An Application of Competitive Analysis Strategies on Organizational Competitiveness (A Case of University of Nairobi, Kenya)

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ABSTRACT
The purpose of this study was to apply competitive analysis model to the University of Nairobi competitive environment. This study uses Michael Porter’s five forces model as the framework for evaluation of the competitive environment of Nairobi University. The reviewed literature reviewed seeks to identify the key environmental forces and competitive drivers influencing the strategic choices that students make among competing universities in a competitive higher education environment. To collect data and information from the sampled respondents, a questionnaire was used. Information gathered through the questionnaires was sorted, coded and input into statistical package for social sciences (SPSS) to generate frequencies, descriptive and inferential statistics. It was found that cost is a key component of the university competitiveness and students peg their choice especially on the cost of boarding. This meant that the university had to prove value for money in order to justify students’ choices. It was found that students could easily influence the choice of a university. Lecturers’ strikes did not deter students from choosing a university, however the fame of the lecturers and their public relations skills were important in influencing students choice of the university. The power of buyers (students), power of sellers (lecturers), threat of new entrants and competitor rivalry were found to be key and significant in determining the competitiveness of the University of Nairobi. Only the threat of substitutes was found to have less effect on the competitiveness of the university. The university should continue to revise its policies and make them more aggressive, vibrant and in sync with changes in the operating environment. In particular all policies should be reviewed to ensure they are friendly to the students. The management should take a bold step and start admitting international students in all its courses.

Key Words: University of Nairobi’s Competitive analysis, Strategy, Competition challenges

1.0 INTRODUCTION
According to Perry & Ross, (2008) competitive analysis involves understanding and analyzing businesses which compete directly or indirectly with your business in at least one market, product category or service. The main process involved in competitor analysis is to identify strengths and weaknesses of competitors, and the opportunities and threats for your business. It is common for the terms competitor analysis and competitive intelligence to be used interchangeably. However, competitive intelligence tends to cover a broader view of the competitive environment. It includes all the factors that could affect profits, for example, new technology, changing consumer tastes and general economic trends. The Society of Competitive Intelligence Professionals (SCIP) (2012) defines competitive analysis as a systematic and ethical programme for gathering, analyzing and managing external information that can affect your company’s plans, decisions and operations. Core competencies provide the foundations for developing a competitive advantage. If a company is unable to identify distinctive competencies, they may overlook attractive opportunities and pursue poor ones. The current business climate is driven by technological development and quick reactions to changing environments. Consequently, a competitive advantage based on a singular competence is unlikely to be sustainable for very long. (Perry & Ross, 2008)

Competitive strategies are strongest either when they position a firm's strengths against competitors'
University strategic initiatives have been studied with focus on distinct areas of marketing planning (Maringe and Foskett, 2002), marketing communications (Klassen, 2002), positioning and corporate identity (Gray, Fam and Llane, 2003; Melewar and Akel, 2005) university selection requirements and student satisfaction (Beerli Palacio, Diaz, Meneses and Perez Perez, 2002; Veloutsou, Lewis and Paton, 2004) and, to some extent, the associated discipline of branding. The body of work in the academic literature concerning branding of higher education does seem to be limited, however (Hemsley-Brown and Oplatka, 2006; Waeraas and Solbakk, 2008) Aspects of branding have been explored; the role of websites in university branding (Opoku, Abratt and Pitt 2006) the role of heritage (Bulotaite, 2003) the emergence of brand identities (Lowrie, 2007), and harmonisation within brand architecture of universities (Hemsley-Brown and Goonawardana, 2007).

Hammond, Harmon, and Webster focused on strategic marketing related to the performance of a university placing an emphasis on marketing planning, (Hammond, Harmon, & Webster, 2007). (Hemsley-Brown, & Oplatka, 2006) concerned with university marketing in a broader sense systematically analyzing different views found in the literature about such issues. Hayez, (2007) deals with the future of university marketing. He emphasizes the importance of integrating strategic planning and marketing and more detailed processing of an integrated marketing communication and forming a successful university brand.

There has been increasing competition among universities and the necessity of improving the marketing processes in order to achieve better communication between universities and their interest groups. (Ivy, 2008) concentrates on addressing students stressing the fact that this interest group should be regarded in a more comprehensive aspect establishing marketing-mix model consisting of seven factors. Ho & Hung, (2008) specify a suitable marketing mix and strategies for institutions of the tertiary education. Their work focuses mainly on the market segmentation. Stemming from their own research, they identified five main groups of university candidates for whom they defined suitable marketing strategies.

Enhancing the identity, image, and brand of universities and their diversification is seen by experts as another key factor in winning new students (Pelsmacker, Geuens, & Bergh, 2003). Their study stress that an organization’s identity is closely related to the brand, product, distribution, and communication towards stakeholders. This is in fact a certain way of presenting the firm. The university brand and identity is the subject of research conducted, for example, by Goonawardana, & Hemsley-Brown (2007) who concentrates on cooperation between the rector’s office and individual faculties in creating a university brand. The university brand and identity is further investigated by (Lowrie, 2007). He describes how two diverse fields – university mission and marketing approach affect identity of these institutions. Russian authors Saginova, & Belyansky (2008) emphasize the importance of strategic marketing focused on innovations for further development of universities on the background of transforming Russian economy. They view the cooperation between the university and the private sector as a convenient innovation concept.

De Chernatony and McDonald (2005) assert that a successful brand delivers sustainable competitive advantage and invariably results in superior profitability and market performance. Bennett, Ali-Choudhury and Savani (2007) suggest that universities require strong brands to enhance awareness of their existence and course offerings, to differentiate themselves from rivals and to gain market share. All of these offers a rationale for branding activity but again actually measuring outcomes or return on investment are elusive.

Chapleo (2010) deals with the key factors which influence and form successful brand of a university. Among these factors, there is a clear vision, highlighting leading position, participation of employees on forming a successful brand etc. Students are the main target group of services offered by universities. Russell (2005) tries
to find which factors account for the satisfaction of domestic and international students being thus relevant for setting up suitable marketing communication. Gruber, Fub, Voss, & Gläser-Zikuda (2010) have created a fifteen-dimensional model for measuring the satisfaction of students with the services offered by universities. Within a marketing context, Ramachandran (2010) investigates the way the management of a university tries to improve the services it offers to students pointing out the impact of a marketing management on communication with students.

Competitor identification is a key task for managers interested in scanning their competitive terrain, shoring up their defenses against likely competitive incursions, and planning competitive attack and response strategies. It is a necessary precursor to the task of competitor analysis, and the starting point for analyzing the dynamics of competitive strategy (Bergen and Peteraf, 2002). A key strategic reality for universities is that they characterized by greater competition for financial and human resources, global student mobility and demands by resource providers for greater accountability and improved performance (Gianni and Elisabetta, 2001)

Colleges should compete harder for students so that these institutions have incentives to offer good value for the money (as judged by students, their parents, and others who care about the quality of colleges). Private colleges compete fiercely for students. Public colleges compete less intensely. With greater competition among public colleges, we would see more variation in what they do, just as we see among private colleges. There would be much more diversity among the structure of public colleges. Diversity would not mean fixed percentages of students by race but would mean diversity in university offerings to reach out to the diverse interests of students (Amacher and Roger, 2001).

Chan and Welebir (2003) adapted Michael Porter’s 5-forces model to analyze the competitive forces in online education market. The first source of competitors could be other universities within relatively close geographic areas, and universities with high brand image outside the geographic area of the institution. This source of competition is not new to universities; however, as more universities add campuses education to their line of services, the rivalry will intensify (Chan and Welebir, 2003). Emerging competitor types are the purely virtual education providers. The Internet has allowed virtual education providers to enter the online education market without the typical barriers traditional institutions faced upon establishment (Graves, 2001). These competitors are creating brand awareness and marketing themselves as alternatives to traditional colleges and universities.

Other competitors besides sellers and buyers come from firms in other industries that offer substitute products (Chan and Welebir, 2003). The Internet facility throughout the world is an external factor, while the source inputs directly regarding course design could be either external or internal factor. Students represent the one part source of competition (Chan and Welebir, 2003). Students are taken as an independent factor since its importance has been proposed many researchers (Chan and Welebir 2003; Totty and Grimes, 2001; Smith, 2003; Volery and Lord, 2000).

Kenyan universities are operating in different markets than they did a decade ago; their overall marketing orientation and survival is determined by how well they reposition themselves as distinct academic entities to increase student enrollment in the competitive academic environment created by technological changes and globalization (Siringi, 2005). Despite the large number of private universities in Kenya, some universities still have relatively low student enrolment (Ngome, 2010). Kenyan public universities have an upper hand in student enrolment through the Joint Admissions Board (JAB) unlike private universities (Koech, 2000). This has created a cut-throat competition for university students in Kenya between local universities (both public and private) and foreign institutions.

1.1 University of Nairobi

The University of Nairobi owes its origin to several developments in higher education within the country and the region. The idea of an institution for higher learning in Kenya goes back to 1947 when the Kenya Government drew up a plan for the establishment of a technical and commercial institute in Nairobi. By 1949, this plan had grown into an East African concept aimed at providing higher technical education for the region. In September 1951, a Royal Charter was issued to the Royal Technical College of East Africa and the foundation stone of the college was laid in April 1952. The inception of the University of Nairobi is traced back to 1956, with the establishment of the Royal Technical College which admitted its first lot of A-level graduates for technical courses in April the same year.
The Royal Technical College was transformed into the second University College in East Africa on 25th June, 1961 under the name Royal College Nairobi and was admitted into a special relation with the University of London whereupon it immediately began preparing students in the faculties of Arts, Science and Engineering for award degrees of the University of London. On 20th May 1964, the Royal College Nairobi was renamed University College Nairobi as a constituent college of inter-territorial, Federal University of East Africa, and henceforth the enrolled students were to study for degrees of the University of East Africa and not London as was the case before. In 1970, the University College Nairobi transformed into the first national university in Kenya and was renamed the University of Nairobi (UON, 2012).

In view of the rapid expansion and complexities in administration, the University underwent a major restructuring in 1983 resulting in decentralization of the administration, by creation of six (6) colleges headed by principals. The following are the names and respective locations of the colleges: College of Agriculture & Veterinary Sciences situated at Upper Kabete Campus, College of Architecture & Engineering situated at the Main Campus, College of Biological & Physical Sciences situated at Chiromo Campus, College of Education & External Studies situated at Kikuyu Campus, College of Health Sciences situated at the Kenyatta National Hospital and College of Humanities and Social sciences situated at the Main Campus -Faculty of Arts; Parklands-Faculty of Law; Lower Kabete Campus -Faculty of Commerce. Since 1970, the University of Nairobi has seen many innovations, which have contributed to its development and that of the nation. It has grown from a faculty based university serving a student population of 2,768 to a college focused university serving over 36,000 currently (UON, 2012).

1.2 Statement of Problem

Sustaining competitive advantage requires erecting barriers against the competition by looking at the following: How you compete, basis of competition, where you compete, whom you are competing against and the ways to create barrier to competition (Aaker, 2011). The business environment within which the universities in Kenya operate has been very volatile since both the market forces and technology are converging to deliver many new capabilities in the very near future. Markets that were thought secure now look vulnerable to competition from the local private universities (Kimando, Njogu Sakwa, 2012).

For a business to be successful there should be some degree of advantage over the competitors. Competitive advantage can come in one or combination of the following factors: price, service, quality, location, or imbedded customer base. The better the business performs against one of these factors, the more likely it is to succeed (Bailey, 2006). Universities have embraced different competitive strategies to counter competition. i.e. some have embraced technology and web marketing as a strategy where by many higher education for-profit institutions, now offer on-line classes, use e-learning module, distance learning, selling courses electronically, this has made learning easier and efficient thus increasing their enrollment (Kalypso, 2009).

To date, there is poor understanding of the role/use of effective marketing communication with customers in attracting and maintaining prospective and present customers in higher learning institutions (Ngome, 2010). The competitive landscape in university education in Kenya is clearly changing, and yet there is no proper competitive model in place to address the same, hence the need for this research.

2. Literature Review

2.1 The Students as the Buyer

According to Amacher and Roger, (2001), colleges should compete harder for students so that these institutions have incentives to offer good value for the money (as judged by students, their parents, and others who care about the quality of colleges). Private colleges compete fiercely for students while public colleges compete less intensely. With greater competition among public colleges, we would see more variation in what they do, just as we see among private colleges. There would be much more diversity among the structure of public colleges (Amacher and Roger, 2001).

Students affect the university industry through their collective ability to demand higher quality education, better or more services and by choosing one university over another. The universities may not have changed much over the years but the students market has changed rather dramatically. High school graduates may not be as important as they used to be. Part-time students, mature working students and/or displaced adults, and college
graduates transferred in the university system, have become increasingly visible and important student groups. Each of these non-traditional student groups has different learning styles and may require a different teaching approach. Also, these groups aim to acquire marketable hands-on skills in order to maintain and/or improve their career prospects more so than high school graduates (Gekas, 2004).

A study by Del Rey and Romero (2004) aver that private institutions optimally choose to provide an educational quality lower than the one provided publicly. This result may be explained by the different strategies followed by institutions when competing for students. On the one hand, the public university is able to behave as a monopoly by means of setting admission standards and a zero tuition fee. On the other, the private university’s admission policy, based on tuition fees, makes this institution attractive just to those students of lower ability who are not accepted into the public university and can afford to pay the private fee. The study showed that the presence of a private university in the market involves positive welfare gains compared to the public monopoly. This is because those students attending the public institution under monopoly are not affected by competition, and the presence of a private university allows new students to accede to higher education. This, in turn, increases total income in the economy (Del Rey and Romero, 2004).

Oliveira (2004) analyzes competition between public and private universities in the presence of peer group effects and perfect capital markets. She finds two types of equilibria depending on the parameters of the model, one in which the public university has higher quality than the private and the other in which the public has lower quality. On the demand-side, a number of papers have focused on the choice factors of the student-consumer (Baldwin & James, 2000; Umashankar, 2001; Pugsley & Coffey, 2002; Binsardi & Ekwulugo, 2003) and research seeking to identify key factors in the choice of higher education has been conducted by researchers based in Australia (e.g. Kemp & Madden, 1998; Soutar & Turner, 2002) and the UK (e.g. Ball et al., 2002), with some research on students choice in international markets (e.g. Gomes & Murphy, 2003).

2.2 Lecturers as the Suppliers

In private and public universities competitions, the buying industry often faces a high pressure on margins from their suppliers. The relationship to powerful suppliers can potentially reduce strategic options for the organization. In the university industry, the primary suppliers of knowledge are the instructors. They have to find ways to transmit their knowledge to students (teach) and students to receive it (learn). Historically, university instructors were selected on the basis of their credentials and a terminal degree (doctorate) was a necessity for university teaching. It appears with the advent of continuing education courses (evening and weekend courses mainly for adults), distance education courses (non traditional classroom-based courses offered over the internet), increased demand by industry for skills and training rather than knowledge and education, and the proliferation of community colleges, private schools, in-house seminars and education consulting, the relative power of instructors has waned. The expansion of post secondary schools and modes of delivery seem to have eroded the instructors' power. (Association of Universities and Colleges of Canada, 2001).

A good portion of instructor’s power spilled over to educational technology providers that seem to, to some degree, replaced instruction. However, as the intensity of the competition in post secondary education increases, the search for qualified university instructors with terminal degrees and traditional integrity also intensifies (Booth, 2001). Humanities, arts and sciences were always a centre piece of university life. However, universities, as societal institutions that reflect societal values, have been transforming. Universities are no longer elite institutions of higher learning for the few rich and powerful. They now embrace new concepts such as ethnic and cultural diversity, and gender equity. The university system is scrutinized by all stakeholders to meet and surpass its new societal mandate. As a result, the bargaining power of the universities has been reduced and subjected to meeting its social mandate (Bruneau and Savage, 2002).

2.3 Threat of Substitutes

A threat from substitutes exists if there are alternative products with lower prices of better performance parameters for the same purpose. They could potentially attract a significant proportion of market volume and hence reduce the potential sales volume for existing players. This category also relates to complementary products. Similarly to the threat of new entrants, the threat of substitutes is determined by factors like brand
loyalty of customers, close customer relationships, switching costs for customers, the relative price for performance of substitutes and current trends (Schuller and Martina, 2010).

Institutions have the potential to increase competitive pressure on traditional higher education through more vigorous application of well known approaches. Internet mediated distance learning, on the other hand, will bring a new and potentially explosive kind of competitive pressure to bear on traditional higher education. Through distance learning (DL) the traditional institutions will compete with each other in a manner in which many previous size and geographic limitations on competition will disappear. For-profit entities will enter the competition both as partners of individual institutions and as direct providers, and alternative forms of credentialing will take on a new power. All areas of the teaching function of universities will be impacted (Clifford, 2000). The new DL allows nonlinear learning approaches based on cognitive learning theories, permitting the student to move at her tempo with an organizational structure that responds to her comprehension of the material. Flexibility to respond to different learning styles is increased dramatically compared to the traditional lecture (Blumenstyk, 2007).

Distance learning has the potential to be highly scalable, that is, to be extended to larger and larger numbers of students without significantly changing the basic approach. This removes the limitations on size that have mitigated competition between institutions of higher education. Most students still will not be able to go physically to one of the most prestigious colleges or universities, but they will be able to take courses and degree programs from them. The scalability also increases the potential for creating significant profit, thus making this a field of great interest to the for-profit world (Kartus, 2005). Because of all of these attributes; the new DL itself is likely to be both a sustaining and a disruptive technology. It will be used by universities to better serve some of their existing constituencies, such as alumni and students, and to access constituencies currently served by other universities (Christensen, 2007).

Substitute providers limit the potential demand for university services by diverting some of this demand elsewhere. To the extent that switching costs from one institution of higher learning to another are low, substitute providers may have a strong impact on universities. Many substitute providers are less expensive than universities and they accept transfers for course work. Some time ago, universities were perhaps the sole providers of knowledge necessary for a career path. Today, the number of community colleges, (Community Colleges of Applied Arts and Technology (CAAT) as they are known in the province of Ontario), have reached an all time high. In fact, there are more community colleges (22) than universities (17) in the province of Ontario. The practical character of the colleges’ curriculum and the training they provide for some students or some programs of study may be better preparatory grounds for the job market (Kelly, 2003). In addition, professional associations of all kinds, sometimes in co-operation with universities and sometimes without, train their own members offering their own courses. The Institute of Canadian Bankers, for example, offers its own investment securities course often taught by moonlighting university professors at host university campuses (Industry Canada, 2008).

2.4 Threat of New Entrants

The emergence of numerous substitute providers suggests that the barriers to entry in the post secondary industry are rather low. This increases the potential of new entrants. The potential new entrant's list may include more private colleges, more corporate in-house training, and more community colleges allowed conferring university degrees. In addition, new programs within the university system may be considered as new entrants as they often compete, cannibalize, or replace existing programs. For example, new targeted programs such as Health Services Management or Retail Management, often offered outside a traditional business school, in effect constitute new entrants that may compete in attracting students who otherwise may have chosen a traditional business school. In addition, the proliferation of MBA and executive MBA programs not only has discounted the value of this degree but it also illustrates the lowering of barriers to entry to graduate business education (Strosnider, 1997).

New entrants are a challenge for existing competitors because new entrants will ultimately want to gain market share; which in turn results in pressure on prices, costs, and the investment needed to compete. The threat of new entrants will depend on whether or not the industry presents high or low barriers of entry. Due to the relatively loose governmental regulations in higher education sector, the sector is seeing an increase in the number of private higher education
institutions and with increasing competition in the sector. For example, a move by one university to offer a program in distance education mode or an MBA program through an off campus part-time basis may lead other universities to imitate the move, take a counter action to improve and/or maintain their relative competitive position. Larger universities admittedly may have a greater financial ability, (for example large endowment funds) to launch new programs to attract new students than smaller universities. Smaller universities may not have as many resources up front to initiate a new program or fund new buildings and capital equipment. Some universities may enjoy special licences and privileges to the extent that they may have received exclusive governmental approval to offer programs which other universities are not allowed to (Golde & Dore, 2006).

Private post secondary colleges have mushroomed in major population centres. The bigger ones operate multi branches in several locations attracting a strong interest from young and middle career adults who require a fast track program of study as well as focused training. As long as the human resources departments of major employers are adequately impressed to hire their graduates instead of university graduates these private colleges are viable substitutes and competitors of university degrees. In-house management training programs sponsored by numerous corporate entities, in essence, are also higher education substitutes and, therefore, compete against universities (Leitzel, Corvey and Hiley, 2004).

Finally, in Canada like in Kenya, many colleges are elevated and given the right to confer university degrees in certain programs. This elevation perhaps started earlier when the traditionally two year long college programs were expanded to three years of study. Once these three year programs were established their programs became so similar to corresponding university programs that the government could no longer resist granting these colleges the right to confer university degrees (Hood, 2009).

2.5 Summary of Literature Review and Research Gaps

Del, Rey and Romero (2004) aver different strategies followed by institutions when competing for students lead to different levels of quality between public and private universities. As a result, the bargaining power of the universities has been reduced and subjected to meeting its social mandate (Bruneau and Savage, 2002). However the university has become a global village with the university lecturer able to juggle through different private university and therefore attract the students whose otherwise are lecture oriented (Czepie and Kerin, 2010). Distance learning is likely to be both a sustaining and a disruptive technology. It will be used by universities to better serve some of their existing constituencies, such as alumni and students, and to access constituencies currently served by other universities (Christensen, 2007).

Substitute providers limit the potential demand for university services by diverting some of this demand elsewhere. New programs within the university system may be considered as new entrants as they often compete, cannibalize, or replace existing programs. New entrants are a challenge for existing competitors because new entrants will ultimately want to gain market share; which in turn results in pressure on prices, costs, and the investment needed to compete. Due to competition rivalry, universities embark on a marketing strategy to increase enrolment and their student market share (Golde, and Dore, 2006).

3. METHODOLOGY

3.1 Research Design

A research design is the structure of research (Kothari, 2004). This study used descriptive survey research design. According to Sekaran and Bougie (2011) descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variable of interest in a situation. Frequently descriptive studies are undertaken in organizations to learn about and describe the characteristics of a group of research respondents or organizations to understand relevant aspects. Descriptive survey method was chosen because it is relatively inexpensive and is useful in describing the characteristics of a large population. Consequently, very large samples are feasible, making the results statistically significant even when analyzing multiple variables. Descriptive studies thus become essential in many situations especially when using qualitative data in understanding the phenomena. The target population of this study was all students, management and other employees who were on roll of University of Nairobi as at 30th April 2012. The accessible population was all students, management and other employees from the school of business and school of economics which are located at the main campus in the city of Nairobi. This choice of accessible population was accessioned by the
proximity to the researcher and due to ease of access to the university main campus. The logistic of distributing the questionnaire was also considered in determining the accessible population. Stratified random sampling was done to have the strata of students, management and other employees. Stratified sampling ensures that specific groups are represented proportionally in the sample. The population of this study had more than ten thousand population elements and hence defined by Mugenda & Mugenda (2003) as a large population. The target sample for this study was therefore determined using a formula which is recommended (Gay (1981). The formula produces a minimum sample size of 384 respondents for a large population. The formula is as stated below.

\[ n = \frac{Z^2 \times p \times (1-p)}{d^2} \]

Where:
- \( n \) = Sample size for large population
- \( Z \) = Normal distribution Z value score, (1.96)
- \( p \) = Proportion of units in the sample size possessing the variables under study, where for this study it is set at 50% (0.5)
- \( d \) = Precision level desired or the significance level which is 0.05 for the study

The formula was substituted with the following figures to produce a sample of 384 respondents.

\[ n = (1.96)^2 \times (0.5)(0.5) = 384 \]

\[ (0.05)^2 \]

**DATA PRESENTATION AND DISCUSSIONS**

The responses were classified according to the variables of the study and inferential statistics was used to analyze the variables. The dependent variable was the cost of the university. All the responses were converted into natural logarithm before producing the Pearson correlation and the regression output.

**Table 1: Pearson’s Correlation**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cost</th>
<th>Power of Buyers</th>
<th>Power of Sellers</th>
<th>Threat of Substitutes</th>
<th>Threat of new Entrants</th>
<th>Competitor Rivalry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of Buyers</td>
<td>0.15</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of Sellers</td>
<td>0.12</td>
<td>0.943</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat of Substitutes</td>
<td>0.08</td>
<td>0.206</td>
<td>-0.125</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Threat of new Entrants</td>
<td>0.09</td>
<td>-0.867</td>
<td>-0.893</td>
<td>0.006</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Competitor Rivalry</td>
<td>0.14</td>
<td>0.757</td>
<td>0.57</td>
<td>0.593</td>
<td>-0.695</td>
<td>1</td>
</tr>
</tbody>
</table>

Correlation coefficient shows the strength and direction of relationship between two variables. From the results presented above, the factors with strong correlation were the power of sellers and the power of buyers which had a strong positive correlation of 0.943. This means that, a unit change in the power of buyers would cause a 0.943 change in the power of sellers in the University of Nairobi and it is a converse relationship. This interpretation applies to other factors with a positive correlation coefficient. The factors with a strong negative correlation (-0.893) were the threat of new entrants and power of sellers. This shows that a unit change in the new entrants would lead to a negative change in the power of sellers in the University of Nairobi. This means that an increase in the number of new universities would lead to migration of lecturers in the University of
A linear regression analysis was done on the data using the model where cost was the dependent variable and the rest of the factors were taken as independent variables. The model fitness was tested and the results are presented on table 4.26 and 4.27. The overall correlation coefficient between the dependent and the independent variables is 63.8%. This means that the variations in the independent variables lead to an overall positive change in the dependent variable. An R square is also called the coefficient of determination. In this case it means that the model can only explains 40.7% of the University of Nairobi competitiveness leaving 59.3% which is explained by other factors not captured in this study or model as shown in table 2 above.

### Table 2: Regression Model Fitness

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.638</td>
</tr>
<tr>
<td>R Square</td>
<td>0.407</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.375</td>
</tr>
<tr>
<td>Std. Error of the Estimate</td>
<td>0.03424</td>
</tr>
</tbody>
</table>

The ANOVA shows that the model is very significant in explaining the variables of the study. This is because this study assumes that the population of the study is normally distributed and has level of significance of 0.05 (5%) or level of confidence of 0.95 (95%). With a p-value or significance of 0.000 it shows that it is less that 0.05 and the model has a very low error margin in explaining the variables of the study. This also means that the model is statistically significant in explaining the variables being studied. The sum of squares explained by the regression equation is 0.073 out of a total of 0.180 which is 40.7% and 0.107 (59.3%) is explained by other factors not captured by the model as shown in table 3 above.

### Table 3: Analysis of Variance - ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.073</td>
<td>5</td>
<td>0.015</td>
<td>12.514</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>0.107</td>
<td>91</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.180</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The regression output shows the relationship between the dependent variable and the independent variables. The beta coefficients show the extent and direction of change of the dependent variable due to a unit change in the

### Table 4: Regression Output

<table>
<thead>
<tr>
<th>Factor</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.302</td>
<td>0.113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of Buyers</td>
<td>-0.657</td>
<td>0.238</td>
<td>-3.369</td>
<td>-2.763</td>
</tr>
<tr>
<td>Power of Sellers</td>
<td>0.559</td>
<td>0.158</td>
<td>4.476</td>
<td>3.541</td>
</tr>
<tr>
<td>Threat of Substitutes</td>
<td>0.204</td>
<td>0.112</td>
<td>0.728</td>
<td>1.814</td>
</tr>
<tr>
<td>Threat of new Entrants</td>
<td>0.447</td>
<td>0.058</td>
<td>1.859</td>
<td>7.670</td>
</tr>
<tr>
<td>Competitor Rivalry</td>
<td>0.257</td>
<td>0.055</td>
<td>1.000</td>
<td>4.722</td>
</tr>
</tbody>
</table>

The regression output shows the relationship between the dependent variable and the independent variables. The beta coefficients show the extent and direction of change of the dependent variable due to a unit change in the
independent variables. The level of significance shows the extent of influence of each independent variable on the dependent variable. All the variables with a p-value of less than 0.05 are statistically significant in explaining competitiveness of the University of Nairobi. These are power of buyers, power of sellers, threat of new entrants and competitor rivalry. The only factor which is not significant is threat of new substitutes as shown in table 4 above.

4. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.0 Findings

The study has come up with various findings regarding the competitiveness of the University of Nairobi based on the Porter’s five forces model and also from the view point of the insiders of the university, who are students, management and other employees. It was found that cost is a key component of the university competitiveness and students peg their choice especially on the cost of boarding. This meant that the university had to prove value for money in order to justify students’ choices. It was also noted that students could easily influence the choice of a university when they provide guidance to parents and other friends on why they should choose a particular university. Lecturers’ strikes did not deter students from choosing a university, however the fame of the lecturers and their public relations skills were important in influencing students choice of the university. The power of buyers (students), power of sellers (lecturers), threat of new entrants and competitor rivalry were found to be key and significant in determining the competitiveness of the University of Nairobi. Only the threat of substitutes was found to have less effect on the competitiveness of the university.

4.1 Conclusions

Based on the findings of the study the following conclusions can be made regarding the competitiveness of the University of Nairobi.

The power of buyers (students) was found to be important in determining competitiveness of the university. This is true because students are the key customers for all universities, should the university fail to garner the minimum number of students then its survival will be guaranteed. This explains the aggressive completion for students that universities in Kenya have been having for the past couple of years. We have seen in the media both electronic and print how universities have been splashing state of the art advertisements in order to attract students or other decision makers on the choice of university like the parents and guardians.

The power of sellers (lecturers) has also come out strongly as a key determinant of a students’ choice of the University of Nairobi. Lecturers to a great extent determine the quality of university education. This could be the reason why some universities have structured incentives for their best lecturers to ensure they don’t leave for greener pastures. Such incentives include sponsorship for their higher education, journal publications and revenue sharing for module II degrees. Many universities especially the private ones have been seen to provide good pay packages and perks to woo lecturers from public universities. It has also been seen that in 2012 the public universities signed a very lucrative bargaining agreement with the umbrella trade union of university lecturers in a way to avert crisis and potential migration to private universities.

Threat of new entrants was found to offer a competitive challenge to the University of Nairobi. This is the case with some private universities which are now admitting top students especially in business course. A case in point is where Strathmore University has been getting ’A’ grade students for their business degrees and hence denying the university of Nairobi business school the opportunity of admitting such students. Other private universities and new public universities have also been a continuing threat to the University of Nairobi.

Competitor rivalry has been on the rise in recent year against the University of Nairobi. We have witnessed almost all universities in Kenya locating their Nairobi campuses within a walking distance from the compound of the main campus of the University of Nairobi. This means that the University of Nairobi will have to employ very tactful strategic moves to counter all this kind of rivalry.

Threat of substitutes was the only force that was found to be of no major significance to the competitiveness of the University of Nairobi. This could be explained by the fact that the university most offers science oriented courses which require hefty investments and physical interaction with students. Most of the substitutes are mostly online, open and distance learning courses where it is not possible to offer courses like medicine and engineering which are some of the domain course of the University of Nairobi.

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It can therefore be concluded that the University of Nairobi continues to face challenges from four of the forces offered by Prof. Michael Porter and the model is therefore applicable in University environment contrary to common belief that it can only be applied in business environment. The university will need to continue working hard and smart to outwit the highly competitive Kenyan university sector.

4.2 Recommendations

The management of the University of Nairobi will need to be aware of the continued competitive environment especially within Nairobi. The university should continue to revise its policies and make them more aggressive, vibrant and in sync with changes in the operating environment. In particular all policies should be reviewed to ensure they are friendly to the students.

Many of the competitors of the University of Nairobi are competing for the working class especially for the postgraduate course. The management should take a bold step and start admitting international students in all its courses. This will definitely cause a strategic drift to all its competitors and make them go back to the drawing board.

The University of Nairobi is the pioneer of open and distance learning in Kenya. The management should consider to revamp this revenue line and make its income pie does not continue to be invaded by foreign open learning universities. This would also increase its local foot print especially in the rural areas and busy business executives.

It also recommended to government policy makers that they develop policy and regulations on responsible marketing for institutions of higher learning. This is drawn from the fact that some universities have been employing persuasive advertisements which do not reflect the competitiveness of the institution and later frustrating the students because of promising below par services.

4.3 Suggestion for Further Studies

Arising from review of literature, the findings of the study and interactions with the respondents the following areas can be considered for further study in order to enrich this study on competitiveness. This study can be replications in a cross section of both public and private universities. This kind of study will reveal the level of competitiveness across institutions and inform policy in a better and detailed manner that from a single case.

REFERENCES


