

Significance of Quality Assurance Mechanisms in University Strategic Management: An Advisory Model for University Managers in Kenya

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Abstract

Quality Assurance in university management has been perceived differently in different institutions. This study focused on the position of quality assurance in strategic management aimed at pursuit of sustainable competitive advantage. The study incorporated both descriptive and explanatory designs. Structured close ended Likert type questionnaire was used to collect primary data in a census survey from 324 managers in public and private universities in Kenya. Secondary data was collected from universities' records, and the Commission for University Education in Kenya. Variable characteristics were analyzed using means and standard deviations. Pearson's product moment correlation analysis was used to test relationships between variables; while multiple, hierarchical regression analysis were used to test the moderating effect of quality assurance mechanisms on sustainable competitive advantage in Kenyan universities. The study results yielded a positive and statistically significant moderating effect of quality assurance mechanisms (explained variance 1.3% {R square change}; $\beta=0.125$ and p value < 0.05 $\beta=0.159$ and p value < 0.05) on the relationship between strategic factors and sustainable competitive advantage. All calculations were done at a confidence level of 0.95 and alpha level of 0.05. The study results were used to develop an advisory model for university managers who wish to lead their institutions towards sustainable competitive advantage.

Keywords: Sustainable competitive advantage, Quality assurance mechanisms, strategic factors

1. Introduction

In Kenya, quality assurance in universities is carried out internally and externally. Internal assessment is done through quality assurance units while external assessments are carried out by commission for University Education (CUE) and professional bodies. Mainly, quality assurance in Kenyan higher education is geared towards accreditation and adherence to set standards and specifications (CUE, 2012). Basically these are operational and efficiency strategies; of greater concern is if indeed the quality assurance mechanisms provide direction to universities on issues of strategic positioning, specifically for sustainable competitive advantage in the global arena. Indeed, the question of achieving sustainable competitive advantage in any firm centers on strategy which is the act of aligning a firm and its dynamic environment (Porter, 1991). Nevertheless, it is observed in the strategy theory, firms in the same industry with similar resources perform differently (Wade & Hulland, 2004). This scenario is conspicuously observed among universities in Kenya. However, some universities seem to consistently perform better than others and this creates scholarly curiosity to find out what is it that they do better than others? It is important to note that countries or regions without sustainable higher education can easily become subjects to brain. This trend has been observed in Kenya and poses a threat to achievement of industrialization and vision 2030. It is with such a concern that this study sought to look at strategic factors that influence sustainable competitive advantage in Kenyan universities; and specifically test the moderating effect of quality assurance mechanisms on this relationship.

Certainly, studies on sustainable competitive advantage have been done in other parts of the world (Mazzarol and Soutar, 2009; Phichai and Pharuke, 2009; Nguyen, 2008; Al-swidi and Mahmood, 2011; and Ramadan, 2010). However, empirical research is insufficient on the moderating effect of quality assurance mechanisms on the relationship between strategic factors and sustainable competitive advantages in universities in Kenya. Therefore, it is presumed that embracing the strategic factors that positively influence sustainable competitive advantage and proper positioning of quality assurance mechanisms will lead to improved services and quality higher education in the short run, and advance on universities' competitiveness internationally in the long run.

The main purpose of the study was to examine the statistical significance of Quality Assurance Mechanisms moderating effect on Universities' strategic management, for sustainable competitive advantage.

The study objectives included the following:

- i. To examine the relationship between strategic drivers and sustainable competitive advantage in Kenyan universities.
- ii. To investigate the relationship between strategic managerial choices and sustainable competitive

advantage in Kenyan universities.

- iii. To appraise the relationship between strategic initial firm conditions and sustainable competitive advantage in Kenyan universities
- iv. To examine the moderating effect of quality assurance mechanisms on the relationship between strategic factors and sustainable competitive advantage

In addition, the Study had hypothesis as follows:

H0₁: *There is no statistically significant relationship between strategic drivers and sustainable competitive advantage in Kenyan universities.*

H0₂: *There is no statistically significant relationship between strategic managerial choices and sustainable competitive advantage in Kenyan universities.*

H0₃: *There is no statistically significant relationship between strategic initial firm conditions and sustainable competitive advantage in Kenyan universities.*

H0₄: *The strength of the relationship between sustainable competitive advantage and strategic factors is not positively moderated by quality assurance mechanisms in Kenyan universities.*

The conceptual model for this study was adapted from Michael Porter's model of 1998. This model integrated the Resource Based View and Dynamic Capabilities ideas in explaining the determinants of competitive advantage. Thus, in this study, sustainable competitive advantage in universities was the dependent variable while strategic factors, Initial conditions, managerial choice and drivers were the independent variables. A moderator variable was quality assurance mechanisms.

Informed by the existing theory and results from empirical studies, the predicted relationship was that the identified independent variables may have a positive and significant relationship with the dependent variable. However, the relationship may change due to effect of moderating variables. The relationship between these variables is conceptualized in Figure 1.

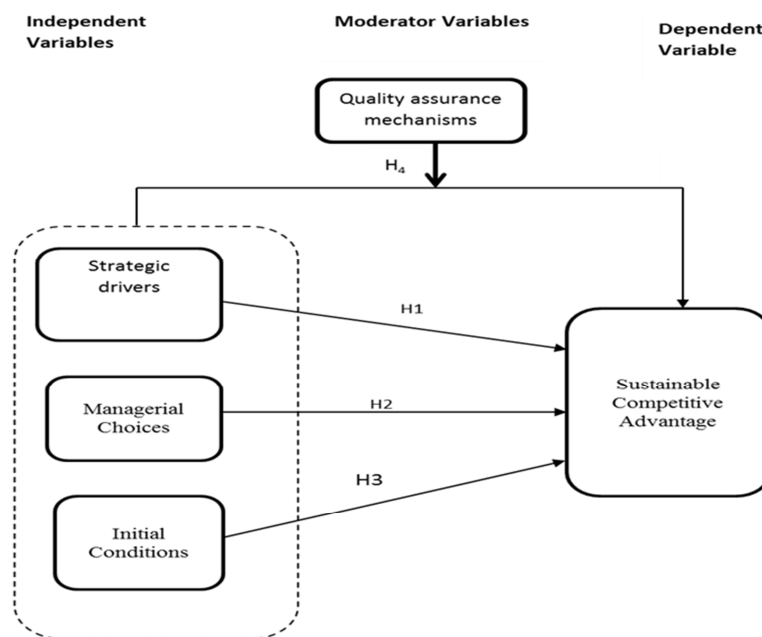


Figure 1: Strategic factors influencing Sustainable Competitive Advantage in Kenyan Universities

2. Methods

2.1 Research Philosophy and Research Design

The underlying epistemology of this research was positivist which focused on examining earlier established theories under the assumption that reality was objectively given and could be described by measurable properties independent of the observer and his instruments. The study used a descriptive survey, conducting quantitative analysis (Myers, 2007).

The study was done in fifty four (54) public and private chartered universities in Kenya. These fifty four universities had been chartered by the time of the study and formed the total population of universities in Kenya. The target population was all the senior managers in fifty four (54) chartered universities in Kenya. The researcher used a census survey since all the universities were studied. The total number of 54 private and public universities was manageable within the researchers' available time and financial resources. In addition, six key senior managers in each of these universities were purposefully selected to respond to a questionnaire making

the total respondents equal to 324.

2.2 Reliability Measures

In this study, tools which were used by other researchers to measure sustainable competitive advantage (Weerawardena, 2003, Day and Wesley's 1988) were adapted. Organizational dynamic capability measures were adapted from (Gibson and Birkinshaw's 2004, Lane, Koka and Pathak, 2006 and Wang and Ahmed 2007). Cronbach's alpha (a function of the average inter-correlations of items and the number of items in the scale) was used in this study to measure internal consistency of questionnaire items. The study tools were accepted since they yielded a coefficient of 0.75. This was acceptable since it indicates satisfactory internal consistency reliability (Nunnally and Bernstein, 1994).

2.3 Validity Measures

Validity is often defined as the extent to which an instrument measures what it purports to measure (Davies and Dodd, 2000; Mishler, 2002). Construct validity is normally evidenced if we can establish convergent, discriminant and nomological validities in a study as it was the case in this particular study. In addition, the literature review cited a number of studies from which the study instruments were adapted meaning theoretically the study components are supported. Nomological validity which is about theoretical soundness was established through Pearson's moment correlation matrix for constructs yielding an acceptable coefficient ($r=0.76$). Discriminant validity was checked by testing the study items using orthogonal varimax rotation method in factor analysis. Only factors with Eigenvalue loading greater than 1.0 were extracted. The content validity of this study was determined by first discussing the items in the instrument with the supervisors, and research experts. Content validity index of 0.802 was computed. Neuman (2000) recommends a content validity index of above 0.5, indicating that the validity of the instrument was acceptable.

2.4 Data Analysis

Data analysis for various hypotheses was tested as follows:

Hypothesis	Statistics
H0 ₁ : There is no statistically significant relationship between strategic drivers and sustainable competitive advantage in Kenyan universities	Multiple regression analysis
H0 ₂ : There is no statistically significant relationship between managerial choices and sustainable competitive advantage in Kenyan universities	Multiple regression analysis
H0 ₃ : There is no statistically significant relationship between initial firm conditions and sustainable competitive advantage in Kenyan universities.	Multiple regression analysis
H0 ₄ : The strength of the relationship between sustainable competitive advantage and strategic factors is not positively moderated by quality assurance mechanisms in Kenyan universities.	Stepwise and hierarchical regression analysis
H0 ₅ : The strength of the relationship between sustainable competitive advantage and strategic factors is not positively moderated by organizational culture in Kenyan universities	Stepwise and hierarchical regression analysis

3. Results/ Discussion

The key findings according to objectives and hypothesis of the study are explained as here below:

3.1.1 Relationship between of Strategic Drivers and Sustainable Competitive Advantage in Kenyan Universities

The researcher's first objective was to examine the relationship between strategic drivers and sustainable competitive advantage in Kenyan universities. From the study findings, the correlation analysis established that there existed a strong correlation between strategic drivers and sustainable competitive advantage in the Kenyan universities having scored a correlation coefficient of 0.686 at a precision level of 95per cent.

This is an indication that Entrepreneurial Orientation (EO), knowledge management capability development, Network/ICT expansion and marketing capability development are indeed predictors of sustainable competitive advantage in Kenyan Universities. Markedly, this is consistent with the work of Keh, Nguyen, and Ng, 2007 that Entrepreneurial behavior has more propensity to seeking innovative future prospects and enhance competitive advantage. Therefore the study findings reject *the hypothesis that there is no statistically significant relationship between Entrepreneurial expansion and sustainable competitive advantage in Kenyan universities*

Consistency is also observed as regards the study findings and prior studies on Knowledge management capability. According to Njuguna (2009), through organizational learning a firm can develop hard to imitate knowledge resources and capabilities (human capital as well as organizational capital) that create value which intern leads to superior performance. The study findings reject *the hypothesis that there is no statistically significant relationship between knowledge management and sustainable, competitive advantage.*

The study finding of strong relationship between networking and SCA is an add on to these previous studies (including works of Dehning and Stratopoulos 2003;Maringa and Leah 2011).To this end the study findings indeed reject *the hypothesis that there is no statistically significant relationship between network expansion and sustainable competitive advantage.*

The study also evidently found out that there is a significant relationship between marketing capability development and SCA. This is also consistent with reviewed literature on previous studies (Wang and Ahmed, 2007; Helfat and Peteraf, 2003; Lumpkin and Dess 1996; Mazzarol and Soutar 1999).As such the study findings imply that the *hypothesis that there is no statistically significant relationship between marketing capability development and sustainable competitive advantage in Kenyan universities is rejected.*

3.1.2 Relationship between Managerial Choices and Sustainable Competitive Advantage in Kenyan Universities

The second objective of the research was to investigate the relationship between managerial choices and sustainable competitive advantage in Kenyan universities. Based on the research findings, the correlation analysis established that there existed a very correlation between managerial choices and sustainable competitive advantage having scored a correlation coefficient of 0.642 at a significance level of 0.05.

This shows consistency with the Resource Based View theory and as purported by previous studies (Barney, 1986, 1991; Teece, Pisano and Schuen, 1997) that competitiveness and performance of a firm is dependent on its valuable, rare, imperfectly imitable, and non-substitutable resources. Managerial choices and initial conditions of universities as defined in this study can be viewed as organizational resources and capabilities that constitute a main source of the competitive advantage. To this end, the study findings lead to the rejection of *the Hypothesis that there is no statistically significant relationship between managerial choices and sustainable competitive advantage in Kenyan universities.*

3.1.3 Relationship between Initial Firm conditions and Sustainable Competitive Advantage in Kenyan Universities

The third objective of the research was to appraise the relationship between initial firm conditions and sustainable competitive advantage in Kenyan universities. Based on the correlation analysis, it emerged that there is a strong correlation between initial factors and sustainable competitive advantage having scored a correlation coefficient of 0.652 at a precision level of 95per cent. Similarly, as is the case of managerial choices, initial factors are also tangible capabilities that are supported by the resource based view as drivers to competitive advantage. Conclusively then the *Hypothesis that there is no statistically significant relationship between initial factors and sustainable competitive advantage in Kenyan universities is also rejected.*

This finding is consistent with Barney, 1986, 1991 and Teece, Pisano and Schuen, 1997 work based on resource based view that the competitiveness and performance of a firm is dependent on its valuable, rare, imperfectly imitable, and non-substitutable resources.

Since this study focused on the combined strategic factors, correlation test between strategic factors and sustainable competitive advantage was done and yielded a strong correlation coefficient of 0.752 at significance level of 0.05.This finding leads to conclusion that strategic factors have positive and significant relationship with sustainable competitive advantage.

3.1.4 Moderating Effect of Quality Assurance Mechanisms on the Relationship between Strategic Factors and Sustainable Competitive Advantage

The fourth objective was to examine the moderating effect of quality assurance mechanisms on the relationship between strategic factors and sustainable competitive advantage. From the correlation analysis, it showed that there existed a strong correlation between quality assurance and sustainable competitive advantage having scored a correlation coefficient of 0.536 at a precision level of 95per cent. Deming (1982) and Lemak, Reed, and Satish, (1997) posits that TQM strategy boosts the competitive advantage of an organization through the additional values to the customers .Other studies in Kenya (Magutu, Mbeche, Nyaoga, Nyamwange, Ongera, and Ombati, 2010) ; Awino, ,Muchara, Ogutu and Oeba,2012) seem to support the same stance that quality management is key to better services, customer satisfaction and interwoven with strategic drivers boosts sustainable competitiveness in organizations. Thus the *hypothesis that there is no statistically significant relationship between quality assurance mechanisms and sustainable competitive advantage in Kenyan universities is rejected.*

4. Conclusions

Conclusions about the key findings of the study are as here below:

4.1 Objective one:

The researcher's first objective was to examine the relationship between strategic drivers and sustainable competitive advantage in Kenyan universities. From the study findings, the correlation analysis established that there existed a strong correlation between strategic drivers and sustainable competitive advantage in the Kenyan universities having scored a correlation coefficient of 0.686 and a precision level of 95per cent. Therefore the study findings reject the hypothesis that there is no statistically significant relationship between strategic drivers and sustainable competitive advantage in Kenyan universities.

4.2 Objective two:

The second objective of the research was to examine the relationship between strategic managerial choices and sustainable competitive advantage in Kenyan universities. Based on the research findings, the correlation analysis established that there existed a very strong correlation between managerial choices and sustainable competitive advantage having scored a correlation coefficient of 0.642 at a significance level of 0.05. To this end, the study findings lead to the rejection of the Hypothesis that there is no statistically significant relationship between managerial choices and sustainable competitive advantage in Kenyan universities.

4.3 Objective Three:

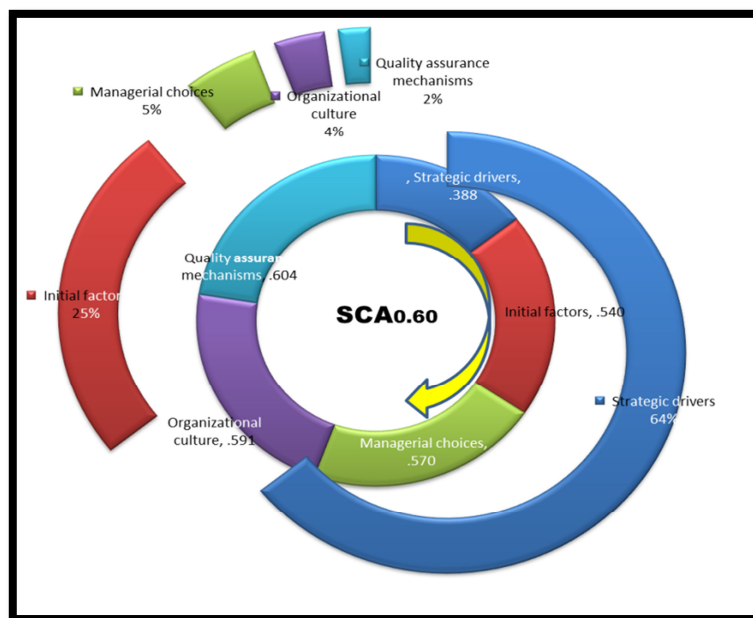
The third objective of the research was to appraise the relationship between strategic initial firm conditions and sustainable competitive advantage in Kenyan universities. Based on the correlation analysis, it emerged that there is a strong correlation between initial factors and sustainable competitive advantage having scored a correlation coefficient of 0.642 at a precision level of 95 per cent. Similarly, as is the case of managerial choices, initial factors are also tangible capabilities that are supported by the resource based view as drivers to competitive advantage. Conclusively then the Hypothesis that there is no statistically significant relationship between initial factors and sustainable competitive advantage in Kenyan universities is rejected.

4.4 Objective Four:

The fourth objective was to examine the moderating effect of quality assurance mechanisms on the relationship between strategic factors and sustainable competitive advantage. From the correlation analysis, it showed that there existed a strong correlation between quality assurance and sustainable competitive advantage having scored a correlation coefficient of 0.536 at a precision level of 95 per cent. The study results also showed a positive and statistically strong moderating effect of quality assurance mechanisms (explained variance 1.3% {R square change}; $\beta=0.125$ and $p \text{ value} < 0.05$). Thus the hypothesis that the strength of the relationship between strategic factors and sustainable competitive advantage is not positively moderated by quality assurance mechanisms in Kenyan universities is rejected.

5. Recommendations

This study provides recommendations for further studies and recommendations to Policy makers, University Managers, Ministry of Education and Government of Kenya. In order to actualize an advisory role based on these findings recommendations, a framework that models sentiments deduced from the study findings has been developed. Figure 2: illustrates this model:



Inner Circle: Explained variance by various variables on SCA [Adjusted R square]

Outer Ring: Contribution of each predictor variable to SCA model prediction [R square change]

Arrow: Direction for strategy formulation and implementation

Figure 2: Advisory Model for Sustainable Competitive Advantage

The above model illustrates that universities in Kenya should start with crafting strategy for strategic drivers (knowledge management capability, innovative entrepreneurial, ICT, networking and marketing capability development), then plan on upgrading in initial factors (infrastructure). The third step should be to work on a decision making pattern that leads to a democratic culture. When all these measures are in place, then quality

assurance mechanisms should be put in place and then the universities shall be enroute to sustainable competitive advantage.

In a nutshell this study has empirically tested strategic factors and their prediction ability on sustainable competitive advantage in Kenyan Universities. The study findings confirm strong and significant relationships though in varying degrees. Further the results on moderating effect of Quality assurance implies that if more effort is made in this direction then Kenyan Universities would move a notch higher in terms of sustainability and by extension be able to compete regionally and even globally.

6. Limitations of the Study

However, it had some weaknesses in regard to methodology. First, the study used cross-sectional data but longitudinal studies should provide more confidence in the study results. Secondly data was collected from single industry (universities) but this information may not be adequate to generalize in other firms or industries. Further research may explore use of more dimensions in each of the strategic factors' clusters to increase precision in prediction of sustainable competitive advantage.

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