work can have very useful applications. Opinion mining is useful not only for end users but may also be used by companies to know the performance of a product, or by advertisers to decide where to place their advertisements. A page expressing a positive sentiment about a product could be a good choice to place the advertisement of the product, whereas a page having negative reviews may be a good page to place the advertisement of its competitor (Vivek Kumar et al., 2011). Weblogs (also termed Blogs) provide an important platform for users to express themselves and therefore presents a rich source of information for business intelligence.

According to granularity, sentiment classification can be conducted on words, sentences and documents. According to training mode, sentiment classification can be categorized into supervised, unsupervised and semi-supervised. A key problem of sentiment analysis is to determine the polarity of a review is positive (thumps up) or negative (thumps down). Objectives statements interleaved with the subjective statements can be confusing for learning methods, and subjective statements with conflicting sentiment further complicate the classification task (Zheng Lin et al., 2011).

Text Mining

Text mining is sometimes referred to as opinion mining or sentiment analysis. Text mining, a sub-specialty of knowledge discovery from data, is the process of utilizing computers to extract useful information from vast volumes of digital content. Low-level data are transformed to richer data by detecting meaningful themes implicitly present in the data. Text mining utilizes the research procedures for text analysis techniques to uncover useful information buried in text documents. While data mining is a process that involves structured data, text mining involves unstructured text documents. This paper focuses on online text mining, defined as the process of searching through

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unstructured data on the Internet and deriving useful business intelligence from it (Gabriel et al., 2011).

Text holders at present are accessing organisations via multiple and varied channels. If mined, their comments, suggestions and complaints provide valuable insights for marketing of products and services. By applying text mining technology, one can examine unstructured text and discover buried knowledge about customers, competitors, or other groups. Text mining tasks are classification, clustering and association (Elaine et. al, 2004).

Naïve Bayes Text Classifier

Automatic text categorization methods use algorithms capable of identifying patterns or classification rules with good generalization properties. One of the first text categorization methods was designed using a naïve Bayes representation of text. Naïve Bayes text representation assumes statistical independence in term co-occurrence and uses each term as a feature for the description of the content of each document (Marcelo Mendoza, 2012).

Using Bayes rule, the probability that represents the event "d generates c" can be obtained as follows:

$$p(c/d) = \frac{p(c)p(d/c)}{p(d)}.$$

Document categorization is the task of assigning a Boolean value to each pair $(d,c) \in D \times C$, where D represent a document collection, C represents a set of categories, d is a document that belongs to D, and c is a category which belongs to C. In relation to sentiments, the categories can either be negative or positive.

K-Nearest Neighbor (KNN) Classifier

The KNN text-classification is quite simple: given a test document d, the system finds the k nearest neighbors among the training corpus, and uses the classes of the k nearest neighbors to weigh class candidates. The similarity score of each nearest neighbor document to the test document is used as the weight of the classes of the neighbor document. If several k nearest neighbors share a class, then the per-neighbor weights of that class are added together, and the resulting weighted sum is used as the likelihood score of that class with respect to the test document. By sorting the scores of candidate classes, a ranked list is obtained for the test document (Songbo Tan, 2005). Formally, the decision rule in KNN classification can be written as:

$$Score(d,c_i) = \sum_{d_j \in KNN(d)} Sim(d,d_j)\delta(d_j,c_i)$$

Here, $KNN(d)$ indicates the set of k nearest neighbors of document d, and $\delta(d_j,c_i)$ is the classification for document d_j with respect to class c_i.

Applications of Text Mining

Information and Communication Technology has found many application areas in different areas of the economy. Companies, governments, and individuals who incorporate tools to manage attention

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gain competitive advantage. Text mining is not industry specific. Numerous industries can benefit from text mining including insurance, finance, consumer products, manufacturing, healthcare, life sciences, hospitality, retail, transportation, information technology, government, and education (Froelich and Ananyan, 2008). In an e-business setting, text mining can be used to perform a variety of tasks, such as search and retrieve information, manage documents, match resource to user query, learn visitor interest, and match interest to available resources (Elaine et. al, 2004).

Market Research and Survey Analysis

Market Intelligence (MI) is accurate, current and usable information and knowledge about market environment. The acquisition of MI is a key activity for corporations to make market decisions and maintain market dominance in furious markets over market competitor. Today, the Internet, with its easy access and unlimited data-storage capacity, enables researchers to assemble valuable information about customers, competitors and market environment without leaving PCs (Danxiang Ai et. al, 2006). Andrea G.B. et al (2007) argued that dynamic predictive knowledge of customers is the most important factor to develop an effective marketing strategy.

Text mining can assist market researchers through analysis of open-ended survey responses, news articles, press releases, blogs, call center notes, and e-mails. Information about companies, products, major concerns, consumer expectations and other insight can be generated. The less time it takes for a market research company to produce a survey report, and the more accurate the informative the survey, the less the expense, and therefore the greater the net profit and value (Josh Froelich and Sergei Ananyan, 2008).

The open-ended responses from surveys provide a wealth of insight into the true message of the respondent. Understanding an issue from a customer perspective is a major leap forward from offering multiple choice surveys with limited options. Immense value is present in online sources of information about business. News feeds, analyst reports, industry journals, blogs, and websites are all sources of text that can be harnessed to identify credit ratings, new products launches and their perception by the public, or management changes. Companies can try to answer questions such as what are the new markets, what competitors are doing, what do customers think about products, what are the developments in existing markets, and identify sources of existing research for current projects (Josh Froelich and Sergei Ananyan, 2008).

Collective intelligence is used to refer to emerging behaviours in colonies. Often, these colonies are formed by insects, and presented more complex behaviours than those of the individuals forming them. An example of collective intelligence can be seen especially in social networks, where decentralized groups of people with no leader are able to take decisions and promote initiatives which would not be possible by a single individual (Juan Trujillo and Alejandro Mate, 2012). Marketing professionals apply collective intelligence techniques to create behavioral models and apply them for targeting and personalization. As they analyze preferences, match products to customers, discover groups of similar consumers, and construct pricing models, they generate significant competitive advantage (Tilmann Bruckhasus, 2010).

Competitive Intelligence

The Internet contains a variety of external information about competitors. About 90% of the Fortune 500 firms in the U.S. employ some form of competitive intelligence. Competitive intelligence applications use text mining to extract facts from web pages, industry journals, and newsgroups. Companies can compare themselves against competitors by looking at the density of specific marketing keywords to assess which company is likely to grab prospects from search engines.

Companies can monitor competitors to avoid being late in introducing a new product or technology. Other results that can be found through text mining include identifying the direction of innovators, licensing opportunities, patent infringements, and trending and forecasting specific market ideas. Pricing information can be collated to provide a detailed picture of the market and assist in determining the proper cost structure (Josh Froelich and Sergei Ananyan, 2008).

Brand Monitoring

More organisations are using the Internet to voice opinions and publish information. More individuals are using blogs to disseminate ideas and provide feedback in unmonitored forums. This has increased the difficulty of managing and controlling the corporate brand. Companies are faced with false advertisements, negative political associations, loss of traffic through competitor leeching in search results, easily disseminated rumors without truth, cyber squatting (registering domain names or similar names of another company's brand), and unauthorized uses of logos and trademarks. Given that the majority of this medium is natural language, traditional quantitative tools are not well suited to the task. Companies can use text mining, along with search engines, to assess brand risk. Filters can be configured to monitor occurrences of specific brand keywords. Blogs and press releases can be classified as containing positive or negative comments about a brand. Typographical analysis of the domain name can identify similar domain names to monitor, information extraction tools can highlight names of brand perpetrators in text and flag these for follow up (Josh Froelich and Sergei Ananyan, 2008).

Peter de Maeyer (2012) focused on consumer reviews. He said that the existence of such reviews has naturally made marketers anxious as it represents a significant loss of control over what is said about the brand. He concluded by saying that the literature on the sales impact of online reviews has seen rapid growth during the past five years. As consumers rely increasingly on online information for their purchase decisions, it is important for marketers to acquire a deep understanding of the concepts and phenomena connected to online reviews.

Equity Analysis

Companies can leverage stock market data collected from public bulletin boards. For example, a classification model can be developed based on the frequency of various keywords to predict whether the next day trading value will increase or decrease for given stocks. This is essentially a time series model. While the results of the study were not spectacular, this was a prototypical example looking or patterns in text to assist in making a decision (Josh Froelich and Sergei Ananyan, 2008).

Satoru et al (2006) analyzed the effect of text information of analyst's reports through text mining. They confirmed that analyst's reports had important influence to stock price. So they analyzed the validity of combining text information with numerical information. They identified that to combine text information with numerical information make it possible to extract more valuable knowledge from analyst's reports.

Patent Research

Patents and other forms of Intellectual property is an important asset for any business. They need to be kept secret and protected. Their exposure can make competitors design counter strategies for other competitors in the market. Trade secrets are indispensable for competitive advantage. This has been supported by several researchers.

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Patents expose a wealth of information about the goals and practices of an organization or individual. Much of a patent is written in plain text form suitable for text mining. Clustering the patents produced by a certain business can reveal the key concepts of that business' focus. These per-business clusters can serve as a valuable additional piece of information in a competitor portfolio. Some software applications can graph the clusters to display associations between the key concepts to facilitate navigation of the patent database to assist in learning about related topics. A corporation looking to invest in a specific technology could assess whether prior patents exist. Similarly, a corporation could use its own technology patents as a guide and use text mining to identify similar patents based on frequencies of keywords to determine if infringement has occurred (Josh Froelich and Sergei Ananyan, 2008).

Conclusion

With an exponential growth in the amount of unstructured data, text mining is becoming an important part of mainstream decision support technology. The acceptance of Business Intelligence tools is growing at an accelerating pace. By using domain-specific Business Intelligence Information Systems with data analysis and reporting techniques, text mining becomes indispensable for strong competitive advantage for early implementers of this new decision support technology. However, multi-language syntactic analysis of text is still a challenge.

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STRATEGIC PLANNING PRACTICES AND PERFORMANCE OF PUBLIC UNIVERSITIES IN KENYA

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Abstract

The purpose of the study was to investigate the impact of strategic planning practices adopted by public universities in Kenya on performance. It was guided by four objectives; to evaluate how the practice of goal setting, flexibility, communication and control in strategic planning influence performance. The research was studied through descriptive survey. The target population of this study consisted of all the twenty two public universities in Kenya. Qualitative data was collected from a purposive sample of three public universities in Kenya. A five point likert scale questionnaire was used to obtain data from thirty five respondents of the strategic planning committee of the three public universities in Kenya. The data was then statistically tested by multiple regressions to reach a valid conclusion. The study concluded that public universities in Kenya are actively involved in strategic planning and had documented vision and mission statements. The study established that public universities in Kenya adopted a number of strategic planning practices that had a positive relationship with the performance of these institutions; hence the implication of this study is that strategic planning practices enhances better organizational performance, which in the long run impacts on its service delivery and survival. The study leads to a better understanding of the relationship between strategic planning practices and performance and provide a useful framework to stake holders in academic institution in their endeavors to improve performance.

Key words: Goal setting, Flexibility, Communication, Control, Performance.

Introduction

The business environment is becoming more and more complex, dictating the need for strategic management. Strategic management is concerned with formulation and implementation of strategy in an organization. Simply put, strategy means looking at the long-term future to determine what the organization wants to become, and putting in place a plan, on how to get there. An organization is directionless and predisposed to changes in the business environment without a strategy. Thus, strategy acts as guidepost for an evolving organization. Strategy gives the organization a direction and indicates what must be done to survive, grow and be profitable. Organization success increasingly comes from strategy Pearce and Robinson (2007).

Higher education in Kenya can be traced back to 1922 when Makerere University in Uganda was founded as a technical college for African students from the East African countries. Mwiria and Ngethe (2006). The college offered post-school certificate courses in fields such as teacher training and carpentry. After the publication of the Asquith Report in 1949, the Makerere University Act was passed enabling the institution to legally transform itself into the University of East Africa .It then admitted its first undergraduate students for degrees offered by the University of London in1950.

Previously, there were 7 public universities in Kenya with an enrolment of 100,649 students Muchiri (2010). Presently the number of the public universities in Kenya has risen to 23. Apart from the public universities in Kenya, there are 29 private universities in Kenya categorized as: 17 charted private universities, 12 private universities operating with letters of interim authority (LIA) 12 and 2 registered private universities.

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Public university planning in Kenya was based on the government's five year planning cycle hence lacked anything strategic about it. This planning cycle mostly involved adjusting plans for inflation and political changes especially to accommodate the whims of the ruling regime. The planning never seriously focused on the long term , this was the case until the advent of performance contracting that demanded that planning be at strategic levels Lewa, Mutuku and Mutuku (2009). Kenya public universities and colleges must bring about the needed institutional redesign and devise an effective strategic planning system that will guide their operations Mucai and Omboi (2010).

Strategy is a tool that a public university and colleges can use to find its competitive advantage and place within the ever turbulent operating environment Mucai and Omboi (2010). It is therefore vital that strategic planning is one of the major steps the public universities can take to address the challenges they face in improving the quality of their programmes in provision of Higher Education Lewa, Mutuku and muttuku (2009). Public in Kenya have began to get serious about strategic planning given that they are required by the government to undertake strategic planning RoK (2006) and the fact that they are aware of the challenges they face today Lewa Mutuku and Mutuku (2009).

However, they still continue to face difficulties in coping with competition Wong and Mulili (2011) and a plethora of problems from exclusivity, research deficiency, and centralized system of governance to commercialization of education attributed to the parallel programme that compromises on quality Ooro (2009). This raises the question, how does corporate strategic planning practice relate to performance. There are numerous studies done in Kenya in on public university but focused on different aspects other than strategic planning practices and performance Sifuna (1997); Ooro (2009); Lewa, Mutuku and Mutuku (2009); Wong and Mulili, (2011).

Mittra (2001) and Kamau (2008) have done studies in strategic planning practices in hotel, tours and travel companies respectively. They did not however cover strategic planning practices and performance in the higher education sector. This research project therefore aimed to fill in the gap in literature by addressing the following questions, what are the strategic planning practices adopted by public universities in Kenya? And how does strategic planning practice influence performance of public universities in Kenya.

Objectives

The study focused on how strategic planning practices adopted by public universities in Kenya influence their performance. It was guided by the following specific objectives:

To establish how goal setting influence performance of public universities in Kenya.

To establish how flexibility influence performance of public universities in Kenya.

To establish how communication influence performance of public universities in Kenya.

To establish how control influence performance of public universities in Kenya.

Literature review

According to Glaister and Falshaw (1999) strategic management literature advocates a positive relationship between strategic planning and financial performance. However, mixed results found in empirical research result in to controversy over the extent to which strategic planning improve a firm's performance. Various researchers have attempted to understand these contradictory findings. Shrader, Mulford and Blackburn (1989) comprehensively reviewed over 60 and found no obvious

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complete relationship between strategic planning and performance. According to Pearce, Freeman, and Robinson (1987) evidence that formal strategic planning enhances a firm's financial performance was inconclusive. This was based on the results of the 18 studies of the relationship between strategic planning and performance in smalls firms reviewed. The study also concluded that the small firms do not plan. Armstrong (1982) reviewed 14 strategic planning and performance research and found out those strategic planning benefited firms. However he was concerned with the lack of description and definition of strategic planning and concluded that without a description of strategic planning was not possible to scientifically assess the value of planning.

Schwenk and Shrader (1993) in their meta-analysis reviews 26 studies of small firms and established a positive relationship between strategic planning and performance. Boyd (1991) concluded that there were modest positive correlations between strategic planning and financial based on the results of his meta-analysis of 21 studies published between 1970 and 1988, including 29 samples and 2,496 organizations. According to Miller and Cardinal (1994) strategic planning positively affected firm performance based on the results of the 26 published researches they reviewed.

According to Greenley (1994) evidence supporting relationship between strategic planning and financial performance was established in his results based on the 29 published researches he reviewed. Sarason and Tegarden (2003) in their study which focused on the configuration theory and firm's resource based view to understand the relationship between strategic planning and the firm's performance. Their results established partial support for a positive relationship between strategic planning and the firm's performance.

According to Kroll (1992) Strategic planning practices cover the major functional elements of management. Customer focus is a strategic practice that enhances performance of the organization (Bhardwaj et al., 1993). According to Ansoff (1984) the key to cope with dynamic situation is technology. According to Grensing (2010) the best practices for effective strategic planning are group diversity, flexibility, commitment, iteration and stretch goals. Robinson (2012) supported Grensing, to him the best practices in strategic planning are stretch goals, communication and control.

Peng and Litteljohn (2001) show that effective communication is a key requirement for effective strategy implementation. Rapert, Velliquette and Garretson (2002) explored vertical communication linkages as a means by which strategic consensus and performance can be enhanced. They contend that communication and shared understandings play an important role in the implementation process. Specifically, when vertical communication is frequent, strategic consensus (shared understanding about strategic priorities) is enhanced and an organization's performance improves.

Such controls also require a rich information exchange between corporate and divisional managers Hoskisson, Hitt and Ireland (1994). According to Hitt, et al. (1996) strategic controls entail the use of long-term and strategically relevant criteria for the evaluation of business-level managers' actions and performance.

Organizational performance is achieved through the achievement or accomplishment of organizational goals and objectives Koontz (2006). According to Dixon, et al. (1990) appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives. Kotey and Meredith (1997) contends that, performance is measured by either subjective or objective criteria, arguments for subjective measures include difficulties with collecting qualitative performance data from small firms and with reliability of such data arising from differences in accounting methods used by firms. Kent (1994) found out that, objective performance measures include indicators such as profit growth, revenue growth, return on capital employ.

Methodology

The study employed a descriptive survey study research design. The target population was 22 fully fledged public universities. A purposive sample of 3 public universities was used to collect the necessary data from 12 members of the strategic planning committee. The researcher used a self administered questionnaire with Likert scale questions ranging from (1) not at all to (5) a very great extent. Data for this study was analyzed quantitatively through descriptive statistics and multiple regression analysis. Statistical Package for Social Scientists (SPSS) was used for data analysis. Data was presented inform of statistics such as frequency distribution and percentages tables.

Results

Majority of the respondents in this research has served the university for over five years. In terms of education level, most of the respondents were post graduate degree holders and a few numbers were degree holders. On strategic planning practices the research found out that goal and objectives are set by the CEO's and senior management. Consultants and employees are rarely involved. The study also established that the set goals are SMART and challenging. Resources are also available to meet the set goals and that employees believe in their ability to achieve the goal which enhances their commitment to the goals.

The study established that goals meet individual and corporate goals. The research established that strategic planning in the university is a continuous process and meetings are frequently held to evaluate review and adjust plans ensuring that the universities have structural, financial, operational and technical flexibility. The study established that the mode of communication in the university is circulars and memos and that employees are aware participate and are committed to the strategic planning process.

It was also found out that there is regular feedback, clear lines of accountability and responsibilities and corrective action. The universities also undertook premise, implementation and special alert controls and strategic surveillance. The study established that the measures of performance were subjective in terms of product and service quality, research and development, innovation and quality of service to the customer. This was because the universities are not profit oriented institutions.

Multiple regression was used to determine how goal setting, flexibility, communication and control influence performance in public universities. The multiple regression analysis model tested was as follows:

$Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\beta4X4+e$ where:
Y= represents the dependent variable, performance
$\beta0$ = constant
X1= represents goal index
X2= represents flexibility index
X3= represents communication index
X4= represents control index
$\beta1$; $\beta2$; $\beta3$; $\beta4$= regression coefficient
e = error term

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The model was significant in predicting performance in universities since ($F (4, 30) = 10.65, p<.001$) hence there is a significant linear relationship between goal setting, flexibility, communication control and performance. The four predictors produced an adjusted R2 value of .59 ($F (4, 30) = 10.65, p<0.001$) for the prediction of performance. This means that goal setting, flexibility, communication and control accounted for approximately 59% of variance in performance.

According to the regression equation established, taking all factors into account constant at zero, goal setting made the greatest contribution to performance with standardized beta value of .609 followed by flexibility with .349. Control was third with .156 and communication made the least contribution with .016. This means that an increase in one unit of goal setting, flexibility, communication and control would increase performance Y by 1.13. This means that goal, flexibility, communication and control significantly influence performance of public universities in Kenya.

Conclusion

The study established that public universities are actively undertaken strategic planning. All employees are involved in the implementation of strategic plans however only top management are the elected representative are involved in the formulation of strategic plans. All stakeholders in the organization namely employees and senior management, consultants are involved in strategic management. Involving all stakeholders require them to poses the knowledge and skills required to implement strategies. Where all are included it may take long time expensive and may affect the performance of the institution.

In addition, the institutions evaluated and reviewed their plans constantly in light of changing conditions and met frequently to discuss strategic issues. Circulars and memos are the main modes of communication in these institutions. CEOs and senior managers are the most influential persons. The institutions are not profit oriented and thus measure their performance mainly on product and service quality, research and development, innovation and quality of service to the customer.

The research aimed to ascertain the impact of strategic planning practices namely goal setting, flexibility, communication and control on firm performance. The review of the literature on these practices revealed they positively impact performance. The research attempted to empirically test the impact of these strategic planning practices on performance, and the findings indicate that goal setting and flexibility are valuable skills which have major impact on firm performance among the firms of the institution studied. Control and communication were seen to have the least impact on performance of the institutions studied. The results show a positive and significant association between goal setting and flexibility of strategic planning to performance.

This research could have important academic and practical implications. Theoretically, it could contribute to a better understanding of the relationship between goal setting, flexibility, communication and control of strategic planning and firm performance. In practice, it points out to leaders that goal setting, flexibility, communication and control of strategic planning process improves performance. This research is obviously not without limits. For example, it is only qualitative in nature. Quantitative case studies, even interviews with some decision makers might usefully complement qualitative data. Future research could address this limit.

The findings of this study contain important insights that will help university managements to improve their performance and overcome some of the challenges they are facing. To start with, this study has confirmed the influence of goals in universities' performance. This is in concurrence to numerous studies that have shown how goals contribute to the success of organizations. The management of a university can vastly improve its staff's performance by paying closer attention to its goals. A university should set goals and allow the heads of faculties and departments to do the same. As has already been noted, employees perform better when they are guided by goals that are specific, measurable, attainable, and realistic and time bound. Leaders in universities should also ensure that all employees are aware of the goals that have been set by the top leadership as well as goals set by their own faculties and departments. It is not sufficient that a university has lofty goals if the employees are not aware of them. In addition to knowing the university's goals, employees should embrace those goals and be part of their implementation. Studies have shown that when employees participate in setting goals, they tend to perform much better than if they have goals foisted upon them because they have a sense of ownership over those goals. In this regard, leaders in public universities should endeavor to include as much input from employees as possible during goal setting.

This study established that flexibility also had a major influence on performance in public universities which is in line with what researchers have found over the years. Performance in public universities will increase if the management in these universities allows greater flexibility in their strategic planning. With all the challenges facing Kenya's public universities, the management of these institutions cannot afford to remain stuck in old ways of doing things. Public universities are operating in fast changing environments hence they must be ready to adapt quickly. Information technology is improving very rapidly and universities must keep up with these changes because they risk becoming obsolete and missing out on the benefits of technology if they do not.

Students enrolling in universities today are very different from students of yesteryears. These students are more assertive, younger and more innovative. Universities should tailor their teaching approaches to these students' unique characteristics otherwise these students will not benefit much from the education provided. In addition, universities should fashion their programs to position graduates to compete in the job market or become entrepreneurs. Universities should not continue teaching courses with few or no job openings available and instead focus on careers that have a high demand on the job market. All these are attributes of organizational flexibility.

Communication is another important process in strategic planning. The role of communication in organizational performance is well documented hence the finding by the study that communication indeed influenced performance is not surprising. What was surprising was the finding that communication had the least influence on performance in the public universities. Available literature on organizational performance places a lot of emphasis on communication. Many researchers have proved that communication plays a key role in influencing how well an organization performs with better communication leading to better performance. Effective communication is important for disseminating goals to all members of the university workforce and providing feedback.

It is also important to have effective channels of communication from managers to subordinates and from subordinates to their seniors. In public universities, information flows from the top leadership to the juniors mostly through circulars and subordinates rarely have an opportunity to bring up issues with their bosses. It is important therefore that the management of public universities streamline communication channels by removing cumbersome bureaucracy that stifles communication.

In addition to that, managers should encourage employees to speak their minds more freely. Finally the study looked at the influence of control on performance in public universities. The study found that control influences performance in public universities such that higher levels of achievement can be derived by increasing control. This is in-line with what other researchers have established before. However control is not as important as goal setting and flexibility. Policy makers in public universities should increase the levels of strategic control. Public universities should institute systems that monitor performance and generate feedback to employees. Employees perform better when they receive continuous feedback from management. It is also important for universities to monitor the progress of their strategies so that they can make necessary adjustments as they progress.

In summary, public universities in Kenya are actively involved in strategic planning and have well documented vision and mission statements. They have also adopted a number of strategic planning practices that have a positive relationship with the performance of the institutions; hence the implication of the study is strategic planning practices enhances better organizational performance, which in the long run has an impact on its service delivery and survival.

Recommendations

In light of these implications the study recommends that the lower level employees should have more representation in the process of strategy development. Moreover, the implementation of a system to ensure accountability at the top level management who exert more influence in the strategic planning process. To add on to this, there is need for greater participation by all the stakeholders in the implementation process and also establishment of proper mechanism to monitor and control the implementation of the strategic plan. Further, management of public universities should seek to ways of enhancing their operating efficiency and quality of products or services in order to improve their performance and embrace technology especially in their mode of communication. Lastly the running of public universities ought to be made autonomous devoid of any political interference and bureaucratic processes or systems that inhibit strategic thinking and quick decision making to enhance their performance.

Overall the management of these institutions needs to explore means and ways of enhancing their strategic planning practices so as to improve the performance of these institutions. Further research area of strategic planning practices and their impact on performance of the universities is desired.

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EVALUATION OF GOVERNMENT STRATEGIC RESPONSES ON MANAGEMENT OF THE CHALLENGES FACED BY SMALL-SCALE FRESH TOMATO FARMERS IN MBEERE-SOUTH DISTRICT, KENYA

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Abstract

Small- scale fresh tomato farming is an upcoming business in Mbeere- South District, Kenya. Like any other sector of production, this sector is hampered by inadequate technical expertise among farmers, unavailability of farm inputs, limited access to credit, inaccessibility of business information services and marketing challenges. This means that small- scale tomato farmers could incur losses forcing them to abandon their farming. The challenges are serious in rural areas, which do not have supportive infrastructure like roads, internet, electricity, and storage facilities. The study was carried out in Mbeere-South District, Kenya. The purpose of the study was to evaluate the strategic responses by the government on the management of the challenges faced by small-scale fresh tomato farmers in the district. The strategic responses looked at included technical expertise, marketing, access to credit facilities, business information services and access to farm inputs. The study focused on all tomato farmers engaged in tomato production along the Masinga dam. The study was significant in evaluating the performance of the government on the strategic areas looked at a time when the government is working on the achievement of Vision 2030 of creation of jobs and eradication of poverty. By establishing how the government had been able to respond to the challenges faced by these farmers, the researcher was able to make recommendations which could make tomato farming a profitable venture in the region. The study employed the survey research design. Descriptive research was used based on the fact that the researcher was interested on describing the state of affairs as they existed. There are approximately 200 farmers who produce tomatoes along the dam using water from River Tana to irrigate their crop. All the farmers in this area were targeted. The researcher used questionnaires and face-to-face interview to collect data. Data was analysed using Statistical Package for Social Sciences (SPSS) software. Frequencies, means, mode and percentages were used in the analysis and the results presented in tables and charts.

Key Words: Strategic responses, Management of challenges.

Introduction

Mbeere-South District hosts the famous seven folks dams which include Kindaruma, Kiambere, Kamburu, Masinga, Grand falls, Mutonga and Gitaru. Mostly the small scale fresh tomato production is carried out by farmers along Masinga dam. Small scale fresh tomato farming is a form of Small and Micro Enterprise (SME) which plays a significant role in the Kenyan economy. Most of these Small and Micro enterprises (SMEs) operate within the informal economy, a sector commonly referred to as informal sector, or in the Kenya context, Jua Kali (Mitullah, 2003). The Kenya Labour Force Survey Report of 1998/99 indicates that the sector covers all semi-organized and unregulated activities that are small scale in terms of employment. The report notes that the activities are largely undertaken by self-employed persons or employees with few workers in the open markets, in market

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stalls, in both developed and undeveloped premises, (Republic of Kenya, 2003). Farming play a crucial role in the social and economic development of a country.The Kenyan Government in its vision 2030 is pursuing a National Development Strategy that seeks to instill rapid and sustained economic growth and reduce the high incidence of poverty, (Republic of Kenya, 2007). Poverty in Kenya is one among many problems, which include insecurity, a high mortality rate, lack of ready market, poor infrastructure, and lack of business information support for SMEs.

The study focused Mbeere-South District in Kenya. Various crops are planted in this region. They include maize, peas, beans, green grams and millet which are seasonal. Like any other sector of production, small scale fresh tomato farming as an upcoming business in Mbeere-south district is bound to face various problems such as inadequate technical expertise among farmers, unavailability of farm inputs, limited access to credit, inaccessibility of business information services and marketing challenges. From the quarterly reports of April to June, July to September and October to December 2011(Republic of Kenya, 2011) which were obtained from Mwea Divisional Agriculture office, several constraints which the farmers faced in this sector were highlighted. They included inadequate greenhouse technology, unpredictable flooding of Masinga dam, non-availability of Government subsidised fertilizer, high cost of fuel, expensive chemicals, unstable market prices, unreliable water for irrigation and poor road network. The study sought to evaluate the strategic responses by the government on the management of the challenges faced by small-scale fresh tomato farmers. The performance of the government on the management of the challenges would be an eye opener to the farmers and the policy makers hence informed decisions would be made which will be a milestone towards the achievement of the country's vision 2030.

Objectives

The objectives of the study included;

To establish whether the government has provided technical expertise to the farmers to manage the challenges.

To establish whether the government has been able to provide affordable farm inputs to the farmers.

To determine whether the government has helped manage the challenges faced by the tomato farmers through access to credit.

To establish whether the government has been able to provide business information services to the tomato farmers.

To establish whether the government is managing the various marketing challenges faced by the farmers.

Literature review

Many researches have been done on the implication of technical expertise, access to farm inputs, access to credit facilities, marketing and business information services. Sapienza and Grimm, (1997) argues that high education level has a positive impact on firm performance. Kolvereid (1992) shows that entrepreneurs with high education are more likely to have their business grow. At another level, Meja, (2003) argues that without technical expertise small scale farmers may not be able to control pests and diseases attacking their produce.

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Quality farm inputs are a requirement for higher yields by the farmers and with the liberalisation of the production and importation of agricultural inputs, the number of competitors increase, quality is diversified and prices are open to the law of demand and supply hence the sale of fake inputs by unscrupulous agencies (Chianu, 2008). Mead and Musinga (1995) argues that lack of credit and finance whether for working capital or other type is a major constraint to the SMES. Most SMEs rely mostly on their own savings and reinvest profits for their business which is not sufficient. Business growth is determined by how successfully one sells products and services. Hult, et al. (2003) argues that market orientation and superior products and services enables better satisfaction of customers and stakeholders which in turn result in a firm's growth. Business information, according to Thomas and Ballard (1995) is raw data converted into a form to enable the user to make a decision in responses to a business need. Information and business information services are of strategic importance to business as the success of any firm depends on its ability to acquire the right information at the right time and cost.

These researches clearly show that availability of technical expertise, credit facilities, business information services, farm inputs and market has a positive impact on the growth of a firm. Non-availability of the same poses challenges to the firm and contributes to stagnation. These challenges include inadequate technology, non-availability of subsidized fertilizer, expensive chemicals, insufficient business information services, unstable market prices and poor road network. Small scale fresh tomato farmers in Mbeere South District are among those affected by these challenges. The researcher therefore intends to establish whether the government has been able to manage these challenges through assistance in technical expertise, credit facilities, business information services, farm inputs and marketing.

Methodology

The study employed the survey research design, which is used to enable researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2002). Descriptive research was used based on the fact that in this study the researcher was interested on describing the state of affairs as they existed at that time, (Kothari, 2004). There are approximately 200 farmers in Mbeere South District who produce tomatoes along Masinga dam, using water from River Tana to irrigate the crop and they were all targeted. Simple random sampling was used by the researcher to select a sample of forty small scale fresh tomato farmers from the target population. A list of the farmers from the divisions was obtained by the researcher and they were allocated numbers which were picked randomly until the required sample was realised. The researcher used both the interview and the structured questionnaire to collect data. Questionnaires were administrated to the literate farmers and then the researcher had face-to-face interviews with the illiterate farmers. Frequencies, means, and percentages were used to analyse the data. Statistical Package of Social Sciences Software (SPSS) was used. The results were presented inform of tables and charts.

Results and discussions

The research established that 75% had tomato training and 25% never had the training (as shown in figure 4.1).

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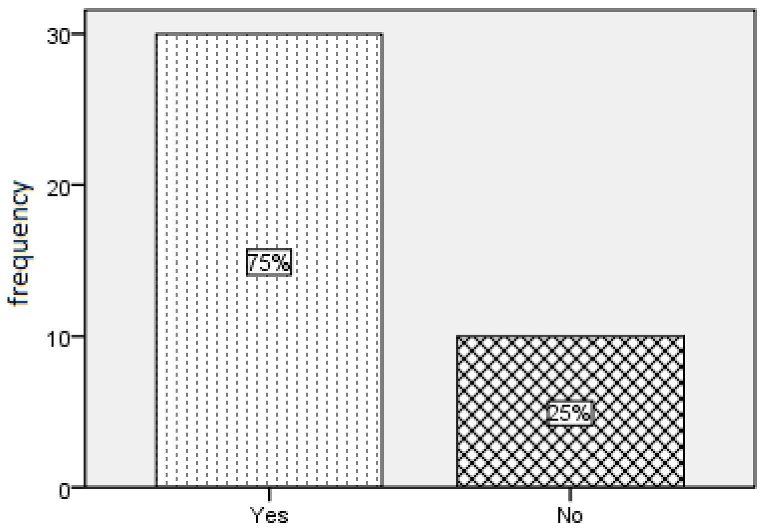

Figure 4.1 Analysis of technical training

On productivity 73% of respondents were impacted positively; this shows that training has a very positive effect on production of tomatoes. Only 17% were affected negatively, 10% of the respondents felt no effect. On the training of the farmers by the government, only 2 % had regular training by the government. This is a very small proportion as compared to 98 % of the respondents who did not have the regular training by the government (as shown in figure 4.3).

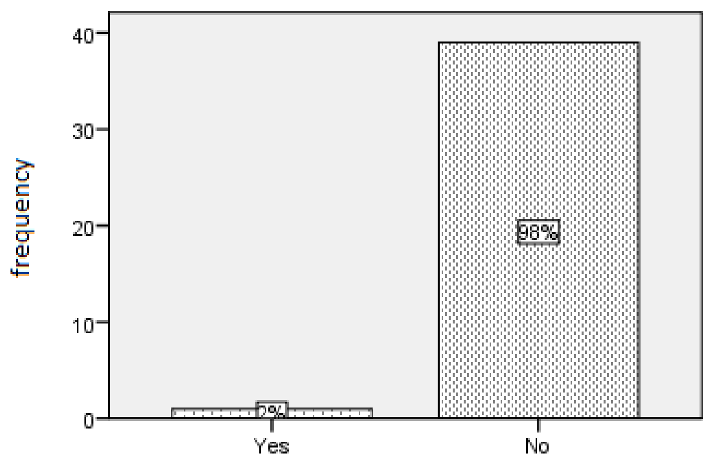

Figure 4.3 Analysis of government training

The results imply that the government did not play a big role in imparting farming skills to the farmers.

On farm inputs, 8% of the respondents agreed that the farm inputs were very accessible while 72 % reported they were accessible. Only 12 % of respondents said the inputs are inaccessible, 8% supported that the inputs were very inaccessible. The research wanted to establish the rates government had subsidized farm inputs. The response as per the number of respondents interviewed was 40 but only 39 responded to this particular question. Therefore the response rate was 99%. Out of the 39 respondents 3% believed that the government subsidized sometimes, another 3% felt the farm inputs were subsidized always. Majority of respondents 95% said that the government had

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never subsidized farm inputs. When comparing the rate of accessibility of the farm inputs in which majority (80% said they are accessible) and the rate at which the government subsidized them (95% said that the prices were not subsidized), it is evident that though farm inputs were available most farmers felt that the government had not played a part in offering the farm inputs at subsidized prices which would make them affordable hence improve on their productivity.

In regard to access to credit from recognized lending institutions (banks and cooperative societies), 23 who represented 57% did not have access to credit facilities (as shown in table 4.5).

Table 4.5 Access to credit facilities from banks and cooperative societies

	Frequency	Percent
Yes	17	43
No	23	57
Total	**40**	**100**

Only 17 respondents who represented by 43% had access to credit facilities. Out of the 17 respondents, 13 got credit facilities from cooperatives societies. This is a very small proportion of the respondents. More than half of the respondents did not access credit facilities from banks and cooperative societies. The 23 of the respondents who did not access credit from the banks and cooperative societies, 2 borrowed from groups, 5 from friends and family members and 16 had no source of credit (as shown in table 4.6).

Table 4.6 Access and source of credit

		credit source					Total
		Banks	Cooperative societies	Groups	Friends and family members	Not applicable	
Access to credit facilities	Yes	4	13	0	0	0	17
	No	0	0	2	5	16	23
Total		4	13	2	5	16	40

The study therefore established that accessibility to credit by the farmers is a big challenge in the area though 54% of respondents indicated that the terms of credit were favourable. This implies that the non-accessibility of the credit to many of the farmers may be as a result of other factors which need to be established by the government.

The research also sought to establish the rate of transport problems experienced by the farmers. 18% of the respondents interviewed felt that the transport problems happened always, 37% said they encountered the problem often, 40% of respondent indicated that they experienced the problems sometimes and 5% of the respondents never had transport problems. In addition to the transport problem, marketing of the tomatoes was also focused. The study sought to establish the rate of the marketing challenges the farmers faced. Out of the 40 respondents, 5% believed that the rate of challenges faced in marketing was very high, 60% said that the rate was high. Only 35% felt the rate was moderate. Marketing challenges according to the findings are experienced by the farmers.

The study also sought to establish whether the government had done something to alleviate the marketing challenges. Majority of the respondents 85% reported that the government had done nothing to address the marketing challenges. Only 10% said that the government had done something

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and 5% of the respondents were not aware of what the government had done to address the marketing challenges (as shown in figure 4.9).

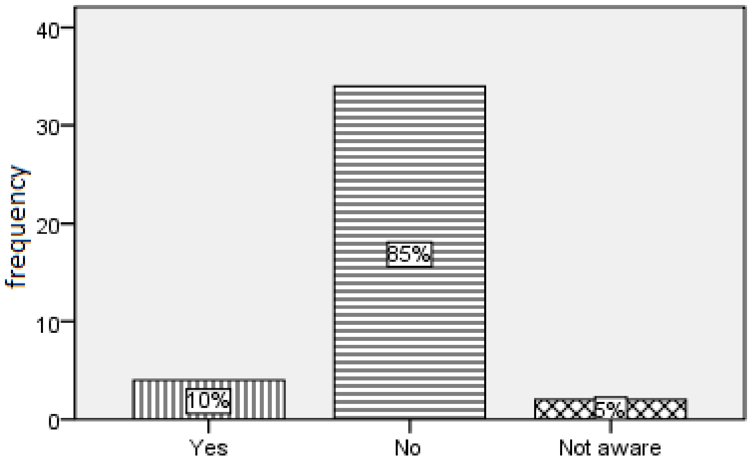

Figure 4.9 Analysis of how the government addressed the marketing challenges

They study also sought to establish the forums through which the farmers got information about farming from. From the results, 20% of the respondents got information through farmers' groups organized by the extension workers, 55% through the media and 25% said that no forums were organized by the government. In this respect whatever the government had done for the farmers in Mbeere-South district to gain information was very minimal.

Conclusions

Based on the findings of this study several things emerged in relation to the management of the challenges faced by the small-scale tomato farmers in Mbeere-South district by the government. On the provision of technical skills, affordable farm inputs, business information services, accessibility to credit and the management of the marketing challenges, the government had done very little about them. In some cases the farmers were even not aware of what the government would offer to them. Involving and sensitizing the farmers in different dimensions and approaches would help them get informed hence improve on production. Doing training and providing accessible credit facilities and information about them will yield satisfaction to the farmers and community at large, improve their well being and above all achieve high success rate.

The data analysis for this study showed that though the purpose of the study was to highlight the government strategic responses to benefit the farmers, the farmers' participation would also help the government to identify the most urgent and important areas to look at. The government would also be able to establish the challenges faced in solving the problems faced by the farmers and also come up with favorable solutions to the problems using the information given by the farmers in generating the best strategies. It was also evident a number of the farmers were ignorant of the issues surrounding them and this could be the reason why they did not have any information and trained skills on tomato growing thus use their own knowledge hence low production rate.

Recommendations

Based on the findings of the study, some recommendations were made in order to make small-scale tomato farming a profitable venture in Mbeere-South district. Considering that small-scale tomato farming is carried out by both trained and untrained farmers, one of the recommendations is that farmers whether trained or not should be involved in generating strategies and airing their opinions. Therefore the government should organize forums, seminars and agricultural trainings to ensure that they are equipped with information and knowledge relevant in their farming activities.

At another level, a system to distribute resources to the farmers and reliable means of transport of the produce to the market should be a key factor considering that tomatoes are very perishable. Therefore the government should embark on upgrading the feeder roads leading to the farms to ease the transport problems. The government should also create forums to educate the farmers on how to access credit from the lenders since the low number registered in borrowing from the financial institutions could have been as a result of lack of the information on how to access the credit.

Marketing challenges can be addressed by connecting the farmers with ready markets. This can be through the formation of cooperative societies which can be selling the produce locally on behalf of the farmers. The cooperative societies can also export the produce on behalf of the farmers. The government should also put an information centre where ordinary farmers can go to raise their issues and also get informed on matters related to their area of production.

Lack of involvement and commitment by farmers in generating strategies and new approaches towards farming would kill the farmers trust to the government and this often may result to failure. Therefore the researcher recommends that the farmers always be involved by the agriculture officers when making decisions which directly affect their area of production.

Since most farmers get farming information through the media especially radios, most of the communications should be availed regularly through the local dialect which farmers listen to most.

Water is a key component in the production of tomatoes in Mbeere-South district. The focus was only to the farmers who irrigate their produce using water from Masinga dam. The government should also focus on other farmers who are far from the dam. Therefore strategies should be laid down on how to provide water even to these farmers either through the construction of dams to collect rain water and also through the provision of piped water which for many years has not been available in the region.

Technology is a key factor in the Kenyan economy thus the farmers in this region should be trained on how to use greenhouse technology for higher productivity.

Further research should be conducted to establish other areas of strategic importance in the production of tomatoes in Mbeere-South district. Furthermore the study was only carried out in one district and therefore further studies should be carried out in other districts where tomatoes are grown to evaluate how the government has responded to the challenges faced by the farmers in these districts and Kenya as a whole and also to establish the farmers' involvement in generating the strategies to improve on production.

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THE INFLUENCE OF STRATEGIES ADOPTED BY WOMEN ENTREPRENEURS TO ACCESS CREDIT IN KENYA: A SURVEY OF WOMEN ENTREPRENEURS IN KASARANI

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Abstract

This study investigated the influence of strategies adopted by women entrepreneurs to access credit. This research filled in the knowledge gap on the influence of strategies adopted by women entrepreneurs to access credit. The general objective of this study was to find out the influence of strategies adopted by women entrepreneurs to access credit facilities. The specific objectives were to investigate: how business proposal strategy affects credit accessibility; how group formation strategy influences the access to credit and how opening strategy affects accessibility to credit facilities by women entrepreneurs. The target population was 600 business units owned by women entrepreneurs in Kasarani. A systematic random sampling design was used. Data was collected through structured questionnaires which were personally administered by the researcher. The study found out that group formation enhanced social collateral and hence enabled women who did not have physical collateral access loans. Many respondents who knew how to write business proposal accessed credit while those who accessed credit had to have bank accounts. The study recommended that business proposal writing should be made a core subject in colleges to access credit; Commercial banks should accept group membership in lieu of physical collateral and the process of opening bank accounts should be simplified to enable more women entreprenuers open bank account to access credit.

Key words: credit access, groups, bank account, business plans.

Introduction

Women's access to finance is a major constraint to start and expand businesses. Improving women's direct access to credit leads to higher investments in human capital and have a stronger impact on a country's economy in terms of health, education and long term implications for families and societies. There is a great need for women entrepreneurs to get access to credit facilities and the policy makers should understand and develop successful strategies to address the issue (World Bank, 2008). According to Besley, (1995) without adequate access to this credit facilities women entrepreneurs will be subjected to negative shocks and factors such as poor production levels in their businesses, lack of growth and generally poor performance of the business and can lose some of the few assets they have unlike their male counterparts who can access well-designed credits and loans easily thus able to finance their businesses and adopt more effective and efficient strategies to stabilize their businesses (Diagne and Zeller, 2001). In general proper access to financial services provides opportunities for improving the women's businesses and the economy of the entire communities and countries. Despite this however, credit facilities have been designed and crafted in a manner that will lock most women entrepreneurs from accessing it since it does not recognize that women as well as men are active, productive and engaged in business and thus they face their own financial constraints and needs.

Women's access to financial resources is also limited by biased lending practices that emerge when financial institutions in the area consider them smaller, less experienced and therefore less attractive

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clients, or when institutions lack the knowledge to offer products tailored to women's preferences and constraints. The extent to which institutions reach out to women and the conditions under which they do vary noticeably, but women are at a disadvantage when an institution does not fund the type of activities typically run by women, when it does not accept female guarantors, when its requirements are not clear or widely known or when, as it is typically the case, loans to women are smaller than those granted to men for similar activities (Baydas, Meyer and Aguilera 1994).

Statement of the problem

Access to finance is a challenge common to all MSEs, the challenge for women business owners is compounded by the multifaceted gender related problems that inhibit their ability to access credit. To securing capital for starting business is one of the major obstacles of every entrepreneur particularly in the MSE sector but women entrepreneurs face additional constraints to secure financial resources (Wole, 2009).

According to Kuratko and Welsch, (1994), women entrepreneurs have long been victims of gender related discrimination. Abor and Biekpe (2006) emphasise that this discrimination against women seems to be worse in African countries where the financial sector is male oriented for example, they experience particular difficulties in gaining bank finance for their ventures. Although men and women both experience personal problems, women face more difficulties. This is especially true with regard to a lack of self-confidence and not being taken seriously by providers of funds when applying for funds. It is widely acknowledged that African women have access to fewer resources than men. For example they tend to have lower access to credit facilities, education, land and training facilities than their male counterparts (Katepa, 1999).

In the developing world, women's access to credit is limited because lending offices usually require tangible collateral from borrowers. The most commonly accepted tangible form of collateral is land. However, many women do not own property that can be exploited as collateral because gender relationships play a central role (Dowuona-Hammond, 2007). Women entrepreneurs are often prevented from running competitive businesses by their relatively low education and skill levels, which generally limit their access to the various support and credit services (Cutura, 2007). Even when they have access to information on the financial services and market opportunities available to them, women may be less equipped to comprehend it due to low levels of literacy (UNDP, 2007).

General objective

The main purpose of this study was to find out the influence of strategies adopted by women entrepreneurs to access credit facilities.

Specific objectives

To investigate how proposal strategy affects accessibility to credit by women entrepreneurs.

To determine how group formation strategy influence the access to credit by women entrepreneurs in Kenya.

To determine how accounts opening strategy affects accessibility to credit facilities by women entrepreneurs.

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Literature review

The greatest barrier facing women entrepreneurs in Kenya is access to finance which is an issue because of requirements of collateral. In Kenya only 1% of women own property and that makes it very difficult for women to provide collateral for banks. Most women who venture into businesses in the rural areas and need financing lack the needed collateral to enable them secure bank loans. Responsibility of entrepreneurs for dependants has limited opportunities to make savings or undertake business expansion and diversification (Athanne, 2011).

Formal and informal banking institutions always demand collateral to act as a security on loans. This is often in the form of houses or deed to some immoveable assets. This precondition plays a major part in the accessibility of loans and the situation may be more complicated for women entrepreneurs, who may not have right of ownership to expensive property including land and houses. While most of the entrepreneurs, recognize the importance of loans in improving their businesses, collateral is a major impediment to loan accessibility and therefore business growth. Most women entrepreneurs start their businesses from their own savings or loans from relatives since they do not demand security. Beaver, (2002), explains that the historical development and the associated culture, of the banking system underpin the problem of the emphasis on the provision of collateral as a primary condition in lending. Banks have always adopted a risk averse stance towards small firms, with an accompanying inability to focus on the income generating potential of the venture, when analyzing the likelihood of loan repayment. Therefore, although there has been a considerable progress in the lending to the SME's, banks remain cautious because many these businesses have neither, collateral nor, asset registers.

Access to credit

According to Schmidt and Kropp, (1987) the main problem among the formal lending and saving institutions is caused mainly by the policies they put in place regarding access to loan facilities. For example, the terms of payment, the mode of application, the qualification requirements and complex procedures and in most cases the women entrepreneurs cannot properly understand and access these credit facilities. The banks mostly have prescribed minimum loan amounts which are not enough to improve or start their businesses. In addition, some financial institutions require security that does not fit the needs of the women which will hinder them from applying for the loans.

According to Atieno, (2001) also pointed out that access to credit by borrowers is affected mainly by credit rationing behavior of lending institutions who used descriptive statistics to analyze the role of institutional lending policies of formal and informal credit institutions in determining access to and uses of credit facilities by small-scale entrepreneurs in Kenya. Lack of information about credit and lack of required security are the major reasons and that the amount applied for was higher than the amount received from both formal and informal sources suggesting credit rationing by the institutions.

Conceptual framework

Demand and access to credit depends on several factors. Group formation, business proposals, and account opening are significant strategies that have been adopted by women entrepreneurs in order to access credit. This study derives a conceptual framework from the literature review that all these factors play an important role in the access to these loans (Yin, 2003). This concept is expressed as a conceptual framework in the figure 1

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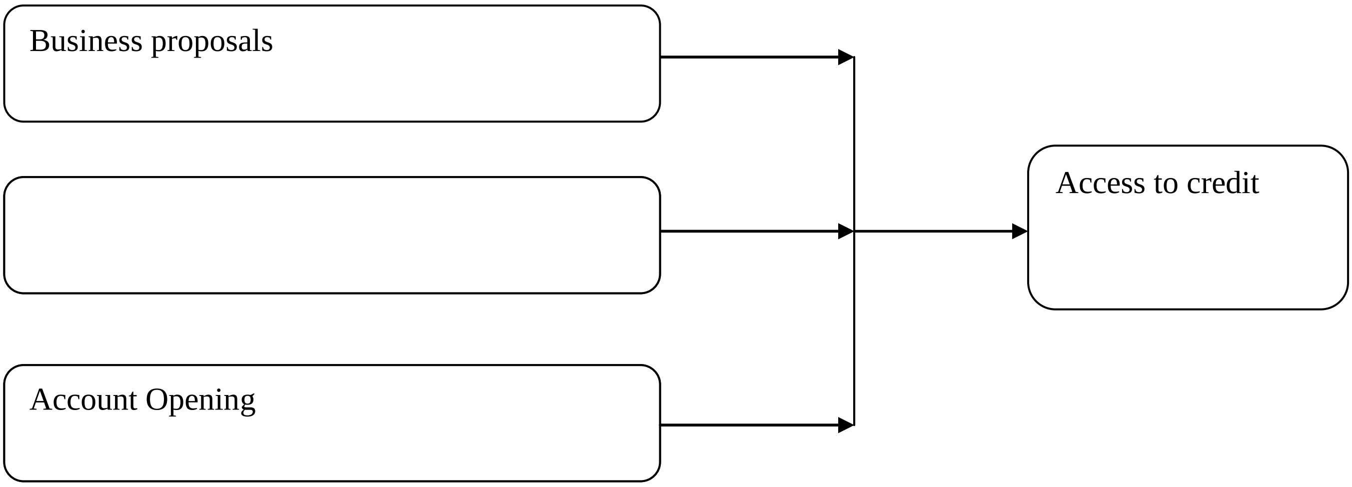

Figure.1 Conceptual framework

Business proposals

When designing a proposal the women are expected to come up with realistic, attainable and measurable goals. In addition, it is important to provide them with the accreditation and certification that will enable them to progress direct to business formation, additional training or remunerated employment as they wish. According to World Bank, (2008) this therefore calls for sensitization so that everybody involved recognise and appreciate the significant impact that women's entrepreneurial activities can have on local economic development and since most of the women are not in formal employment they have almost no information on the current labour market. Meticulous attention must be given to ensure that information and guidance reach them so that the project proposals they come up with are worth investing in. Different aspects of training and support will help develop both the personal skills and business knowledge necessary for successful entrepreneurship taking into account the background of each woman (Namusonge, 2005). Developing these skills however is hard when the women are inexperienced in business and thus proposal should place particular importance on incorporating measures that develop personal skills and amongst other things enable entrepreneurs to take initiatives, be ambitious, have good negotiation skills and be ready to grasp new opportunities that arise.

Group formation

According to Meyer, (2005), self-help groups have proven to be an effective avenue for connecting women with financial institutions. Most of these women groups operate at the village level and typically require that their members gather often. The savings which are collected from every member are either deposited in rural banks or loaned to other group members. After a group has demonstrated it has the capacity to collect loans, the rural banks consolidate the group's savings and provide additional capital that group members use mostly for agricultural purposes (World Bank, 2008). The various women entrepreneurs can be classified into different groups that can ease the burden of having to acquire the loan facility without the minimum required resources. In groups, the women are better placed to apply for the funds and either divide them among themselves or use it for the group investments.

These groups therefore can afford and are motivated to acquire loans in order to set up businesses since their main concern is day to day living. Those without regular means of income will also be able to raise the necessary payments and savings required by the groups and if they do not own

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household assets required for collateral, they will be guaranteed by group members for credit. In rural areas, most families have small pieces of land, may own one or two livestock and live in simple temporary houses (Howse, Dunton and Marshall, 1995). Their sources of livelihood may be farming or agriculture. In this case therefore the assets may not be enough to acquire loans hence the strength in group formation.

Account opening

A major barrier that women entrepreneurs encounter is the lack of access to adequate institutional support in technical, business and financial services. Recent studies have shown that the majority of the poor and especially women lack access to formal banking services of any kind and have emphasized the importance of enabling savings (Republic of Kenya, 1992). Access to an account increases monetary assets and total assets without causing any crowding out in other kind of assets or savings institutions. The effect is greater for households at the bottom and middle of the assets distribution and for the ones with no access to the financial system either formal or informal.

Access to a fully liquid savings account with no withdrawal fees affects investments behavior and enables assets building and investment. Most important is to build the capacity of women entrepreneurs to confidently interact with public and private sector agencies providing both financial and non-financial services. This will enable them to make use of their savings for other beneficial ways to them (Primo, 2003).

Research methodology

A descriptive research was undertaken in order to ascertain reliability of data collected. A sample survey method was used to collect data from women entrepreneurs and from Kenya women entrepreneurs Kasarani.

The target population was all women who have businesses in Kasarani. A list of six hundred business units owned by women in Kasarani was taken from the City Council in Kasarani. From the members of the target population, the researcher used systematic random sampling to select fewer participants for the study. The six hundred businesses were divided in to groups of ten and every 10th business was selected making a sample of sixty business units.

The main tool of data collection for this study was semi- structured questionnaires. The questionnaires were personally administered to the sample selected from Kenya women entrepreneurs.

Descriptive statistics was used to analyze the data. Quantitative data from closed ended type questions was coded in the computer by applying the Statistical Package for Social Sciences (SPSS) using version 20.0 windows. The results were presented in frequencies and percentages.

Results and discussions

As can be seen in table 1, 30% of the respondents used group formation, 28% used business proposal writing to acquire the current loan, and 24 % maintained books of accounts while 18% acquired collateral.

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Table 1 Strategies put in place to access the current loan

	Frequency	Percentage
Acquired collateral	9	18
Group formation	15	30
Maintained books of account	12	24
Business proposal writing	14	28
Total	50	100

Table 2 Collateral that was expected for the loan

	Frequency	Percentage
Business plan	13	26
An account	15	30
Being in an active group	17	34
Guarantors	5	10
Total	50	100

Among the collateral required: Being in an active group was at 34%, an active account was at 30%, business plan was at 26% while guarantors had 10% response. This is shown in table 2. This shows that group formation, business plan knowledge and account opening are strategies that influence access to credit by women entrepreneurs.

Table 3 Women/ investment group formation

	Frequency	Percentage (%)
Yes	45	75
No	15	25
Total	60	100

As can be seen in table 3, 75% of the respondents were in women/investment while 25% were not.

Various reasons for forming the group were given as follows: to have access to credit was at 63%, seconded by to pull together scarce resources with 22 %, thirdly to promote skills such as enterprise management and problem solving at 11% and finally to provide a channel of information at 4 %. It clearly shows that reason for forming investment group by women entrepreneurs is to have easy access to credit.

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Table 4 Purpose of forming the group

	Frequency	Percentage
To have easy access to credit	28	63
To provide a channel for information	2	4
To promote skills such as enterprise management and problem solving	5	11
To pull together scarce resources	10	22
Total	45	100

Table 5 Knowledge to develop a business proposal

	Frequency	Percentage
Yes	44	73
No	16	27
Total	60	100

The respondents were required to indicate if they knew how to develop a business proposal. 73% of the respondents had knowledge on developing a business proposal whereas 27% did not.

Table 6 Did you learn in order to access credit?

	Frequency	Percentage
Yes	34	77
No	10	23
Total	44	100

As can be seen in table 6, 77% of the respondents learnt how to develop a business proposal so as to access credit while 23% of the respondents did not learn in order to access credit.This show majority of the respondents learnt to write proposals in order to access credit.

Account operation

Table 7 Purpose of the account

	Frequency	Percentage
To save money for future use	20	33
To have a day to day personal transaction	4	7
It was a condition for accessing the loan	33	55
Salary processing	3	5
Total	60	100

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The purpose of opening the account is as shown in table 7, 55% of the respondents opened an account as a condition for accessing loan,33% opened to save money 7% opened to have a day to day transaction while 5% opened for salary processing. This shows that majority of the respondents opened bank account as a condition for accessing credit.

Table 8 Strategies adopted by respondents to access credit

Strategy adopted	Frequency	Percentage
Account opening	23	38
Group formation	19	32
Business proposal writing	32	30
Total	60	100

As can be seen in table 8, 38% of the responded had adopted opening an account strategy to access credit, 32% adopted group formation strategy while 30% had adopted business proposal writing strategy to access credit. This indicates that account opening, group formation and business proposal writing are all strategies which are adopted by women entrepreneurs to access credit.

Conclusions

On the objective of business proposal, the study concluded that many of the respondents knew how to write a business proposal and this was for the purpose of accessing credit facility. The use of business proposal influences access to credit facility.

To the objectives of group formation, the study concluded that many women entrepreneurs have formed groups that enables them access credit facilities. The group also enables them to pull together scarce resources thus a strategy that is used by women entrepreneurs.

On the objective of account opening, the study concluded that the respondents have bank accounts or accounts with micro-finance institution. This enables them to access credit facilities and save money for future use thus it is a strategy that the financial institutions use as a gauging aspect for credit providers.

Recommendations

Based on the objectives of the study, the following recommendations were reached. On business proposal, the study recommended that people should be encouraged to learn how to write business proposal in order to access credit. Proposal writing should be made a core subject in colleges. This will equip them with the skill and put it into use when they run a business and when accessing credit.

On group formation, the study recommended that Commercial banks should accept group membership in lieu of physical collateral to access credit, women entrepreneurs be encouraged to form groups that will enable them to pull resources together which acts as collateral when acquiring a credit facility. Additionally, the study recommended that the groups should promote skills such as enterprise management and problem solving in their personal businesses.

To the objective of account opening, the study recommended that the process of opening bank accounts should be simplified to enable more women entreprenuers open bank account to access credit.

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FACTORS AFFECTING THE IMPLEMENTATION OF OPERATIONAL STRATEGIES IN NON GOVERNMENTAL ORGANIZATIONS IN KENYA

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Abstract

Effectiveness of implementation of operational strategies in NGOs in Kenya is inadequate. Strategies put in place by the implementers do not meet the standards of operation hence more often than not the delivery of services to the beneficiaries is wanting. The study examined factors affecting the implementation of the operational strategies in non – governmental organizations in Kenya as conducted in one of the NGOs based in Kenya. It investigated the influence of resource allocation, competitive priorities, information technology and core competencies. A survey of employees at the Action Aid International Kenya, one of the NGOs in Nairobi County was conducted, using a structured self-administered questionnaire. Data was analyzed using qualitative and quantitative techniques with assistance of SPSS. The findings show that alignment of operational strategies with availability of resources ensures greater success in the implementation of operational strategies, that resource allocation ensures availability of necessary operational equipment, that adoption of information technology is important since it enhances positive impact on implementation effectiveness given that information technological systems are vital tools in the dissemination of information that aid in strategy in the communication sector. Further the research found out that organizations core competencies gives the organization a competitive edge as it is not easy to imitate. The study recommends the need of putting up a strong management team with the right skills that work cohesively to be able to achieve the goals, adoption of latest information technologies that is relevant in the market and to maximize on the core competencies and competitive priorities to deliver.

Keywords: Operational strategies, non-governmental organizations, resource allocation, competitive priorities, information technology

Introduction

Porter (1996) viewed strategy as the process of creating a unique and valuable position with means of a set of activities in a way that creates synergistic pursuit of the objectives of a firm. In line with porter's description of strategy, operation strategy concerns the pattern of strategic decisions and actions which set the role, objectives and activities of operations Slack, et al, (2006). Operation strategy binds the various operations decisions and actions into a cohesive consistent response to competitive forces by linking firm policies, programs, systems, and actions into a systematic response to the competitive priorities chosen and communicated by the corporate or business strategy Hayes, et al, (2005). However, operations strategy is narrower in scope, dealing primarily with the operations aspect of the organization, Slack and Lewis, (2001).

Kenya as a country hosts a number of non-governmental organizations who are geared to improve the living standards of its citizenry through the services they offer. Like in any other organization operation strategy implementation among NGOs addresses whom, where, when and how to carry out organization functions. Hence the review of operation strategy implementation and by extension NGOs' performance is necessary in addressing the question of "upwards accountability to donors or

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governments, or others with power over them, and downwards accountability to those affected by them, Bendell, (2006). Successful implementation of operation strategy requires necessary human resource skills, financial resources associated with acquiring new and implementing the technologies; innovation accompanied by the development of best practices in organizational policies, performance improvement and quality control Mintzbergand Quinn, (1992).

Scholte, (2004), states that there are a number of factors that influence NGOs' operational strategy implementation such as limited technical capacities and relatively small resource bases which characterize some NGOs. NGOs sometimes may have limited strategic perspectives and weak linkages with other actors in the development arena. NGOs may have limited managerial and organizational capacities; Shah, (2005). Other factors that have been estimated to influence the implementation of these strategies include resource allocation, competitive priorities, information technology and core competencies.

Literature review

Operations strategy is the development of a long-term plan for using the major resources of the firm for a high degree of compatibility between these resources and the firm's long term corporate strategy. A business strategy is often thought of as a plan or set of intentions that will set the long-term direction of the actions that are needed to ensure future organizational success. The relationship between an organization's strategy and its operations is a key determinant of its ability to achieve long-term success or even survival.

The objective of the operations function is to produce the goods and services required by customers whilst managing resources as efficiently as possible. Theoretical review shows that proponents of the resource - based view argue that it is not the environment but the resources of the organization which form the foundation of the firm's strategy and that superior performance comes from the way that an organization acquires, develops and deploys its resources and builds its capabilities rather than the way it positions itself in the market place as observed by Barney, (1991) and Werner Felt, (1984). Thus, the process of strategy development should be based on a sound understanding of current operational capabilities and an analysis of how these could be developed in the future states Barney, (1991).

Porter's five-force model (1980) is designed to assist in analyzing the relative effect of each of the five industry level competitive forces. All five competitive forces together contribute to the intensity of industry competition and profitability. More specifically, the stronger the force or forces affecting industry competition and profitability; the more important they are in strategy formulation. He described strategic choice as the choice of competitive methods used by the firm to take advantage of opportunities and minimize effects of threats. The five forces framework is composed of threat of entry by potential entrants, bargaining power of buyers, threat of substitutes, bargaining power of suppliers and competitive rivalry within states Porter, (1980). The operating environment is composed of competitors, customers, suppliers and markets.

Prahalad and Gary Hamal proposed this theory in a 1990 article, "The Core Competence or the collective learning and coordination skills behind the firm's product lines''. They made the case that core competencies are the source of competitive advantage and enable the firm to introduce an array of new products and services. According to Prahalad and Hamel (1990), core competencies arise from the integration of multiple technologies and the coordination of diverse production skills core competencies lead to the development of core products which serve as a link between the competencies and end products and enabling value creation in the end products (core products are not directly sold to end users; rather, they are used to build a larger number of end-user products).

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Diffusion theory as propounded by Roger (1995) posits that there are five characteristics of innovations that affect their diffusion which in turn affect organization operation and the accompanying strategies and thereby improve the competitive advantage of the organizations. Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Since decisions are not authoritative or collective, each member of the social system faces his/her own innovation-decision that follows a 5-step process mainly; knowledge – person becomes aware of an innovation and has some idea of how it functions, persuasion – person forms a favorable or unfavorable attitude toward the innovation, decision – person engages in activities that lead to a choice to adopt or reject the innovation, implementation – person puts an innovation into use, and confirmation – person evaluates the results of an innovation-decision already made.

The five characteristics are: relative advantage (the extent to which a technology offers improvements over currently available tools), compatibility (its consistency with social practices and norms among its users), complexity (its ease of use or learning), trialability (the opportunity to try an innovation before committing to use it), and observability (the extent to which the technology's outputs and its gains are clear to see). Each of these characteristics on its own is insufficient to predict either the extent or the rate of diffusion, but diffusion studies have demonstrated that innovations affording advantages, compatibility with existing practices and beliefs, low complexity, potential trialability, and observability, will be more extensively and rapidly diffused than an innovation with the cluster of opposite characteristics.

It thus seems that strategy implementation lends itself to a multitude of theories that could also be employed in enriching the understanding and knowledge on the implementation of operational strategies. From the empirical review, the competitive environment dominating the various sectors of business call for effective strategy formulation and implementation, yet the main problem of managers and business owners is implementation of strategies. The studies and researches show that most big companies have had problems in implementing their strategies and in some occasions were failed in that. A study by Slack et al (2004) on the operations management looks at plans such as: leadership, organizational structure, human resources, information systems and technology, on successful implementation of strategies in service sector as important aspects that can shape the success of the organization.

Nader, et al (2011) undertook a research aimed at identifying factors contributing to the failure of strategic decisions implementation in the Iranian health service sector. Reviewing the literature and using experts' opinion, 16 variables were identified. Using exploratory and confirmatory factor analysis, variables were categorized in the form of 4 factors. The study identified context dimension (0.94), content dimension (0.87), operational dimension (0.71) and structural dimension (0.67) as effective factors on the failure of strategic decisions implementation in Iranian health service sector.

According to Barney (1991), resource based view depend on the unit of analysis to determine the contribution to organization competitive advantage, hence he identifies a variety of units of analysis including, resources, isolating mechanisms, core competences, and routines. However the focus on the individual resource as the relevant unit of analysis, is make the perspective narrow and ignoring the fact that the units or factors possesses strong relations of complementarity among them hence, it is not the individual resource per se, but rather the way they are clustered and their interplay that is important for competitive advantage. In an effort to achieve their objects, organizations usually partner with others in the sector and thereafter not only build the capacity to work with their partners but build the their partners and even changing internal structures and processes as observed by Prahalad and Hamel, (1990). However, over time, collaborators will resemble one another and lose

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their core distinctive competences and this destroys the value of a relationship, since it removes the very rationale for collaborating.

The conceptualised relationship between the independent and dependent variables is shown in Figure 1.

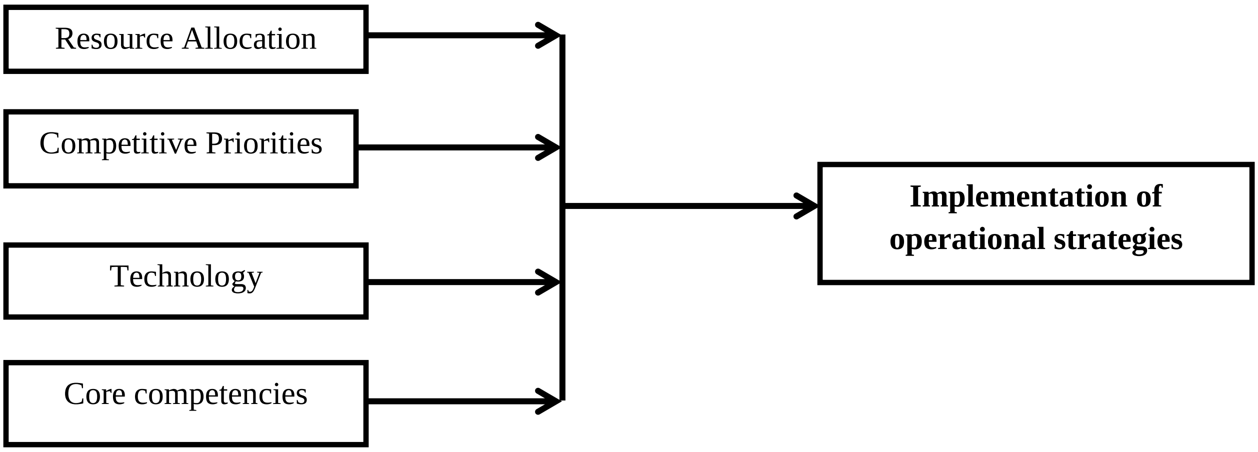

Figure 1: Conceptual Framework

Methodology

The study used a descriptive research design.Cooper and Schindler, (2003) concurred that descriptive design portrays an accurate profile of persons, events, or account of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group. Kothari, (2003) preferred descriptive design because it ensures complete description of the situation, making sure that there is minimum bias in the collection of data. The target population was drawn from NGOs in Kenya. The study population consisted of fifteen (15) management staff and (54) operational staff drawn from the Human Resource (HR) department of ActionAid Kenya. The study utilized a self-administered structured questionnaire, which was refined after a pilot study. In addition, the data collection tool helped the respondents to respond more easily and conveniently. Adam and Swamidass, (1989) noted that questionnaires helps accumulate and summarize results more efficiently.

The Statistical Package for Social Scientists (SPSS) was used to analyze the data. In addition, a linear multiple regression analysis was conducted so as to test the relationship among variables (independent) on the implementation of operational strategies. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study.Kothari, (2004) found that a one way Analysis of variance test can be carried out to identify how each of the independent variable influences the dependent variable. The study used correlation and regression models to analyze the factors affecting the implementation of operational strategies in non-governmental organizations.The relationship thought to relate the dependent and independent variables was $Y= 9.699 + 0.455X1+ 0.683X2+ 0.915X3+ 0.733X4 + \varepsilon$, Where Y is the dependent variable (Implementation of operational strategies), X1 is the Competitive priorities variable, X2 is Technology variable, X3 is core competencies variable and X4 is strategic resource allocation factor.The Cronbach's alpha reliability index was 0.765 this was judged to be acceptable, as it is more than the 0.70 value recommended minimum notes Wynd et al, (2003). It is also deemed acceptable by Santos, (1999).

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Results

From the data collected, 60 out of the 69 questionnaires administeredwere duly filled in and returned representing a 86.9% response rate. This is considered satisfactory to make conclusions for the study. According to Mugenda and Mugenda (2003), a 50% response rate is adequate, 60% good and above 70% rated very good. The findings indicate 40 out of the 69 respondents (42%) agreed that NGOs were successful. Data findings revealed that majority of the respondents agreed that alignment of operational strategies with availability of resources ensures greater successes in the implementation of operational strategies as shown by a mean of 4.24; that resource allocation ensures the availability of the necessary operational equipment, facilities which enhance the implementation of operational strategies as shown by a mean of 3.96; that resource allocation facilitates activities, task and processes that are necessary in the implementation of operational strategy as shown by a mean of 3.83; that strategy implementation incurs costs which are catered for by allocated resources which must be sufficient, as shown by a mean of 3.82. The direction of influence of each of the independent variables on the dependent variable was positive.

Respondents agreed that to successfully compete in low cost segment, an organization must be the low-cost operator or producer, thus it must implement operation strategies that promote low cost as shown by a mean of 4.13; that the ability of a firm to provide consistent and fast delivery is important for its competitive advantage hence influencing the implementation of operational strategy as shown by a mean of 4.0; that competitive priorities include cost, quality, delivery, and flexibility by which an organization can add value to its processes, services and products as shown by a mean of 3.97; and that an organization must establish a proper level of service or product quality requirements by the customer so as to effectively compete in the market place and this in turn influence implementation of operational strategy as realized by a mean of 3.74.

The study also sought to establish respondents' opinion on whether competitive priorities affect implementation of operational strategies in the NGO sector. Data findings revealed that most of the respondents felt that competitive priorities affect implementation of operational strategies in the NGO sector as found by 53%, while the remaining 47% felt that it does not. The findings concur with those of Skinner (1996) who found that the key to developing an effective operations strategy lies in understanding how to create or add value for customers through competitive priority or priorities that are selected to support a given strategy.

Most of the respondents agreed that technology is essential in the implementation of operational strategy as it facilitates performance of activities and tasks as shown by a mean of 4.4; that technology is important in strategy implementation and helps achieve a significant positive impact on implementation effectiveness as shown by a mean of 4.3; that technology obsolesce is a challenge to the implementation of operational strategy in the face of changing trends in the NGOs sector as shown by a mean of 4.1; that technological software forms a vital part of the technological process and influences operational strategy implementation as shown by a mean of 4.0; and that information technological systems are vital tools in the dissemination of information that aid in strategy implementation in the communication sector as shown by a mean of 3.7.

The finding corroborates those of Cumps, et al, (2006) who found that technology has also dramatically affected one of the basic concepts in operations strategy: that of making trade-offs between priorities. With advances in technology, managers no longer have to make pure trade-offs between competitive priorities as they once did. Instead, today's technology allows firms to compete on several priorities simultaneously, resulting in shifts to superior performance curves.

Fifty six percent (56%) of the respondents felt that core competencies affect marketing strategy implementation. The findings agree with those of Prahalad and Hamel (1990) who posits that competencies are the basis of strategy implementation and the root of competitiveness. In the long run, competitiveness derives from an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products. The real sources of competitive advantages are to be found in management's ability to consolidate corporate-wide technologies and production skills into competencies that empower individual businesses to adapt quickly to changing opportunities thus enhancing corporate performance.

In addition, a linear multiple regression analysis was conducted so as to test the relationship among variables (independent) on the implementation of operational strategies. Statistical package for social sciences (SPSS) was applied to code, enter and compute the measurements of the multiple regressions for the study. The four independent variables that were studied, explain only 78.6% of the implementation of operational strategies. This therefore means that other factors not studied in this research contribute 21.4% of the implementation of operational strategies. Therefore, further research should be conducted to investigate the other factors (21.4%) that affect implementation of operational strategies conducted a multiple regression analysis so as to determine the relationship between y and the four variables. As per the SPSS generated table, the equation ($Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$) becomes: $Y= 9.699 + 0.455X1+ 0.683X2+ 0.915X3+ 0.733X4 + \varepsilon$

Where Y is the dependent variable (Implementation of operational strategies), X1 is the Competitive priorities variable, X2 is Technology variable, X3 is core competencies variable and X4 is strategic resource allocation factor.

According to the regression equation established, taking all factors into account (Competitive priorities, technology, core competencies and resource allocation.) constant at zero, Implementation of operational strategies will be 9.699. The data findings analyzed also show that taking all other independent variables at zero; a unit increase in Core competencies will lead to a 0.915 increase in Implementation of operational strategies; a unit increase in resource allocation will lead to a 0.733 increase in implementation of operational strategies; a unit increase in technology will lead to a 0.683 increase in implementation of operational strategies; a unit increase in competitive priorities will lead to a 0.455 increase in implementation of operational strategies. This infers that Competitive priorities contribute more to the implementation of operational strategies followed by core competencies.At 5% level of significance and 95% level of confidence, core competencies had a 0.000 level of significance; technology showed a 0.009 level of significant, resource allocation had a 0.015 level of significant; Competitive priorities showed a 0.006 level of significant; hence the most significant factor is Competitive priorities.

Discussion

The study set out to determine factors affecting the implementation of operational strategies in NGOs in Kenya. The variables suspected to bear on the implementation were resource allocation, information technology, core competencies, and competitive priorities. A review of related literature and empirical studies informed the formulation of questions used to obtain the research data. The results indicate that there is a strong positive relationship between the independent variables and dependent variable. Results from study showed that alignment of operational strategies with availability of resources ensures greater success in the implementation of operational strategies; that technology is important since it draws positive impact on implementation effectiveness because information technological systems are vital tools in the dissemination of information that aid in strategy in the communication sector. Further, the study found that organization's core competency is an important factor as it gives the organization a competitive advantage since it is difficult to imitate when effectively matched to strategic targets during strategy implementation.

These findings are in agreement with those of Slack et al. (2004b) who states that strategy in a business organization is essentially about how the organization seeks tosurvive and prosper within its environment over the long-term. The decisions andactions taken within its operations have a direct impact on the basis on which anorganization is able to do this. The way in which an organization secures, deploysand utilizes its resources will determine the extent to which it can successfully pursuespecific performance objectives.The five operations performance objectives are cost, quality, speed, dependability and flexibility.Operation strategy binds the various operations, decisions and actions into a cohesive consistent response to competitive forces by linking firm policies, programs, systems, and actions into a systematic response to the competitive priorities chosen and communicated by the corporate or business strategy (Hayes, Pisano, Upton & Wheelwright, 2005).

The findings also indicated how competitive priorities affect the implementation of operational strategies. This is in agreement with those of Voss (1995), who found that to successfully compete in aniche; a firm must necessarily be the low-cost producer. However even doing this doesn’t always guarantee profitability and success, as products sold strictly on the basis of cost are typically commodity-like since customers cannot easily distinguish the products made by one firm from those of another therefore customers use cost as the primary determinant in making a purchase.

The study also established that information technology impacts on the implementation of operational strategies as stated byCumpset al, (2006b). They observed that technology has dramatically affected one of the basic concepts in operations strategy: that of making trade-offs between priorities. With advances in technology, managers no longer have to make pure trade-offs between competitive priorities as they once did. Instead, today’s technology allows firms to compete on several priorities simultaneously, resulting in shifts to superior performance curves.

A positive relationship between core competencies and implementation of strategies exists. This corroborated a previous study by Prahalad Hamel, (1990) who established that if a business unit manages to develop its own core competencies over time due to its autonomy it may not share them with other businesses. As a solution to this problem, corporate managers should have the ability to allocate not only cash, but also core competencies among businesses.

Implication to research and practice

Despite the centrality of implementation of operational strategy issues, there has been relatively little scholarly study of the factors that affect their implementation in the non-governmental organizations sector context. Few studies by Slack, (2006c), Roger, (1995), Prahalad and Hamel, (1990), Caeldries and Van Dierdonck (1988) have empirically investigated the factors affecting the implementation of operational strategies in non-governmental organizations. However, they have not addressed the current trends in NGOs in line with operational strategies implementation, since the external environment is becoming more and more turbulent, with the need for managers to develop and implement specific operational strategies so as to achieve better business performance. This research provides new knowledge to guide managers in understanding what kind of factors influence the implementation of operational strategies, which is viewed as critical to organizational performance.

Conclusion

The study set out to examine factors which affect implementation of operational strategies in NGOs in Kenya. The variables investigated were resource allocation, core competencies, competitive

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priorities and information technology. The findings show that alignment of operational strategies with availability of resources ensures greater successes in the implementation of operational strategies. It was also observed that to successfully compete in low cost segment, an organization must be the low-cost operator or producer, thus must implement operation strategies that promote low cost. Further, the study concludes that technology is essential in the implementation of operation strategy as it facilitates performance of activities and tasks.

The study also concludes that core competencies affect marketing strategy implementation to a great extent, that successful strategy implementation depends on competent employees and their capabilities. The results of this research invite the attention of management and operational staff at large to employ effective strategies for the implementation of operational strategies. They should at all times put together a strong management team with the right skills that works cohesively to enable them implement the laid out strategies.

Future research

There is need to conduct more studies on factors affecting the implementation of not only operational strategies but other strategies in all sectors. This study investigated factors affecting the implementation of operational strategies in non-governmental organizations at ActionAid International, Kenya. To this end therefore, this study should be replicated in a different NGO operating out of Nairobi to find out if the same findings hold for it and othergovernment parastatals and to establish the challenges faced in the process of operational strategies implementation.

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SOCIO ECONOMIC FACTORS AFFECTING STRATEGY IMPLEMENTATION AMONG QUOTED COMPANIES IN NSE

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Abstract

The global business environment is dynamic with new business opportunities for growth at the same time bringing exposure to new competitors. Companies have embarked on devising new effective strategies to take advantage of the new opportunities with a goal of effective strategy implementation. High failure rates and challenges have been reported in translating grand plans into action. A research gap was identified in lack of literature on the strategy implementation in Nairobi Securities Exchange (NSE) quoted companies in Kenya. This study establishes what factors affect strategy implementation and more specifically the socio economic factors affecting strategy implementation in companies quoted in NSE given the dearth of empirical literature on the subject. The research examines the effect of financial resources; organizational socialization; employees' involvement and leadership on strategy implementation. Stratified random sampling was applied to achieve desired representation from various subgroups with a target population of management staff in public listed companies in Kenya. Descriptive statistics was used to analyze data. The results reveal that commercial listed firms in a turbulent growth industry must strive for an understanding both of the existing organizational structure and probable future advances that can affect their products and services. The study also advocates for adoption of a well-structured bottom up strategy implementation approach for major strategic issues.

Key Words: Strategy implementation, Social economic factors.

Introduction

According to Beer & Eisenstat (2000) strategic plans are often accompanied by parallel implementation plans, which outline responsibilities, timelines, resource requirements and organizational or operational changes required in order to deliver on the strategic plan initiatives. The key to competitiveness no longer lies in employing strategies which have been successful in the past or in emulating strategies of successful competitors more so with the accelerating dynamics of competition.Feurer and Chaharbaghi(1994) emphasize that real competitive advantage results from developing strategies that differentiate an organization from its competitors in the eyes of the customers. Such a differentiation can only be realized if these strategies encompass both product and operational excellence. Sveiby (1992) argues that there is now a general cognizance that creativity is the key to successful strategy formulation and implementation. Majaro (1992) acknowledges that very few people in organizations dispute the importance of creativity but in the past little has been done by industry actively to foster it.

Implementing strategy is challenging for many organizations, yet it remains under-researched. Hrebiniak and Joyce (1984) states that learning from emotional responses early in the implementation process, which reveal the presence of unexpected emotional triggers, can allow timely adjustments. In other words, emotions can serve as advance feedback signals in strategy implementation. Researchers have revealed a number of problems in strategy implementation including; weak management roles in implementation, communication failure, non-commitment, unawareness or misunderstanding of the strategy, unaligned organizational systems and resources, poor coordination and sharing of responsibilities, inadequate capabilities, competing activities, and uncontrollable environmental factors (Alexander, 1985; Giles, 2007; Galpin, 1998; Lares-Mankki, 1994; Beer and Eisenstat, 2000).Studies carried out by scholars in the field of strategic management seems more concentrated in strategic planning, strategy formulation, strategic change management, strategic responses and strategy marketing .These studies and more did not focus on strategy implementation challenges leaving the field of strategy implementation inexhaustibly explored. Kenyan companies which may otherwise perform well in the Nairobi Stock Exchange are diversely affected in that their share value could go down drastically due to withdrawal by foreign investors for fear of losing in case of chaos.

Literature review

The term ‘strategic plan’ often is used as an umbrella term covering all these aspects, as they are all critical to the success of a strategic planning effort, and are all very much the focus of any such work we do. Strategy implementation is a component of strategic management.Pearce and Robinson (1994) state that strategic management by itself is a process and it refers to a set of decisions and actions that result in the formulation and implementation of long term designed plans to achieve organizational objectives. Grand strategies remain as good ideas unless they are translated into organization action. Managers must therefore move from ‘planning their work’ to ‘working their plan’ as they shift their focus from strategy formulation to strategy implementation. Johnson, Scholes and Whittington (2008) agree that although implementation is usually considered after strategy has been formulated, implementation is a key part of strategic management. Strategy formulation and strategy implementation should thus be considered as two sides of the same coin.Thompson, Strickland and Gamble (2005) commented that the strategy-implementer’s task is to convert the strategic plan into action and get on with what needs to be done to achieve the vision and targeted objectives.There are several theories of implementation available in strategy literature. Okumus (2003) makes an insightful review of the available theories in strategy implementation. One of the earlier theories was in the form of the popular McKinsey's 7-S framework by Perlitz (1993) that considered seven factors of implementation. These factors are: strategy, structure, systems, style, staff, skills, and subordinate goals. The conceptual theories developed over the succeeding two decades, for instance, by Stonich (1982), Hrebiniak and Joyce (1984), consist of well defined and critical implementation factors pointing out similarity in the approaches. The theories for instance, use quite similar factors of implementation such as organizational structure, socialization, people, communication, control and outcome. Each of these scholarly contributions recommends the process to be built around a set of implementation factors. These theories might differ in terms of the selection of implementation factors but the relative emphasis on each factor in the set. Nevertheless, it is evident that there are a set of implementation factors each significant enough to be treated separately in terms of the managerial emphasis laid on them. Figure 1 shows the conceptualized relationship of the study.

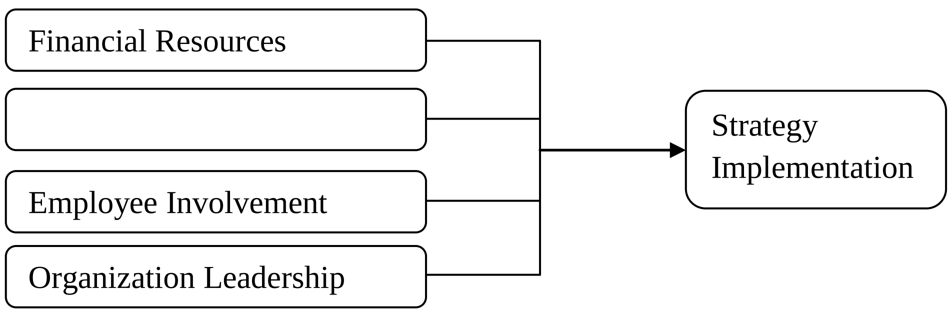

Figure 1: Conceptual framework

The goal of strategy implementation is to provide key personnel in charge of processes with an external standard for measuring the quality and cost of internal activities, and to help identify where opportunities for improvement might reside. Strategy implementation helps organizations to focus on the external environment and to improve process efficiency as well as conceptually and practically improve administrative processes. Currently, the focus of strategy implementation literature has shifted and addresses issues on improving the available resources by identifying the missing links with socio-economic situation in organizations. Most of the available studies have focused on strategy implementation in the developed countries whose financial footing and strategic approach is different from that of companies in Kenya. There is a research gap following lack of literature on the strategy implementation in quoted companies in Kenya. Given the dearth of empirical literature on the subject, one is led to explore further the socio-economic factors influencing strategy implementation in the context of quoted companies in NSE.

Methodology

A survey of companies listed in the Nairobi Securities Exchange was used as a guide for the study adopting an explanatory design method. In selecting the respondents, stratified random sampling was used where subjects were selected in such a way that the existing subgroups in the population are more or less reproduced in the sample. The target population included the management staff in public listed companies in Kenya.The study used primary data generated through administration of questionnaires.Descriptive statistics such as means, standard deviation, frequency distribution and percentages were used to analyze the data and multiple regression analysis was conducted to determine the relationship between dependent and independent variables. This took the form of;

$$Y= \beta_0+\beta_1X_1+\beta_2X_{2+}\ \beta_3X_3+\beta_4X_4+€$$

Where:-

'Y' is the dependent variable and it represents strategy implementation in the NSE.

'β_0' is the autonomous component that is strategy implementation.

'β_1' is the coefficient of proportionality with regards to structure

'X_1' is one of the explanatory variable, Structure.

'β_2' is a coefficient of proportionality with regards to socialization.

'X_2' presents the second independent variable socialization.

'β_3' is the coefficient of proportionality with regards to Leadership..

'X_3' is one of our explanatory variables, Leadership.

'β_4' is the coefficient of proportionality with regards to Resources.

'X_4' is one of our explanatory variable, Resources.

'€' is a random error term and takes care of other factors that affect strategy implementation which are not defined in the model.

Results and discussion

The researcher focused on the organizations listed in NSE with 96 managers as the targeted respondents drawn from Nairobi and its environment. Only 61 questionnaires were returned duly filled in accounting for a 64% responsive rate. On financial resources the results show that recruitment of new staff requires that human resource team assesses the competency of the personnel so that they are compatible with the new strategy was ranked highest with a mean of 3.85 as shown on table 1.

Table 1: Financial resources

	Mean	Std Dev
Current human financial resources are trained with future demands.	3.45	1.24
Resource requirements are documented and are realistic based on previous projects and experiences.	3.63	1.26
Financial resources are allocated on need basis.	3.57	1.44
When recruiting new staff, human resource team assesses the competency of the personnel for compatibility with the new strategy.	3.85	1.36

Resource requirements being documented to ensure they are realistic based on previous projects and experiences was also attested to by the respondents with a mean of 3.63. Most of the respondents also admitted financial resources are allocated on need bases and training of workforce with future demands with means of 3.57 and 3.45 respectively. The findings from this study indicate that, organization requires financial resources in order to implement strategy.

Concerning the organization socialization, respondents strongly agreed that, their respective companies are clear about why they exist and where they are going as indicated by mean of 4.40 as indicated on table 2.

Table 2: Organization socialization

	Mean	Std Dev
The company is clear about why they exist and where they are going	4.40	0.95
Employees embrace the defined mission.	3.92	1.02
Employees fully understand the needs of their customers and are able to respond to changing marketplace demands.	3.77	1.09
There are efficient and effective systems, structures, and processes in place to maintain focus on the mission	3.68	1.30
Employees are treated in a fair and consistent manner.	3.68	1.32
Management decisions take into consideration the effect of outcome on people within the organization.	3.77	1.09

Respondents also expressed opinions that, employees in their companies embrace the defined mission and see the link between their jobs as well as the mission, and are willing to give their all to achieve it (mean of 3.92). Employees in addition fully understand the needs of their customers and are able to respond to changing marketplace demands whilst the management decisions take into consideration the effect of outcome on people within the organization (given by mean of 3.77). While implementing new strategy, managing organization socialization-strategy relationship is very important since the components of the organization including structure, staff, systems, styles, and people influence the way key managerial tasks are executed and how critical management relationship are formed.

Table 3 reveals findings that the managers are able to handle the number of staff under them, (mean of 4.40) where all staff members are aware of the reporting lines, (mean of 4.32) and each member of staff has a job card that specifies what jobs one undertakes (mean 4.03).

Table 3: Employees involvement in strategy formulation

	Mean	Std Dev
Each member of staff has a job card that specifies jobs undertaken	4.03	1.30
All members of staff are aware of the reporting lines	4.32	1.01
Managers are able to handle the number of staff under him	4.40	0.86
The decisions are cascaded from the top management to bottom.	3.98	1.20
Issues are deliberated on and cascaded to top management.	3.85	1.36

It is imperative to note that, once the organization designs the strategy, it may not be possible to implement that strategy on the previous structure that was there and therefore it may be important to change the structure altogether so that each line of management will be in a position to handle a specified size of financial resources including staff management (Pearce and Robinson, 2005). The results imply that organizations achieve desired results when all employees are empowered.

On leadership the results show that everyone in the organization is treated equally and on merit (mean of 3.80) where the leaders encourage staff growth, learning and taking on as much as they want to, at a pace they can handle (mean of 3.78).This is illustrated on table 4.

Table 4: Leadership

	Mean	Std Dev
Leaders work harder and more determinedly than anyone else.	3.62	1.18
Everyone is treated equally and on merit.	3.80	1.19
Leaders are of unquestionable integrity.	3.57	1.36
Leaders encourage staff to grow, to learn and to take on as much as they want to, at a pace they can handle.	3.78	1.24
There's an effective system for developing leaders	3.55	1.45

In addition the leaders work harder and more determinedly than anyone else as given by a mean of 3.62. The results are in line with arguments by Pearce and Robinson (1997) in that, a strategic leader is needed for the effective implementation of strategy to guide the organization to deal with change as well as clarify strategic intent that builds and shapes the organization socialization to fit with opportunities and challenges that change affords.

Analysis of factors that contribute to strategic implementation revealed that respondents to a large extent understood their goals, evaluated and monitored them on regular basis with a mean of 4.03. In addition, respondents acknowledged that, their respective companies had an effective appreciation and approach towards corporate responsibility (mean of 3.80) whilst their customers could utilize the transaction cards to access services in other outlets (mean of 3.70). Moreover, most of the respondents' organizations had on average, opened more accounts per month than the closed ones (3.68). This indicates customer product satisfaction given by a mean of 3.62. Strategy implementation is a key part of the strategic management where crafting and executing strategy since it's the heart and soul of managing the enterprise. Nevertheless, Thompson, Strickland and Gamble(2005) indicates that the biggest challenge in strategy implementation is to create a series of tight fits between strategy and the organization competencies, capability and structure; strategy and budgetary allocations; strategy and policy; strategy and internal support systems; strategy and reward system and strategy and organization socialization.

Inferential findings

The study revealed that the most prevalent variable was structures with beta value of 0.57 while leadership, organization socialization and financial resources had beta value of 0.51, 0.49and 0.41 respectively as indicated on table 6.

Table 6: Coefficients

	Standardized coefficients		
	B	Beta	Sig
Constant	0.71		0.49
Structure	0.57	0.57	0.44
Organization socialization	0.57	0.49	0.44
Leadership	0.49	0.51	0.39
Financial resources	0.41	0.41	0.95

The significant level was 5% implying that, the higher the significant level for an explanatory variable, the lower the confidence level and thus the less the variable explains changes in the dependent variable. Results indicate that, organizational structure is the only explanatory variable explaining changes in strategy significantly (gives confidence level greater that 95%) as opposed to other explanatory variables). The analytical model has an autonomy value of 0.71 while probabilistic values were 0.57 for structure, 0.49 for organization socialization, 0.51 for leadership and 0.41 for financial resources. Given that the original model was as follows:

$\mathbf{Y= \beta_0+\beta_1X_1+\beta_2X_{2+}\ \beta_3X_3+\beta_4X_4 +\epsilon}$

The model can then be generated as follows:

$\mathbf{Y = 0.71 + 0.57X_1 + 0.49X_2 + 0.51X_3 + 0.41X_4 + \epsilon}$

From the model, the constant value of 0.71 implies that the level of strategy implementation in commercial listed firms will have an index of 0.71 when coefficients for all variable factors are zero. The results also indicate that a change in one unit of structure will lead to a 57% change in strategy implementation in the same direction. At the same time, change in organization socialization, leadership and financial resources by 1 unit in each, will result to a positive change in strategy implementation by 49%, 51% and 41% respectively. This is an indication that the independent variables under investigation were positively related to the dependent variable (strategy implementation).

R2 is called the coefficient of determination and tells us the proportion of the change in strategy implementation that is caused by the change in explanatory variables. From Table 7, the value of R2 was found to be 0.62 indicating that structure, organization socialization, leadership and financial resources explained 62% of any change in strategy implementation in commercial listed firms.

Table 7: Multivariate R-Square

Model Summary									
Model	R	R^2	Adjusted R^2	Std. Error	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.79	0.62	0.587	0.39	0.62	17.80	5	54	0.000
Predictors: (Constant), Structure, Organization socialization, Financial resources, Leadership									

The study also reveals that the remaining 38% could be explained by other socio-economic factors affecting strategy implementation. When F is greater than 1, the set of explanatory variables is considered to be significantly determining any changes in strategy implementation. Level of significance of the different explanatory variables was determined by analyzingboth the t value and R2 for each explanatory variableas a single variant as shown on table 8.

Table 8: Single-Variate T-Ratio and R-Square

	T-Value	R-Squared
Structure	3.06	0.14
Organization socialization	4.67	0.27
Leadership	5.10	0.31
Financial resources	4.52	0.26

If t >2, the explanatory variable is said to be statistically significant. Regarding the statistical significance of the explanatory variable towards the strategy implementation, the researcher took a general assumption that those variables whose t > 2 highly significant and therefore relevant in determining strategy implementation. Leadership was found to be the most statistically significant with T-Value of 5.10 while organization socialization, financial resources and structure had statistical significance of 4.67, 4.52 and 3.06 respectively.

Pearson's correlationwas used to determine the degree of relationship between the explanatory variables as shown on table 9.

Table 9: Pearson's correlation

	Strategy Implementation	Structure	Organization Socialization	Leadership	Financial Resources
Strategy Implementation	1.00	0.57	0.52	0.56	0.51
Structure	0.57	1.00	0.37	0.40	0.37
Organization Socialization	0.52	0.37	1.00	0.55	0.54
Leadership	0.56	0.40	0.55	1.00	0.56
Financial Resources	0.51	0.37	0.54	0.56	1.00

Findings indicate that, the relationship between all the variables is significant since the significance level at 95% confidence level; one tail test is less than 0.05.Highest correlation was found between organizational structure and strategy implementation with coefficient factor of 0.57. Others were strategy implementation and leadership having a correlation coefficient of 0.56. Leadership and organization socialization were also found to be correlating highly with correlation coefficient of 0.55 while financial resources were also found to be correlating highly with leadership (0.56). Least correlation was identified between financial resources and structure (0.37). The results indicate that, with proper employment of structure will insignificantly affect the success of strategy implementation. Organizational structure is particularly generation of an organization's overall objective(s), principles and tactics relating to the strategy that the organization uses. This implies that the degree of substitutability was highest for structures and strategy implementation and lowest for financial resources and structure. This can further be explained that utilizing more of financial resources by 1 unit would mean reduction on the emphasis of organizational structure by 37%.

Summary and conclusion

Given results from this study, the researcher concludes that, leadership, organization socialization, structure and financial resources are all significant factors determining strategy implementation for commercial listed firms in Kenya. Organizational structure, nonetheless, has the greatest influence in strategy implementation. All firms and particularly in turbulent growth industries must strive for understanding both of the existing technological advances and the probable future advances that can affect their products and services (Pearce & Robinson, 1997). Most of the respondents indicated that financial resources in their companies are allocated on need basis and requirements are documented to ensure they are realistic based on previous projects and experiences. Most firms require financial resources to implement the strategies.

Organization socialization defined the company's mission and vision and whether the employees link the vision and mission with their jobs. Concerning the organization socialization, respondents strongly agreed that, their respective companies had clear visions and missions coupled up with statements allowing the employees to fully understand the needs of the customers. From the findings it was revealed that the majority of the managers are able to handle the number of staff under them and each employee has clearly defined roles and responsibilities. Strategy implementation however should undergo changes in some organizations in order to ensure that employees become a part of it and feel fully involved and that it is not just a top order or instruction. Majority of organizations treat all the employees equally and that leadership positions or decision making is awarded on merit. Leaders also ensure that learning takes place and that the organization has effective leadership teams that are able to deal with change as well as embracing change and clarifies strategic intent that builds the organization and shape the organization socialization to fit with opportunities and challenges that change affords.

According to the study, commercial listed firms, which operate in a turbulent growth industry, must strive for an understanding both of the existing organizational structure and probable future advances that can affect their products and services. Another recommendation is that listed firms should adopt a well structured bottom up strategy implementation approach for major strategic issues. This could play a vital role in a strategy implementation. The approach would imply a proactive team input in the implementation process. To enhance this, all organization staff should be invited to participate in every step of the management process. The decision on a course of action should be taken by the whole team.

To enhance an effective system for strategy implementation adequate training on leadership should be performed since problems of implementation are really issues about how leaders influence behavior, change the course of events, and overcome resistance. Therefore, good leadership in listed firms should be put in place for successful strategy implementation. In addition, the listed firms should align their human financial resources with future demands. There should be efficient and effective systems, structures, and processes in place to maintain focus on the mission. In addition, employees should be treated in a fair and consistent manner with effective communication throughout the company and listed firms should develop work plans to support the implementation of strategy.

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