

# Determining Strategy Orientation Adopted by Public Universities in Western Kenya

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**Abstract:** *The education sector contributed to 6.7% of Kenya's Gross Domestic Product in 2009/10. According to Kenya National Audit Report 2011/2012, Public Universities are running on deficits with those in Western Kenya incurring deficits of over Kshs.300 million. Public Universities though non-profit, are still expected by the government to raise funds for effective operations. The deficits have resulted to poor performance, lack of innovation, ineffective processes, customer dissatisfaction and stalled projects, indicating ineffective implementation of strategies. Strategy orientation has been linked to positive performance; however information on adoption of strategy orientations in public universities in Western Kenya is unknown. The purpose of this study was to establish the extent of strategy orientation adopted by public universities in Western Kenya, a region with relatively many newly created universities, whose growth, if well managed, has the potential for driving socio-economic development. The study adopted a census survey using cross sectional data of the 4 public universities in Western Kenya that have been in operation for over 5 years from the time they were still constituent colleges. The population was 178 staff comprising of 166 senior managers including Deans; Chairs of Departments; Registrars; Finance Officers; Librarians and 12 top managers including Vice-Chancellors and their deputies. The response rate was 84%. Primary data was collected using interview schedule and structured questionnaire while secondary data was sourced from literature. A Cronbach alpha value of 0.621 was obtained, which was more than 0.6 thus satisfactory. Descriptive statistics of means, standard deviation and percentages was used to establish strategy orientation. The findings revealed that strategy orientations adopted were prospectors at 31.4%, analyzers 27.9%, defenders 25% and reactors 15.7%. The findings implied that universities were prospective in nature. The study recommended the need for universities to continue enhancing prospector strategy. Other public universities can draw important policy guidelines regarding the status of strategy orientations.*

**Keywords:** Strategy orientation, Prospector, Defender, Reactor, Analyzer

## 1. Introduction

According to Noble (2002) strategic orientations are the guiding principles that influence a firm's strategy crafting activities. According to Miles and Snow (2003), Zahra and Pearce (1990) and Daft (2007), four strategy orientations that organizations adopt: prospectors, defenders, analyzers, and reactors, if properly implemented, can lead to effective performance. Boyne and Walker's, 2004 typology includes only prospectors, defenders and reactors. Boyne and Walker, 2004 did not attempt to place public organizations exclusively into one of those categories, but rather their expectation was that public organizations would pursue a mixture of those strategies and that the mix would change over time as agencies confront new opportunities and challenges. Strategic management theorists (Gatigon & Xuereb, 1997) and (Matsuno & Mentzer, 2000) assert that strategic orientation may broadly be defined as a strategy type or a generic pattern of response at the business unit level pertaining to the product-market domain, choice of performance criteria, and marketing execution.

In this study, strategy orientation is operationalized as the guiding principles that influence a firm's strategy crafting activities as measured by choice of strategy. Most of the theory development on strategy framework assumed that it occurs in the for-profit sector (Lee & Miller, 1996; Seger, 1987; Entrialgo, 2002). This leaves organizations, like universities, to either interpret the empirical findings regarding strategy framework to fit the non-profit sector or

reject the findings as inapplicable (Phipps and Burbach, 2010). Available evidence suggests that strategic approaches in non-profit organizations may be different (Thach & Thompson, 2007). Hinson *et al.*, (2009), in a study based in Ghana, found the prospector strategy most prevalent (40%), followed by the analyzer strategy (35%) and the defender strategy (25%). In a comparative study of Malaysia and Singapore, Sim and Teoh (2000) revealed a similar distribution. Out of 96 Malaysian firms the distribution was: 36 (37.5 per cent) prospectors, 35 (36.5 per cent) as analyzers and 25 (26.0 per cent) defenders. Ojera *et al.*, (2011) researched on impact of strategy orientation on strategic control and organizational performance of sugar firms in Western Kenya and found that the reactor was most prevalent.

Majority of research studies also show that strategy orientation has been examined in the context of large established companies (Jantunen *et al.*, 2005), the context of SMEs (Wiklund & Shephend, 2005), industry cluster context (Dai & Li, 2006), international background (Zahra and Garvis, 2000), family business background (Martin and Lumpkin, 2003). The empirical results of their relationships are however not entirely consistent. Zhou, *et al.*, (2007) posit that strategic orientation is a significant driver of superior performance in emerging economies.

Gatigon & Xuereb, 1997; Matsuno & Mentzer, 2000; Noble, 2002; Boyne and Walker, 2004 are all in consensus that strategy orientation directs decision making. Hinson *et al.*,

2009 and Teoh and Sim (2000) further revealed that prospector strategy were most prevalent however Ojera *et al.*, found out that reactor was the most prevalent. These studies contrast in way strategy orientations have been classified, however, their meanings are similar. It is apparent from these studies that most of the authors have not considered all the elements of strategy orientation, yet it is important to identify the extent of adoption for each for effective decision making, therefore, information on the strategy orientations adopted by public universities in Western Kenya is still unknown.

## 2. Research Methodology

This study utilized both quantitative and qualitative methodologies. It emphasized objectivist approach to studying social phenomenon and was based on testing of a theory composed of variables, measured with numbers (Creswell, 2003). The quantitative methodology shares it's philosophical foundation with the positivist paradigm (Weaver & Olson, 2003). The positivist philosophy argues that there is one objective reality. Therefore, as a consequence, valid research is demonstrated only by the degree of proof that can be corresponded to the phenomena that study results stand for (Hope and Waterman, 2003).

The study utilized census survey research design. According to Creswell (2003) a survey design provides a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population. Nachimus and Nachimus (2008) also asserts that a survey design is most suitable in a research aimed at establishing a problem and determining its extent.

This study focused on public universities in Kenya as per the commission of university education report, 2013. It was conducted on the four public universities in Western Kenya. Kenya has twenty two (22) Public Universities (Appendix1). The Universities in Western Region, Kenya are Maseno University, Masinde Muliro University of Science and Technology, Kisii University and Jaramogi Oginga Odinga University of Science and Technology. The researcher chose to study Kenyan Public universities since they were subjected to strategic planning in the face of spiraling demand and declining government funding and are new to the concept compared to the private universities. Map of Kenya is shown in Appendix 11.

The unit of analysis for the study was the Management. Several definitions stress the role of top management (Schaap, 2006) who argues that senior-level leadership behaviours and activities will transform a working plan into concrete reality. The target population of this study constituted respondents from four (4) Public Universities in Western Kenya as per the Commission of University Education report, 2013. (Appendix 11). The interviewees consisted of the Vice Chancellors, Deputy Vice Chancellors, Registrars, Finance officers, Deans, Chairpersons of Departments and Librarians. A census approach was adopted since the units of study were not many and are concentrated in one region thereby favouring costs, time and other resources (Sekaran, 2000). According to Kothari (2004) census enhances validity of the study providing a true measure of the population with no sampling error, availing detailed information about small subgroups within the population and providing benchmark data for future studies. Owing to the superiority of a census survey as evidenced above, the method was adopted for this study.

**Table 1: Population distribution**  
**Public Universities in Western Kenya**

<b>Positions (Management)</b>	<b>MASENO</b>	<b>MASINDE MULIRO</b>	<b>KISII</b>	<b>Jaramogi Oginga Odinga</b>	<b>Total</b>
Vice Chancellor	1	1	1	1	4
Deputy Vice Chancellors	3	3	2	3	11
Registrars	2	3	3	3	11
Finance Officers	1	1	1	1	4
Deans	13	15	11	12	51
Chief Librarian	1	1	1	1	4
Chair of Departments	40	30	24	12	106
<b>TOTALS:</b>	<b>61</b>	<b>54</b>	<b>43</b>	<b>33</b>	<b>191</b>

Sources: Information from respective universities, Commission of University Education (2013) and University Records (2014)

The study mainly utilized primary data supplemented by secondary data from university records. The study aimed at collecting data relating to strategy orientations, implementation and performance of public universities in Western Kenya. In an effort to improve the content validity and response rate, the survey was formulated and implemented with guidelines adapted from Dillman (2000). The scales for the questionnaire and other quantitative measures were drawn from in-depth literature review from which indicators for strategy orientation, implementation and performance with modifications to suit this study were selected. The pool of items in the questionnaire were

subjected to evaluation by experts from the school of Business and Economics. The questionnaire were also supplemented by semi-structured interviews to elicit most valid data possible. The questionnaire was pilot-tested on ten (10) managers at one the universities. These ten (10) managers in the pilot study were excluded from the final survey. The interview schedule was pilot-tested on three (3) managers. These three (3) were also excluded from the final analysis.

**Both Primary and Secondary data was used. The researcher obtained primary data from the senior and top managers. Secondary data was sourced from sectoral literature. Both quantitative and qualitative data was be sought.**

Primary data was obtained from the structured and semi structured questionnaires. The theoretical constructs were developed from the literature review. Conant *et al.*'s, 1990 scale items 1 to 11 was used to measure strategy orientation.

Strategy orientation was measured by Miles and Snow's strategy typology using Conant *et al.*, 1990 11-item instrument. A company is a prospector, if the responses to the 11 items correspond more to prospectors than defenders. On the other hand, a company is classified as a defender if the responses relates to those of defenders more than those of prospectors. A tie between the sum of items corresponding to prospectors and defenders will take into account the company's operating activities before determining the appropriate strategy. A company operating as prospectors are companies which continually seek innovation. Miles and Snow (1978) typology was modified to suit the objectives of this study. The modification entailed converting the resulting strategic classifications to an interval-type scale as developed by Shortell and Zajac (1990), who subsumed the Miles and Snow (1978) strategy types into a continuum of low versus high orientation toward change. Hoffman (2007) further refined this approach to provide a measure of the firm's strategic orientation (1 = Reactor, 3 = Defender, 5 = Analyzer, and 7 = Prospector).

Reliability is concerned with the consistency of the data (Hussey & Hussey, 1997). Since it is difficult to administer the instrument to the survey respondents twice when dealing with top management (Sekaran, 2000), the researcher used Cronbach's alpha method. In this regard, Cronbach's coefficient alpha is commonly used as a measure of internal consistency. The value of coefficient alpha ranges from zero (no internal consistency) to one (complete internal consistency). The Cronbach alpha coefficient threshold level is regarded as 0.6, Hair *et al.*, (1998). Moreover, Carmines and Zellner (1979) indicate that Cronbach's alpha is a superior measure of internal consistency than test-retest or split-halves approaches. In the current study the Cronbach alpha was computed for strategic orientation. The strategy orientation scale indicated a Cronbach alpha of 0.621, well above the threshold level of 0.6 as regarded by Hair *et al.*, (1998).

For strategic orientation, the Conant *et al.*, (1990) 11-item scale was adopted for this study. This scale operationalizes the classic Miles and Snow (1978) strategy typology which has been found to have considerable criterion-related validity (James & Hatten, 1995). The use of the Conant *et al.*, (1990) multi-item measurement enhances reliability. According to Di Benedetto and Song (2003), the Conant *et al.*, (1990) strategic orientation exhibited good internal consistency, using the test-retest procedure, with a mean reliability score of 0.85. This instrument was, however, modified to suit the objectives of this study. This involved converting the strategic classifications to an interval-type scale as developed by Shortell and Zajac (1990), who subsumed the Miles and Snow strategy types into a continuum of low vs. high orientation toward change. Hoffman (2007) further refined this approach to provide a measure of the firm's strategic orientation (1 = Reactor, 3 = Defender, 5 = Analyzer, and 7 = Prospector).

As a general effort to enhance reliability, this study has utilized multi-item scales, which are more reliable than single-item scales (Garrigo's-Simón *et al.*, 2005). Further, efforts were made to reduce bias in manager's true perceptions of the construct by wording and order of presentation of questions.

### 3. Results and Discussion

Response rate was determined by the response out of the original survey population. The results for the response return in Table 2 indicate that the overall response rate was 84% out of a population of 178 respondents. The respondents used for the pilot study were 1(One) Vice Chancellor, 2(Two) Deputy Vice Chancellors, 5(Five) Deans and 5(Five) Chairpersons of Departments. These respondents were not included in the final analysis.

Many social science studies, consider a threshold of at least 60% adequate to generalize the sample and population without threatening the external validity and statistical conclusion validity of inferences made in research using questionnaires (Johnson & Owen, 1962).

**Table 2: Response Rate**

Respondents	Population	Sample	Response Received	Rate (%)
Vice Chancellors	3	3	3	100
Deputy Vice Chancellors	9	9	7	77.8
Registrars	11	11	10	90.9
Finance Officers	4	4	3	75
Deans	46	46	39	84.8
Chairs of Department	101	101	84	83.1
Librarian	4	4	4	100
<b>TOTAL</b>	<b>178</b>	<b>178</b>	<b>150</b>	<b>84.2</b>

Source: Survey data, 2015

The study sought responses from respondents whose characteristics in terms of Job Title and years of work in the universities are presented as shown in table 3. Table 3 indicates that majority of the respondents were 84 were chairs of departments, out of which, 35 had served for a period of 3-5 years, 21 had served over 10 years, 10 had served between 8-10 years, 9 had served between 6-8 years and 9 had served less than three years. 16 Deans had served over 10 years, 11 between 3-5 years, 4 had served between 8-10 years and only 7 had served less than 3 years. The rest were evenly distributed over the number of years they had served. Therefore majority of the respondents, 51 had served 3-5 years followed by 43 who had served over 10 years.

**Table 3: Job title and duration of service**

Job title	Duration of Service In University					Total
	Less Than 3 Years	3-5 Years	6-8 Years	8-10 Years	Over 10 Years	
Chairs of Department	9	35	9	10	21	84
Deans	7	11	1	4	16	39
Finance Officers	0	2	0	1	0	3
Librarians	0	0	1	0	3	4
Registrars	1	3	1	2	3	10
Total	17	51	12	17	43	140

Source: Survey data, 2015

The study established the highest level of education of the respondents. The results are presented as shown in Table 4

Table 4 results indicate that majority of the respondents, 83 (59.3%) were PhD holders, followed by the holders of master's degree, 46(32.9%) and those who had a bachelor's degree, 10(7.1%).

**Table 4:** Highest level of Education for the Respondents

Education	Frequency	Percent
Bachelor	10	7.1
Masters	46	32.9
Doctorate	83	59.3
Others	1	.7
	140	100.0

Source: Survey data, 2015

The study established through secondary records that the oldest public university in Western Kenya has been in operation for over 20years and the youngest has been in operation for less than 5 years as shown in Table 5. This is relevant since strategic plans cover a large span of time that is several years.

**Table 5:** Name of the University and Number of Years in Operation

List of Public Universities Operating in Western Kenya

S/ No	University Name	Area	University Status	Constitute College
1	Maseno University	Maseno	2001	1990
2	Masinde Muliro University of Science and Technology	Kakamega	2009	2002
3	Kisii University	Kisii	2013	2007
4	Jaramogi Oginga Odinga University of Science and Technology	Kisumu	2013	2009

Source: Commission of Higher Education report (2013).

The planning horizon of public universities is shown in Table 6. 78.6% had a planning horizon of five years, whereas 6.4% planned for over five years, 5.7% planned

for Iyear, 5% planned for one year and 4.3% for two years. The planning horizon is the amount of time an organization will look into the future when preparing strategies, many institutions use a five-year planning horizon.

**Table 6:** Planning Horizon

Period of Planning	Frequency	Percent
One Year	7	5.0
Two Year	6	4.3
Four Years	8	5.7
Five Years	110	78.6
Over Five Years	9	6.4
Total	140	100.0

Source: Survey data, 2015

Table 7 summarizes the findings of the study.

The results from Table 7 indicate that most of the firms adopted prospectors strategy in terms of the products and services offered to customers as indicated by 55(39.3%) of the respondents. This implies that they were innovative in their services. Most of the organization had a prospective nature with respect to their image in the marketplace, and amount of time spend on monitoring changes and trends in the marketplace as revealed by 60(42.9%) and 64(45.7%) respectively. The results further revealed that the monitoring and evaluation procedures were prospective in nature as confirmed by 66(47.1%) of the respondents. However, firm goals were characterized as analyzer as revealed by 61(43.6%), while problem solving and changes in trends in most firms were characterized as defender for most of the institutions as reported by 96(68.6%). It can be deduced that the most prevalent strategy orientation is prospectors with a percentage of the respondents which is 44(31.4%). This implies that the public universities are more innovative, creative, they continuously monitor the market place and enter new markets with new types of product offerings, they insure that resources are available and their administrative structures are organized by departments and their administrative control is decentralized.

**Table 7:** Strategy orientation adopted by Public Universities in Western Kenya

Strategy Orientation	Reactor f(%)	Defender f(%)	Analyzer f(%)	Prospectors f(%)
Characteristics of product and services	29(20.7)	37(26.4)	19(13.6)	55(39.3)
Firm image	21(15.0)	16(11.4)	43(30.7)	60(42.9)
Time spend characterizes firm as	8(5.7)	16(11.4)	52(37.1)	64(45.7)
Increase /losses in demand characterizes firm as	41(29.3)	29(20.7)	29(20.7)	41(29.3)
Firm goals characterizes it as	26(18.6)	25(17.9)	61(43.6)	28(20.0)
Managerial employee competency characterizes firm as	21(15.0)	26(18.6)	45(32.1)	48(34.3)
Infrastructure Adaptability	30(21.4)	33(23.6)	52(37.1)	25(17.9)
management staff concentration	36(25.7)	48(34.3)	33(23.6)	23(16.4)
Future preparation	42(30.0)	36(25.7)	22(15.7)	40(28.6)
Problem solving, trends dynamics	9(6.4)	96(68.6)	3(2.1)	32(22.9)
Monitoring & Evaluation procedures	20(14.3)	36(25.7)	18(12.9)	66(47.1)
Mean count and percentages	22(15.7)	35(25.0)	39(27.9)	44(31.4)

Source: Survey data, 2015

This results in Table 7 revealed that public universities in western Kenya adopted the prospectors strategic orientation 31.4%, closely followed by analyzers 27.9%, defender 25.0%, with the least prevalent being reactor,15.7%.

Strategic orientation is strategy type or a generic pattern of response at the business unit level pertaining to the product-market domain, choice of performance criteria, and marketing execution (Gatigon & Xuereb, 1997; Matsuno & Mentzer, 2000). The results in this study shows that public



universities adopt prospector strategy in their organizational structure. This finding is consistent with the literature regarding the distribution of strategic orientation types in a typical competitive environment. The results are also consistent with the Miles and Snow (1978) prediction, Hinson *et al.*, (2009), in a study based in Ghana, which found that the prospector strategy was most prevalent (40%), followed by the analyzer strategy (35%) and the defender strategy (25%). This study contrasts others who have omitted the study of reactors (O'Regan & Ghobadian, 2005; Doty, Glick, & Huber, 1993; Shortell & Zajac, 1990; Miller *et al.*, 1997; Golden, 1992). Anzaya (2007), while confirming the existence of the Miles and Snow (1978) typology in Kenya, omitted the reactor strategy and also failed to report on the relative prevalence of the other three types. Few studies have explicitly reported on reactor strategy. This study is unique because it discovers new knowledge in terms adoption of strategy orientation in public universities in Western Kenya.

In order to determine the strategic initiatives of the universities, the interviewer asked the respondent to list the strategic initiatives that have been implemented in the university over the last 5 years. The emerging strategic initiatives included; Corporate image building through public relations office, Master plan to guide in establishing modern facilities, Establishing new academic programs in order to Position University competitively in the market, ISO certification, Introducing e-learning, Providing the local community with the casual employment in the spirit of building good relations with them, Resource Planning, Introduction of New Schools and Faculties, Collaboration and Linkages with relevant institutions, Interdisciplinary research, Reviewing and Developing Policies, Equipping facilities through Internal Sources and Grants. From the respondent's views, it is clear that the universities have got many strategic initiatives put in place.

#### **4. Summary                      Conclusions                      and Recommendations**

The study established that prospector strategy was the most adopted strategy followed by analyzer strategy, defender and finally reactor strategy. This implied that most of the universities were innovative. From the research findings of the current study, it appears that the main strategy that is adopted by the public universities is the prospector strategy. This suggests that most of the institutions are advancing towards innovativeness. Following the conclusion, the study recommends that efforts be put in place to ensure that strategies are implemented. In addition, since strategy orientation influences the growth of the institutions, much should be invested in the respective strategies in order to realize full growth and achievement of set goals. The theoretical contribution to this study has been uniquely achieved by adapting and validating the Miles and Snow (1978) typology by operationalizing the scale by Conant *et al.*, (1990), which was, however, modified to suit this study. This study has also documented the prevailing practice and suggested adoption of viable strategy orientation. The contributions of this study will enlighten decision makers in public universities.

#### **References**

- [1] Boyne and Walker. (2004). *Strategic Management and Performance of Public Organizations Testing Venerable Ideas*.
- [2] Carmines, E., and Zeller, R., 1979. *Reliability and Validity Assessment*. Sage Publications, Beverly Hills, California.
- [3] Conant, J.S., Mokwa, M.P. & Varadarajan, P.R.(1990).
- [4] Strategic Types, Distinctive Marketing Competencies and Organizational Performance: A Multiple Measures-Based Study', *Strategic Management Journal*, vol. 11, no. 5, pp. 365-83.
- [5] Creswell, J. (2003). *Research Design. Qualitative, Quantitative and Mixed Methods Approaches* (2<sup>nd</sup> ed.). Sage, Thousand Oaks.
- [6] Dai, Z. and Duserick, F. (2006). *Toward 155 - 175 Process-oriented ERP Implementation Competition Forum (ISSN: 1545-2581)*, Vol 4, Number 1, pp. 148-158.
- [7] Daft, R. L. (2007). *Organizational Theory and Design* (9e). Mason, OH: Thomson South-Western.
- [8] De Vaus, D. (2002). *Surveys in Social Research*. 5<sup>th</sup> Edition. London: Routledge.
- [9] De Von, H.A., Block, M.E., Moyle-Wright, P., Ernst, D.M., Hayden, S.J., & Lazzara,
- [10] Di Benedetto, C.A. & Song, M. (2003). The relationship between strategic type and firm capabilities in Chinese firms. *International Marketing Review*, 20(5), 514-533.
- [11] Dillman, D. A. (2000). *Mail and internet surveys: the tailored design method* (2nd ed.). John Wiley and Sons. Garrigós-Simón, F.J, Palacios Marqués, D & Narangajavana,
- [12] J. (2005), "Competitive strategies and performance in Spanish hospitality firms", *International Journal of Contemporary Hospitality Management*, Vol. 17 Iss 1 pp. 22 – 38.
- [13] Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of Marketing Research* 34 (1), 77 – 79.
- [14] Entrialgo, M. (2002). The Impact of the Alignment of Strategy and Managerial Characteristics on Spanish SMEs. *Journal of Small Business Management* 40(3), 260–270.
- [15] Hair, J.F. Black, W.C., Babin, . B.J. X. Anderson, B.J. & Tatham, R.L. (2006). *Multivariate Data Analysis*. Pearson Education Inc., NJ: Upper Saddle River.
- [16] Hinson, R, Dadzie, K. & Winston, E. (2009). The Changing Nature of Contemporary Marketing Practices (CMP) in Ghana: A Test of The Miles And Snow Strategic Typology *Repositioning African Business and Development for the 21st Century Simon Sigué (Ed.) Proceedings of the 10th Annual Conference, IAABD*
- [17] Hoffman, R.C. (2007). The strategic planning process and performance relationship: does culture matter? *Journal of Business Strategies Business Services*
- [18] Hope, K.W., & Waterman, H.A. (2003). Praiseworthy pragmatism? Validity and action research. *Journal of Advanced Nursing*. 44(2), 120-127.
- [19] Hussey, J., & Hussey, R. (1997). *Business Research; A practical guide for undergraduate and post graduate students*. London : Macmillan Press Ltd.
- [20] Jantunen, A.K., Puimalainen, S., Saarenketo, S., & Kylaheiko, K. (2005). Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship*, 3, 223–243.
- [21] Kenya National Audit Office Report 2011/2012. [www.kenao.go.ke/index.php/reports/doc\\_download/56-report-2011-2012](http://www.kenao.go.ke/index.php/reports/doc_download/56-report-2011-2012)

- [22] Kothari, C. K. (2004). *Research Methodolgy: Methods and Techniques*. New Delhi, New Age International Publishers.
- [23] Lee, J., & Miller, D. (1996). *Strategy, Environment and Performance in Two Technological Contexts: Contingency Theory in Korea Organization Studies*. Vol.17/1996, NI; J pp 729-750
- [24] Martin, W.L. & Lumpkin, G.T. (2003): From EO to FO. (<http://www.babson.edu/entrep/fer/BABSON2003/XII/XII-P2/XII-P2.html>).
- [25] Matsuno, K., & Mentzer, J.T. (2000). The Effects of Strategy Type on the Market Orientation-Performance Relationship. *Journal of Marketing: Vol. 64, No. 4*, pp. 1-16.
- [26] Miles, R.E., & Snow, C. C. (1978). *Organizational Strategy, Structure and Process*. New York, NY; McGraw- Hill.
- [27] Miles, Raymond E. and Charles C. Snow (2003). *Organizational, Strategy, Structure and Process*, Stanford: Stanford University Press
- [28] Nachimus, C.F. & Nachimus, D. (2008). *Research Methods in the Social Sciences*. 7th ed. New York: Worth.
- [29] Noble, Charles H. & Michael P. Mokwa (1999), "Implementing Marketing Strategies: Developing and Testing a Managerial Theory," *The Journal of Marketing*, 63(4), 57-73.
- [30] Noble, C.H. (1999b). The Eclectic Roots of Strategy Implementation Research. *Journal of Business Research*.
- [31] Noble, C. S. (2002). Market orientation and alternative strategic orientation: A Longitudinal assessment of performance implications. *Journal of Marketing*, 66(4), 25-39.
- [32] Ojera, P.B., Ogotu, M., Siringi, E.M., & Othuo L. A. (2011). Belief control practices and organizational performances: A survey of sugar industry in Kenya. *African Research Review*, 5(4), 211-17.
- [33] Phipps, K.A., & Burbach, M.E. (2010). Strategic leadership in non-profit sector: opportunities for research. *Journal of Behavioral and Applied Management*, 11, 137-154.
- [34] Schaap, J.I. (2006). Toward Strategy Implementation Success: An Empirical Study of the Role of Senior-Level Leaders in the Nevada Gaming Industry". *UNLV Gaming Research & Review Journal*, 10, 13-37.
- [35] Shortell, S. & Zajac, E. (1990). Research notes. Perceptual and archival measures of miles and snow's strategic types: A Comprehensive assessment of reliability and validity. In: *Academy of Management Journal*, 33(4): 818-832.
- [36] Sim, A. B., & Teoh, H.Y. (2011). Relationships between business strategy, environment and controls: a three country study. *J. Appl. Bus. Res.* 13(4): 57-74 .
- [37] Thach, E., & Thompson, K.J. (2007). Trading places: examining leadership competencies between for-profit vs. public and non-profit leaders. *Leadership and Organization Development Journal*, 28, 356-375. <http://dx.doi.org/10.1108/01437730710752229>.
- [38] Weaver, K., & Olson, T.K. (2006). Understanding paradigms used for nursing research, *Journal of Advanced Nursing*, 40 (5), 459-469.
- [39] Wiklund, J., & Shepherd, D. (2005). Entrepreneurial Orientation and Small Business Performance: A Configurational Approach. *Journal of Business Venture*, 20 (1), 71-91.
- [40] Zahra, S. A., & Garvis, D. M. (2000). Entrepreneurship and \_rm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5), 469-492.
- [41] Zahra, S. A. & Pearce, J. A. (1990), "Research Evidence On The Miles-Snow Typology." *Journal of Management*.
- [42] Zhou, K. Z., & Li, C. B. (2007). How does strategic orientation matter in Chinese firms? *Asia Pacific Journal of Management*, 24 (4), 47-66.

**Appendix I: List of Public Universities Operating In Kenya**

S/NO.	University Name	Area	University Status	Yr. Established
1	University of Nairobi	Nairobi	1970	1956
2	Moi University	Eldoret	1984	1984
3	Kenyatta University	Nairobi	1985	1965
4	Egerton University	Njoro	1991	1939
5	Maseno University	Maseno	2001	1955
6	Jomo Kenyatta Univ. of Agricultural Technology	Nairobi	1994	1981
7	Masinde Muliro Univ. of Science and Technology	Kakamega	2009	2002
8	Dedan Kimathi Univ. of Technology	Nyeri	2012	1972
9	Chuka University	Chuka	2012	2004
10	Technical Univ. of Kenya	Nairobi	2013	1961
11	Technical Univ. of Mombasa	Mombasa	2013	1940
12	Pwani University	Kilifi	2013	2007
13	Kisii University	Kisii	2013	1965
14	University of Eldoret	Eldoret	2013	2008
15	Maasai Mara Univ.	Narok	2013	2008
16	Jaramogi Oginga Odinga university of Science & Tech.	Kisumu	2013	2009
17	Laikipia University	Laikipia	2013	2009
18	South Eastern Kenya Univ.	Kitui	2013	2008
19	Multimedia Univ. of Kenya	Nairobi	2013	2008
20	Univ. of Kabianga	Kericho	2013	2009
21	Karatina University	Karatina	2013	2008
22	Meru University of Science & Techn.	Meru	2013	2008

Source: Commission of Higher Education report.(2013).

#### Appendix 11: Map of Study Area (Kenya)

Western parts of Kenya, formerly Nyanza and Western Provinces

