
**EFFECT OF COMPETITIVE STRATEGIES ON PERFORMANCE OF
PUBLIC UNIVERSITIES IN KENYA (NAIROBI COUNTY)**

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Abstract

Tomorrow's opportunities for Universities are supposed to be managed as competently as their daily operations. Competitive strategies employed by Universities in their operations vary widely. The current operational set-up in Kenya's universities is a turbulent one and highly competitive market condition. To ensure survival and sustainability in the market place the public universities require adopting a competitive strategy. The purpose of this study was to establish the effect of competitive strategies on the performance of public universities in Kenya. This research problem was studied using a descriptive survey design. The target population was 50 respondents from which 30 were chosen as the sample size. Stratified disproportionate sampling technique was used to select the sample. A structured questionnaire was used to collect primary data. Responses in the questionnaires were tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 17.0 programme to analyze the data using descriptive statistics. In addition, multiple regression analysis was conducted to establish the relationship between the competitive strategies and market sustainability. The findings were that economies of scale to a very great extent affect performance of universities. It was further established that capacity utilization of resources, reducing operations time and costs, efficiency and cost control, mass production and mass distribution as aspects of cost leadership affected performance in the university to great extent. Differentiation based on product/service, differentiation based on promotion/ advertising campaign and differentiation based on personnel affected performance of the university and market focus affected performance of the university. The study concluded that cost leadership affects performance of universities in Nairobi County, Kenya through achieving economies of scale, capacity utilization of resources, reducing operations time and costs, efficiency and cost control, mass production, forming linkages with service providers, suppliers and other supplementary institutions and mass distribution and that differentiation affect performance of the university through product/service, promotion/ advertising campaign, personnel differentiation. The study recommended that universities should embrace and invest in cost leadership strategies most especially forming linkages with service providers, suppliers and other supplementary institutions since it will enable them achieve competitive advantage as compared to other universities that are not investing in these strategies and that universities should first understand and know their motive and capability before adopting a certain competitive strategy for example market focus.

Keywords: Competitive strategies, Performance of public universities, Kenya

Introduction

Competitive strategies consist of all those moves and approaches that a university has and is taking to attract students, withstand competitive pressure and improve its market position. The strategies adopted are expected to relate to performance of the university. From a scheme developed by Grant (2002), long term strategy should derive from an Institutions attempt to seek and sustain a competitive advantage based on one of the three generic strategies. These are cost leadership, differentiation and focus strategies (Porter, 1985)

Cost leadership strategies depend on some fairly unique capabilities of an institution to achieve and sustain their low cost position within its operation. Differentiation strategy refers to an institution striving to create a market unique program for varied student groups. Competitive strategies dependent on differentiation are designed to appeal to students with special sensitivity for a particular program attribute. Focus strategy is a marketing strategy in which a University concentrates its resources on entering or expanding in a narrow area. It is usually employed where the institution knows its segment and has programs to competitively satisfy its needs (Cole, 1997).

Universities need competitive strategies to enable them overcome the competitive challenges they experience in the environment where they are located. A competitive strategy therefore enables an institution to gain a competitive advantage over other Universities and sustain its success in its existing. A university that does not have appropriate strategies cannot exploit the opportunities available in the market and will automatically fail. Sustainable competitive advantage is born out of core competencies that yield long term benefit to the institution. To succeed in building a sustainable competitive advantage, a university must try to provide what students perceive as superior value (Thompson and Strickland, 2002).

The concept linking an institutions competitive strategy to performance was introduced by Barney (2002). Their research and experience demonstrated that what distinguishes high performers from their competitors is the consistent way they construct and maintain this competitive essence. While many institutions compete on the basis of a single point of differentiation, the competitive essence of high performers is almost always achieved through the balance, alignment and renewal of what they identified as the three building blocks of high performance: Market focus position, distinctive capabilities and performance anatomy (Barney, 2002). According to porter (1998), the ability of an institution to outperform its competitor depends on five major factors. The first four set the strategic direction for success. These are ability to take advantage of market Activity trends, ability to capture and protect unfair share of markets, ability to capture premium pricing, prudent creation and introduction of new programs. This entails having people, processes and technology for execution excellence.

University's performance is the measure of standard or prescribed indicators of effectiveness, efficiency and environmental responsibility such as cycle time, productivity, waste reduction, and regulatory compliance. Performance also refers to the metrics relating to how a particular request is handled or the act performing: of doing something successfully, using knowledge as distinguished from merely possessing it. It is the outcome of all the institutions operations and strategies.

Kaplan and Norton (2011) introduced the balanced score card as a more realistic measure of performance. The balance scorecard defines a strategy's cause and effect relationships and provides a framework to organizing strategic objectives into the financial perspective in line with the vision and mission of the institution. Key items linked are financials, student's service and satisfaction index, learning and growth within the University and internal university processes. Internal university process is the path to achieving strong financial results and superior student satisfaction.

Pearce and Robinson (2003) highlight three economic goals, which define a university's performance guided by strategic direction. These goals are survival in the market, growth and profitability. A university growth is tied inexplicitly to its survival and profitability. Survival means a long term strategy to remain in operation and inability to do so means that the university is not capable of satisfying its aims. Although product impact market studies (PIMS) have shown that growth in the market share is correlated with profitability, other important forms of growth do exist. Growth in the number of areas served, in the variety of programs offered. Growth means change and proactive change means change is essential in a dynamic operational environment.

Competitive strategies employed by Universities in their operations vary widely depending on the operating environment. The current operational set up in Kenya's education sector is a dynamic one and highly competitive with the emergence of many private universities. The privatization of university education and liberation of student selection since the formation of Commission of University Education (CUE) in 2012 changed the environment in which the public universities operate. To ensure survival and sustainability in the market place, the public universities need to adopt competitive strategies to ensure that they outperform their competitors. Public universities following competitive strategies may realize a performance advantage over competitors that pursue other generic strategy type or those that are stuck in the middle. The competitive strategies include marketing portfolios with adequate human and capital resources, social responsibility activities, brand images, convenience retailing, marketing share position and length of time in the industry.

In recent years, government and international donors have challenged universities in Africa to justify their existence and their claims to the massive funds allocated to them. As a result of the liberation, turbulence in the economy, new government policies and sprouting of many private universities, public universities have been undergoing changes to survive and compete effectively as more and more technical colleges are awarded charters to become fully fledged universities. This study is motivated by the need to fill this gap in knowledge. The study therefore sought to establish the effect of competitive strategies on performance of public universities in Kenya basing on Nairobi County

Public Universities in Kenya

A University is an institute of higher education and research, which grants academic degrees at all levels, (Bachelor, Master, doctorate, and diploma), in a variety of subjects as guided by the University statutes. A university provides both tertiary and quaternary education. In Kenya, Public Universities were created under the Act of parliament to carry out research using their variety of qualified staff in different disciplines. The primary purpose of research, outreach and extension constituted the basis on which research goals were set and measures by which fulfillment of these goals were established.

The privatization of Universities and liberalization of the Kenya economy in the 1990s changed the competitive environment in which the universities operates. This contributed to the universities repositioning themselves for the challenge and development of both strategic and performance objectives. Public universities, as other government institutions operate within such an environment and are therefore environment dependent. As a result of the liberation, turbulence in the economy, and new government policies, public universities have been undergoing changes to survive and compete effectively (GoK, 2005). There are twenty two public universities in Kenya KCCPS (2018)

In almost all African countries, public Universities receive financial assistance from the government. The result is that the level of higher education facilities in Kenya has for long depended on the soundness of the national economic performance. From the 1980s, most African countries experienced financial constraints due to poor economic performance and rapid population growth, added to the need to provide other services like primary education, food and shelter. University education therefore, has faced severe competition from other sector for limited government funds.

Many public universities are established and continue to be established in Kenya in order to improve the level of higher education, learning and absorption of swelling number of students from high schools. The rapid expansion of university education is a spontaneous response to the high demand. With the increasing large flows of students from schools, popular demand for higher education increased. As a result of the liberation, turbulence in the economy, and new government policies, public universities have been undergoing changes to survive and compete effectively. To cope with the changes, public universities have utilized this need for education by students and expanded the capacity to handle extra students. They have also developed market customized courses to fit in the different market segments.

The universities have also formed linkages with other supplementary institutions such as middle level collages, hospitals and research institutions enhancing market sustainability and forming linkages with customers helps in increasing market growth and sustainability. Having a convenient location in most of the major towns in Kenya and a wide branch network increases market growth and sustainability. However, it is not clear how these competitive strategies have affected the performance of public universities in Kenya hence creating a gap which is to be filled by this research. The choice of Nairobi County is justified by the fact that competition among universities is more intense in Nairobi than any other part of the country.

Theoretical Review

Porter (2008) identifies five forces of competition as fierce rivalry, threat to entry, threat to substitutes, power of suppliers and power of buyers. He upholds that understanding the forces that shape a sectors competition is the basis for developing a strategy. Generic strategies can be effectively correlated to organizational performance by using key strategic practices. Porter posits that if the forces are extreme, no organization earns striking returns on investment and if the forces are benign, most of the companies are profitable. The composition of the five forces varies by industry and that an organization needs a separate strategy for every distinct industry such as the public universities. Porter's (1998) generic strategies comprise of low cost, differentiation, focus and combination strategies. These are commonly conventional as a strategic typology for all organizations.

Porter (1985) asserts that an organization is mostly concerned with the amount of competition within its industry. He asserts that low cost and differentiation are distinct ends of a continuum and that may for no reason be related to one another has sparked a great deal of theoretical debate and empirical research. This debate may have been partly encouraged by the absence of conceptual building blocks supporting his value system theory. Scholars have since postulated theories that argue against Porter's point of view, proposing that low cost and differentiation may really be independent dimensions that should be strongly pursued concurrently (Fournier, 2008). Empirical research using the MIS database by Miller & Dess (2010) suggests that the generic strategy framework could be enhanced by viewing cost, differentiation and focus as three dimensions of strategic positioning other than as three discrete strategies. The idea that pursuing multiple sources of competitive advantage is both feasible and desirable has also been supported by other researchers (White, 2008). Thus, the research in strategic management following from Porter does not provide explicit support for Porters original formulation.

Another key theory on this subject is the Theory of Strategic Balancing. Strategic balancing is founded on the premise that the strategy of an organization is partly comparable to the strategy of an individual. Certainly, the performance of organizations is affected by the actors' behavior, such as the system of leaders' values (Collins et al., 2009). An organization wavers between many antagonistic poles that signify cooperation and competition. This allows for existence of various configurations of alliances that disappear only if the alliance swings in the direction of a mainstream of poles of confrontation.

Strategic balancing is comprised of three models which include: relational, symbiotic and deployment models. Competition attests to be part of the relational model and the model of deployment. It can be liable to undulation between the two aggressive strategies, one being primarily cooperative as depicted by the relational model and the other being predominantly competing as exemplified by the model of deployment. The organization can then take turns in adopting the two strategies so as to keep their relationship balanced. This argument is very close to that of Belsley et al, (1980). According to Belsley et al, (1980), there are three types of competitive relationships: competition-dominated, cooperation-dominated, and equal

relationships. The latter is also comparable to the fluctuation between the relational model and the model of deployment as described by Barney (2002).

Competitive strategies, should concentrate on the management-needs recognition process. A number of Universities have achieved this. Hammer and Champy (2010) used the key intelligence topics (KIT) process to identify and prioritize the major intelligence needs of senior management and the organization itself. This made sure that intelligence operations were successful and suitable intelligence was produced. Their approach is valuable since it allows corporate intelligence staff to recognize strategic issues and as a result senior management can guarantee that action is taken regarding the results given. The additional advantages are that an early warning system can be created and this will allow possible threats to the organization and major players in the industry are identified and monitored.

The mathematical theory of games was invented by Deschamps and Nayak (2008). Game theory is the study of the ways in which strategic interactions among rational players produce outcomes with respect to the preferences (or utilities) of those players, none of which might have been intended by any of them. Game theorists, like economists and philosophers studying rational decision-making, describe these by means of an abstract concept called utility. This refers to the amount of „welfare“ an agent derives from an object or an event. Welfare refers to some normative index of relative well-being, justified by reference to some background framework. In the case of people, it is most typical in economics and applications of game theory to evaluate their relative welfare by reference to their own implicit or explicit judgments of it Mint zberg (1973).

Brands, as a result of innovations and differentiation, can be considered as a method of signaling quality and other product characteristics to consumers. This allows various models developed in game theory to be applied, such as Akerlof (1970) classic “market for lemons” model in which price signals quality. The “hidden” value that may be uncovered by applying game theory is the deterrence value of investments in intellectual capital. As is well known, patents and copyrights add value by deterring competitors from making use of the same work and allow the patent or copyright holder to enjoy exclusive use of the intellectual work for a limited time. However, game theory shows that such a deterrence effect can also occur in the absence of patents and copyrights. The simplest scenario is where the market is limited and there is overcapacity in the industry. In such a scenario, an incumbent that makes a pre-emptive move by making a large investment may deter new entrants if the entrant believes that the incumbent will react aggressively to entry, or if the move allows the incumbent to move so far down the learning curve that it is difficult for new entrants to catch up. The mere fact of making a large investment may be enough to deter entry even if there is no patent or copyright protection. Most of the examples that can be quoted are practical benefits of applying game theory in the valuation of intellectual capital. However, game theory provides additional benefits in allowing one to draw insights about how to gain strategic value from intellectual capital. The conventional strategic management wisdom expounded by many authors (Grant, 2002) is that, in order for a firm's resources (including intellectual capital) to lead to a

sustainable competitive advantage, they must be difficult to replicate, durable and imperfectly mobile or not easily traded.

Empirical Review

The management literature reveals how it has been recognized, that performance of public universities requires well formalized competitive strategies. Szalkai (2003) in a study of sustainable customer relationship in Deutschland berg found that it is often discussed whether traditional marketing concept is an appropriate philosophy in an age of environmental deterioration, resource shortage, explosive population growth and world poverty. Recent marketing paradigms, such as the sustainable marketing concept, state that the survival and the continuing profitability of a public university depends upon its ability to strategically fulfill economic, environmental and social purpose. In setting their strategy and marketing policy, public universities should balance company profits, consumer want satisfaction and public interest. Moreover, they should achieve their objectives in cooperation with stakeholders.

Pimtong, Hanqin and Hailin (2012) investigated the influence of competitive strategies and organizational structure on hotel performance and to explore whether organizational structure has a moderating effect on the relationship between competitive strategies and hotel performance. This study employed a causal and descriptive research design to determine the cause-and-effect relationships among competitive strategies, organizational structure, and hotel performance based on previous studies. A 28-question self-administered questionnaire comprising three sections was employed. The target population for this study was US hotel owners and general and executive managers whose e-mail addresses were listed on a publicly available database. A census survey was carried out and e-mails were sent to all of the hoteliers listed in the database. The results show competitive human resources (HR) strategy to have a direct impact on a hotel's behavioral performance, and a competitive IT strategy to have a direct impact on a hotel's financial performance. Organizational structure is found to have a moderating effect on the relationship between both of these strategies and behavioral performance. However, the results of the current study show that organizational structure has no influence on the relationship between a brand image strategy and a hotel's behavioral performance, nor does it have any moderating effect on the relationship between a hotel's financial performance and its competitive brand image, HR or IT strategy.

Timberlake (2002) in his study on the business case for sustainable development: making a difference toward the earth found that on the level of marketing sustainability, the aspects of competitive advantage are becoming the most stressed issues. Earlier, and for most public universities even today, legal and social pressures played a primordial importance for thinking about and acting in sustainability matter. Nowadays, an increasing number of public universities realize the need to implement corporate sustainability for maintaining competitiveness. Sustainability issues are increasingly integrated into overall company strategy, into strategy of business units and into that of different company's functions as well, such as

innovation, purchasing, marketing, human resource management, and so on. Moreover, performance of public universities-oriented competitive strategies have been identified and elaborated.

Gloria and Ding (2005) investigated the mediating effects of a firm's competitive strategy in the market orientation-performance relationship. Based on a sample of 371 operations firms in China, evidence was found that the three dimensions of market orientation exert different effects on competitive strategy and performance. Among them, customer orientation has the strongest association with competitive strategy and market performance. This lends credence to a component wise approach on the study of the relationship between market orientation and performance. The results of structural equation analyses indicate that the mediating effect of competitive strategy is mainly revealed in innovation strategy, the most vital factor in creating superior value for the company in the emerging market.

Analyzing success factors of leading public universities in new product development Deschamps and Nayak (2008) found, that big public universities seem particularly adept and translate societal improvements, and ideas of their new products often come from analysis of social trends, especially environment trends or interest in healthier eating. However, a range of research reports and management publications admit that an increasing number of public universities is becoming involved in sustainability concerns, but relatively few public universities have adapted corporate sustainability principles and actions as an integrated system. Just so-called high performance businesses serve as examples and may be submitted to benchmark and follow leading practice.

A number of studies have been done on competitive strategies but under different contexts in Kenya. Murage (2011) analyzed the competitive strategies in the petroleum industry and found that service stations use differentiation as a method of obtaining competitive advantage over other service stations. Gathoga (2011) focused on competitive strategies by commercial banks in Kenya. The study revealed that banks in Kenya use various means in order to remain competitive, he also concluded that expansion into other areas by opening new branches has also, been used as a strategy. Kimotho (2012) did a study on the impact of competitive strategies on the financial performance of CFC Stanbic Bank Limited. The link between these competitive strategies and the financial performance of commercial banks form the framework of the study. A case study approach was employed to determine the impact of competitive strategies on the financial performance of commercial banks specifically focusing on CfC Stanbic Bank Ltd in Kenya. Content analysis was used to analyze the data collected in this study. The presentation of the analysis and interpretations was captured in two parts: the first part capturing the general information in regard to those sampled, while the second part was further subdivided into parts capturing; Segmentation Strategies; Price Strategies; Delivery and Distribution Strategies; Promotional Strategies; Risk management strategies; Product and service differentiation strategies and performance of the bank. The results indicate that those companies that are effective at rapidly bringing innovative new products and services to the market have gained a huge competitive edge in today's business

world. The results therefore attributed the improvement in financial performance on the competitive strategies that the bank has been undertaking in the past years of its existence.

Cost-leadership strategy is a pricing strategy in which a company sells the same product at different prices in different markets. It can also refer to the charging of different prices for the same product to different social or geographic sectors of the market. It describes a way to establish the competitive advantage. Cost leadership, in basic words, means the lowest cost of operation in the industry. Consistently making or offering better products that outperform competitors' products (Cole 2011)

Market focus strategy encompasses the intangible, informational aspects of selling and servicing a product as well as the tangible, procedural aspects of product delivery and replenishment. Successful market focus strategies create a competitive advantage for the seller, as customers view these products as unique or superior. Advertising and promotion of a product is based on its differentiating characteristics. Differentiation strategies refer to the approach under which a public university aims to develop and market unique products for different customer segments. Usually employed where a public university has clear competitive advantages, and can sustain an expensive advertising campaign. It is one of three generic marketing strategies (focus strategy and low cost strategy for the other two) that can be adopted by any public university (Cole 2011)

Conceptual framework

A conceptual framework is a figure that shows the relationship between the dependent variable and the independent variable. In this study the dependent variable is performance of public universities while the independent variables are cost leadership strategies, differentiation strategies and market focus. A conceptual framework has been drawn to show the relationship of the dependent variable and the independent variables.

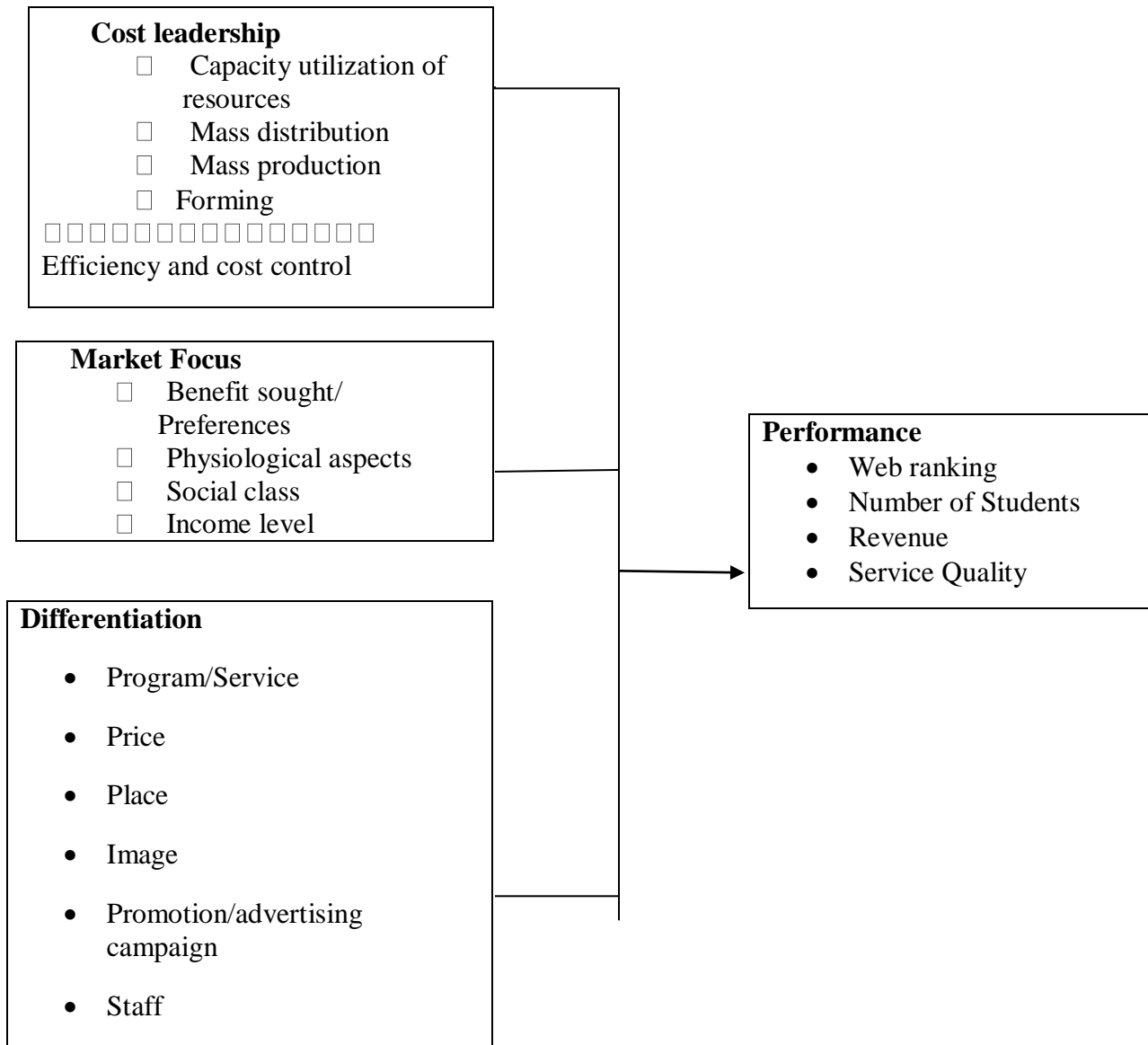


Figure 1: Conceptual Framework
 Source: Self Conceptualization, (2018)

Methodology and data

The intention of research was to gather data at a particular point in time and use it to describe the nature of existing conditions. The study adopted descriptive survey design. Descriptive research is a study designed to depict the participants in an accurate way. The three main ways to collect this information are: Observational, defined as a method of viewing and recording the participants. Case study, defined as an in-depth study of an individual or group of individuals.

The population of the study comprised of Deans of schools, Administrative staff heads, Heads of Academic Divisions and heads of research directorates in the public universities in Nairobi County as shown in the Table.

Table 1: Target Population

Name of University	Public Schools	Deans of Schools	Administrative staff heads	Heads of Academic Divisions	Heads of Research Directorates	Population
UON		5	4	4	2	15
Kenyatta University		6	4	4	1	15
Tech. Uni. of Kenya		3	4	2	1	10
Coop. Uni. Col. of Kenya		3	4	2	1	10
Total						50

Source: (Commission for Higher Education, 2018)

In this study, the sampling frame was drawn from the administrative position of officers at their various universities because they are the ones involved in strategic formulation and implementation. They had a clear understanding of the competitive strategies developed by their universities to ensure they remain competitive. These administrative positions were used so as to ensure that the sampling frame is current, complete, representative and relevant for the attainment of the study objective.

Cooper and Schindler (2003) argue that a sample size of between 10-30% of the target population can be adequate for generalization of the research findings to the study provided the sample is scientifically determined. The study adopted purposive sampling and stratified sampling method since the population was not uniformly distributed across all the strata.

Table 2: Sample Size

Name of University	Public Population	Sample Size
UON	15	10
Kenyatta University	15	10
Tech. Uni. of Kenya	10	5
Coop. Uni. Col. of Kenya	10	5
Total	50	30

Source (Author 2018)

For the purpose of collecting data on the effects of application of competitive strategies on the performance of public universities, primary data (information gathered directly from respondents) was collected using questionnaires. On the other hand secondary data such as the performance of public universities was collected from newspapers, published books, journals and magazines as well as other sources such as annual reports. Primary data was collected using questionnaires on the effects of cost leadership, market focus and differentiation strategies on performance of public universities.

A structured questionnaire was used to collect primary data. The questionnaires were preferred in this study because respondents of the study are assumed to be literate and quite able to answer questions asked adequately. According to Mugenda and Mugenda (2003), questionnaires are commonly used to obtain important information about a population under study. The questionnaire was carefully designed and tested with a few members of the population for further improvements. This was done in order to enhance its validity and accuracy of data to be collected for the study.

A pilot test was conducted to test the effectiveness of the questionnaire. According to Polit and Beck (2003) a pilot test is a small scale version in preparation for a main study whose purpose is not to test research questions and hypothesis, but rather to test protocols, data collection instruments in the study. The rule of the thumb suggests that 5% to 10% of the target sample is adequate for pilot study (Cooper & Schindler, 2011). Pilot test was done on public university in Bungoma county (Kibabii University) where deans of schools, 4 heads of Administrative staff and 2 research heads were approached. Pilot testing ensures potential problems are identified, costly mistakes are noted and corrected, it is used to estimate the time requirement for actual field work and any suitable modifications on the questionnaire test items. Pilot test enhance the training of field staff, review of test instrument and prevention of wasteful expenditures whose results may not be acceptable (Kombo & Tromp, 2009).

Due to the nature of the study, reliability for primary data was measured using internal consistency. Where it measured consistency within the instrument or how well a set of items measures a characteristic within the test or particular behavior (Sabana, 2014). The most popular method of testing for internal consistency in the social sciences is use of Cronbach alpha (Kombo & Tromp, 2009). The formula used to determine Cronbach's coefficient alpha that will be used is as below:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Where N is the number of items, c-bar the average inter-item covariance and v-bar equals the average variance.

Data was collected using a self-administered questionnaire. The respondents were assured of confidentiality of their responses. The researcher obtained an introductory letter from the University to collect data from the universities then personally deliver the questionnaires to the respondents and they were filled in her presence.

Data Analysis and Presentation

The process of data analysis involved several stages namely; data clean up and explanation. Data cleanup involve editing, coding, and tabulation in order to detect any anomalies in the responses and assign specific numerical values to the responses for further analysis. Completed questionnaires were edited for completeness and consistency. The data was then coded and checked for any errors and omissions (Cooper and Schindler, 2003). Frequency tables, percentages and mean were used to present the findings. Responses in the questionnaires was tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 21.0 program to analyze the data using descriptive statistics. This generated quantitative reports through tabulations, percentages, and measure of central tendency. This provided the general findings on the effects of competitive strategies on the performance of public universities.

In addition, multiple regression analysis was conducted to establish the relationship between the competitive strategies and performance of public universities. Multiple regressions is a flexible method of data analysis that may be appropriate whenever quantitative variables (the dependent) is to be examined in relationship to any other factors (expressed as independent or predictor variable). Relationships may be non-linear, independent variables may be quantitative or qualitative and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account, (Cohen, West and Aiken, 2003). The regression model was as follows:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Where:

Y = Performance of public universities

α = Constant Term

β_1, β_2 and $\beta_3,$ = Regression coefficients

X₁= Cost leadership X₂= Market

Focus X₃= Differentiation

ε = Error term

The response rate results are as captured in table 3 below

Table 3: Response Rate

	Frequency	Percentage
Responded	44	81.5
Not responded	10	18.5
Total	54	100.0

Source: Researcher (2018)

The results indicate that 44 respondents out of the targeted 54 responded. This represents 81.5% response rate. This represents the number of respondents who filled and returned the questionnaires. Response rate was good and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was made a reality after the researcher engaged research assistants to administer the questionnaires. This response rate is adequate for analysis and reporting.

Descriptive Analysis

This section is dedicated to descriptive analysis of the study variables and how they affect performance. It covers the effect of cost leadership strategy, market focus strategy and differentiation strategy on performance of universities and a section describing the performance of universities.

Cost Leadership Strategy

The study sought to explore the extent to which cost leadership affect performance in the university. The summary of respondents' responses is as presented in table 4.

Table 4: Effect of Cost Leadership on Performance of Universities

Dimension Of Strategy	Mean	Standard Deviation
Economies of scale	4.714	0.123
Capacity utilization of resources	4.098	0.4345
Reduction in operations time and costs	3.997	0.6454
Efficiency and cost control	3.7313	0.91423
Mass production	3.731	0.237
Mass distribution	3.862	0.402
Forming linkages with service providers, suppliers and other supplementary institutions	3.234	0.7567
Aggregate scores	3.910	0.502

Source: Researcher (2018)

From the findings, economies of scale to a very great extent affect performance of university as expressed by a mean score of 4.714. Capacity utilization of resources, reduction in operations time and costs, efficiency and cost control, mass production and mass distribution affect performance in the university to great extent as indicated by the likert mean scores of 4.098, 3.997, 3.7313, 3.731 and 3.862 respectively. It was also evident that forming linkages with service providers, suppliers and other supplementary institutions influenced performance of the university to a moderate extent as expressed by a mean score of 3.234. In summary, cost leadership is found to affect universities performance to a great extent as shown by a mean score of 3.910 in the five-point likert scale.

The standard deviation statistic is an indication of the extent of consensus in the opinion of the respondents about the various questions put to them. A standard deviation of zero means that there is no variance in the respondents' opinion. In other words the respondents are in 100% consensus in their response to the given question. Therefore, a standard deviation statistic that is close to zero indicates the respondents' near-consensus in terms of how they responded to a question. On the other hand, a standard deviation closer to one indicates that there was a wide diversity of opinion in terms of how the respondents answered the questions put to them.

The results showed that, on the questions of how economies of scale, capacity utilization, mass production, and mass distribution affect the performance of universities there was a general consensus of opinion in terms of how the respondents answered the questions. This is as shown by likert scores of 0.123, 0.4345, 0.123 and 0.402 respectively.

However, on the questions of whether the reduction in operations time and costs, efficiency and cost control, and formation of linkage with service providers, suppliers and other supplementary institutions have effect on performance of public universities there was diverse opinion among the respondents as shown by standard deviation scores of 0.6454, 0.91423 and 0.7567 respectively. An aggregate standard deviation score of 0.502 indicates that respondents' opinion was fairly balanced without preponderance towards a specific direction.

Market Focus Strategy

The study sought to find out the effect of market focus strategy on the performance of universities. The responses obtained from respondents are summarized on table 5

Table 5: Effect of Market Focus Strategy on Performance of Universities

Dimension Of Strategy	Mean	Standard deviation
The university practices segmentation based on benefit	4.872	0.211
Sought by the customers		

The university practices segmentation based on physiological aspects of the customers	4.691	0.603
The university practices segmentation based on social class of the customers	2.363	0.5508
The university practices segmentation based on income level of the customers	4.829	0.867
Aggregate scores	4.189	0.558

Source: Researcher (2018)

From the findings, the respondents strongly agreed that various aspects such as the university practices segmentation based on benefit sought by the customers, physiological aspects of the customers and that the university practices segmentation based on income level of the customers to a very great extent affect performance in the university as expressed by a mean score of 4.872, 4.691 and 4.829 respectively. The respondents also indicated that segmentation based on income level of the customers as practiced by the university, to a little extent affected the performance of the university as expressed by a mean score of 2.363. The study therefore deduced that overall; market focus strategy affects performance of universities to a great extent as supported by an aggregate score of 4.189 based on the five point Likert scale in the questionnaire.

The standard deviation score of 0.558 point to a balanced opinion on this subject among the respondents. On the specific question of whether practicing segmentation based on benefits sought by customers has an effect on universities performance, the respondents' opinion which was in the affirmative was near- consensus. However, on the other three questions of whether: segmentation based on physiological aspects of customers, segmentation based on social class of customers, and segmentation based on income level of customers has an effect on performance of the universities, there was varied opinion as shown by the standard deviation scores of 0.603, 0.5508 and 0.867 respectively.

Differentiation Strategy

The study sought to explore the extent to which differentiation affect performance in the university based on various aspects. The findings are presented in table 6.

Table 6: Effect of Differentiation Strategy on Performance of Universities

Dimension Of Strategy	Mean	Standard deviation
Differentiation based on product/service	4.714	0.123
Differentiation based on price	3.124	0.774
Differentiation based on place	4.188	1.394
Differentiation based on promotion/ advertising campaign	4.901	0.272
Differentiation based on personnel	4.691	0.603
Differentiation based on image	4.242	0.771
Differentiation based on technological leadership	3.667	1.342
Aggregate scores	4.218	0.754

Source: Researcher (2018)

According to the findings, it was clear that differentiation based on product/service, differentiation based on promotion/ advertising campaign and differentiation based on personnel affected performance of the university to a very great extent as expressed by a mean score of 4.714, 4.901 and 4.691 respectively. The respondents also indicated that differentiation based on place, differentiation based on image and differentiation based on technological leadership affected performance of the university to a great extent as expressed by a mean score of 4.188, 4.242 and 3.667 respectively. It was also evident that differentiation based on price moderately affected performance as expressed by a mean score of 3.124. From the above findings, differentiation strategy affects performance of public universities to a great extent as expressed by an aggregate score of 4.218 based on the five point likert scale in the questionnaire.

The aggregate standard deviation score of 0.754 means that the respondents had varied opinions about the effect of differentiation strategy on the performance of universities. The results indicate that there was a near-consensus opinion on the specific questions of whether: differentiation based on product/service and differentiation based on promotion/ advertising campaign has an effect on performance of universities. This is as indicated by standard deviation scores of 0.123 and 0.272 respectively. On the specific questions of whether: Differentiation based on place and differentiation based on technological leadership has an effect on performance of universities, there was a very divergent opinion as shown by standard

deviation scores of 1.394 and 1.342 respectively. On the rest of the questions namely whether: Differentiation based on price, differentiation based on personnel, and differentiations based on image have an effect on performance of universities, there was balance opinion on both sides of the scale as shown by standard deviation scores of 0.774, 0.603 and 0.771 respectively.

Performance of Universities

The study further sought to determine the trend of various aspects in the universities for the last five years. Findings are presented in table 7.

Table 7: Trend of Various Aspects in the University for the Last Five Years

	Mean	Standard deviation
Web Ranking	3.8878	0.81079
Number of students	4.5306	0.78915
Revenue	3.5417	1.51529
Service quality index	4.5714	0.77326
Aggregate scores	4.1329	0.9721

Source: Researcher (2018)

From the findings, it was evident that numbers of students and service quality index have greatly improved for the last five years as expressed by a mean score of 4.5306 and 4.5714 respectively. The respondents also indicated that web Ranking and revenue have improved for the last five years as expressed by a mean score of 3.8878 and 3.5417 respectively. The findings depict that performance of universities had improved for the last five years as shown by an aggregate score of 4.1329 based on the five point like scale in the questionnaire.

The standard deviation aggregate score of 0.9721 indicates that there a varied opinion on both sides of the scale. Indeed, the opinion was varied for all the four specific measures of web ranking, number of students, revenue and service quality index as shown by the standard deviation scores of 0.81079, 0.78915, 1.51529 and 0.77326. However, the biggest diversity was on the question of revenue suggesting that various universities have been in diverse financial positions.

Inferential Analysis

In this study, a multiple regression analysis was conducted to establish relationship between the variables and the dependent variable.

Regression Model

An estimation of the relationship between the independent variables and the dependent variable was conducted using a regression model. In this study, performance of universities was the dependent variable while the independent variables included cost leadership strategy, market focus strategy and differentiation strategy.

Regression Coefficients

The regression results are as shown in table 8 below

Table 8: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
1 (Constant)	4.835	0.521		9.28	0.000
Market focus	1.628	0.231	0.241	7.047	0.000
Differentiation	1.581	0.193	0.154	8.192	0.000
Cost leadership	1.361	0.203	0.142	6.704	0.000

a. Dependent Variable: university performance

Source: Researcher (2018)

The estimated regression equation takes the form: $Y = 4.835 + 0.241X_1 + 0.154X_2 + 0.142X_3$

The results showed that market focus, differentiation and cost leadership strategies have a significant effect of the performance of universities in Kenya. This is as supported by the P values of 0.000 the three variables' regression coefficients. In addition, the three indicators highlighted above have a positive effect on performance of universities as indicated by the positive values of the regression coefficients of 0.241, 0.154 and 0.142 for market focus and differentiation and cost leadership strategies respectively. It is therefore depicted that university performance is influenced by cost leadership, market focus and differentiation strategies. These findings conforms with Grant, (2002) who observed that long term strategy should derive from a firms attempt to seek a competitive advantage based on one of three generic strategies which are essential in ensuring university performance.

Low cost leadership depends on some fairly unique capabilities of a firm to achieve and sustain their low-cost position within the industry of operation. Striving to create a market unique

product for varied customer groups through differentiation is another key competitive strategy, which aids university performance. Competitive strategies dependent on differentiation are designed to appeal to customers with special sensitivity for a particular product attribute. Such customers will be willing to pay a premium hence improve the university performance. Another researcher who obtained similar was Gathoga(2011) whose focus was on the factors driving competitiveness of banks in Kenya. Murage (2011) arrive at the same conclusion when he conducted a study about the competitive strategies in the oil sector in Kenya.

Model Explanatory Power

The regression model explanatory power was measured using R squared. The results are shown below in table 9

Table 9: R squared

Model Summary

Model	R	Adjusted R Square	Std. Error of the Estimate	Change in R Square	F Change	Sig. Change
1	.874 ^a	.765	.1729	.938	142.265	.000

a. Predictors: (Constant), market focus, differentiation, cost leadership

Source (Researcher, 2018)

R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The results show that 87.4% of the changes in performance among universities in Kenya is explained by market focus and differentiation strategies. This is as evidenced by the Adjusted R square value of 0.874 and a significant P value of 0.000. The adjusted R², also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 75.1% of the changes in the university performance variables could be attributed to the combined effect of the predictor variables

Significance of the Overall Model

The significance of the overall model was tested using the F-statistic. The results indicate that all the independent variables are a good joint predictor of the dependent variable. From the following ANOVA Table 10 the F-statistic value obtained was 54.407 which was significant at $\alpha = 0.05$ as supported by the p-value of 0.001.

Table 10: ANOVA results

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	42.759	3	10.69	54.407	0.0001
	13.164	40	0.196		

Residual		
	55.923	43
Total		

Source: Researcher (2018)

Conclusions

The purpose of the study was to establish the effect of competitive strategies on performance of public universities in Kenya. Specifically, the study sought to establish the effect of cost leadership strategies, differentiation strategy and focus strategies on performance of public universities in Kenya.

The study revealed that cost leadership strategy affected performance of the public universities to a great extent. The study found out that economies of scale to a very great extent affect performance of universities. It was further established that capacity utilization of resources, reducing operations time and costs, efficiency and cost control, mass production and mass distribution as aspects of cost leadership affected performance in the university to great extent. The study indicated that forming linkages with service providers, suppliers and other supplementary institutions also affected performance to a moderate extent.

The study further deduced that market focus affected performance of public universities to a great extent through various aspects such as practicing segmentation based on benefit sought by the customers; physiological aspects of the customers and income level of the customers to a very great extent affect the performance of the universities. It was also pointed out that segmentation based on income level of the customers as practiced by the university, to a little extent affected its performance.

The study established that differentiation based on product/service, differentiation based on promotion/ advertising campaign and differentiation based on personnel affected performance of the public universities to a very great extent. It was also pointed out that differentiation based on place, differentiation based on image and differentiation based on technological leadership affected performance of the university to a great extent.

Differentiation based on price moderately affected performance. On the topic of performance of Universities, it was evident that numbers of students and service quality index have greatly improved for the last five years and it was also indicated that web Ranking and revenue have improved.

The study concludes that cost leadership affects performance of universities in Kenya through achieving economies of scale, capacity utilization of resources, reducing operations time and costs, efficiency and cost control, mass production, forming linkages with service providers, suppliers and other supplementary institutions and mass distribution. In order to achieve a low-cost advantage, public universities must have a low-cost leadership strategy, low-cost operations with integrated sections/business units, and a workforce committed to the low-cost strategy. Economies of scale gives a university a competitive advantage as compared to other universities

thus adopting cost leadership strategies enables universities to maximize production while minimizing their cost of operation.

The study also concluded that market focus affected performance of the university through various aspects such as practicing segmentation based on benefit sought by the customers, physiological aspects of the customers and income level of the customers.

It was also pointed out that segmentation based on income level of the customers as practiced by the university also had an influence on performance of the universities. Focus aims at growing market share through operating in a niche market or in markets either not attractive to, or overlooked by, larger competitors.

On the topic of differentiation, this study concluded that differentiation affect performance of the university through product/service, promotion/ advertising campaign, personnel differentiation. Differentiation based on place, differentiation based on image and differentiation based on technological leadership affected performance of the university. Differentiation strategy is an approach under which a public university aims to develop and market unique services and products for different customer segments.

This study recommends that universities should embrace and invest in cost leadership strategies most especially forming linkages with service providers, suppliers and other supplementary institutions since it will enable them achieve competitive advantage as compared to other universities that are not investing in these strategies. The management should respond swiftly to environmental changes and eroded value that arises from competitor activities. To develop core competences there is need for good leadership from the management and involvement of all stakeholders. This process of strategy choice will lead to motivation and commitment during implementation. For good involvement of stakeholders, communication has to be efficient and effective. Cross-functional integration within the universities departments should be introduced to provide structural and administrative capabilities associated with cost minimization capability.

The study recommends that universities should first understand and know their motive and capability before adopting a certain competitive strategy for example market focus. They should know on what basis to segment their products, services and operations. As the markets become dynamic and consumers more irregular and fickle, the universities need some form of market segmentation to efficiently satisfy the market needs. What makes an organization different from a competitor's should be established. Managers need to ensure that the message of differentiation reaches the clients, as the customer's perceptions of the institution are significant. Level of segmentation should be increased in the universities to reflect the strategy adopted.

The study further recommends that in order for university to enhance their performance then they should invest more in differentiating their personnel through continuous training, products and services in order to make them unique and innovative and conducting regular and continuous promotion or advertising campaign to enhance awareness. The universities should counter five fundamental competitive forces that drive industry competition which include threat of new entrants; threat of substitute products; bargaining power of suppliers; bargaining power of buyers and rivalry among current competitors. The competitor universities to should seek

competitive advantage in ways that draw counter-response from rivals, plummeting profitability and industry attractiveness

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