

Original Research Article

Effect of Innovation Strategies on Competitive Advantage in Public Secondary Schools in West Pokot Sub County, West Pokot County

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ABSTRACT

The purpose of the study was to investigate the effect of innovation strategies on competitive advantage in public secondary schools in West Pokot sub County of West Pokot County. The analysis was focused on the respondents of the target population of the study. The research was guided by the following research objectives: - to determine the effect of students' innovation strategies on competitive advantage, to examine the effect of departmental innovation strategies on competitive advantage and to examine the effect of management related innovation strategies on competitive advantage. The study was guided by the Market-Based View (MBV); Resource Based View (RBV) Theory; Capability -Based View (CBV) Theory; The Relational View of Strategy (RVS); and the Institutional theory. A descriptive research design was adopted with a structured questionnaire that covered both qualitative and quantitative data, as a tool for data collection. The survey targeted the Ministry of Education Science and Technology personnel, in particular secondary school principals, HODs, teachers, students and boards by employing census method since the target population was less than one hundred respondents, which is the maximum acceptable number for census method to be used. Data sorting and analysis was carried out by both the regression tools and ANOVA using the Statistical Package for Social Sciences (SPSS) version 23. A multiple correlation coefficient and regression analysis together with the ANOVA test was used to establish, make conclusions and recommendations on the relationship between the study variables from the findings. The findings, through the F calculated at > 5% level of significance, revealed that the regression effect was statistically significant between the independent variables and the dependent variable. They further showed that the overall model was significant with students' innovative Strategies predicting the largest portion of the dependent variable, the other independent variables, departmental innovation strategies and the management related strategies predicting came in that order as concerns their prediction of the competitive advantage. From the findings, management related strategies were the most significant predictor of competitive advantage. The results are to be used with the already conducted researches to enrich the area of innovation and competitive advantage as well as the area of education management.

Keyword: Open Health Initiative, School Based Curriculum Development, Structure-Conduct-Performance, Strategic Plan, institutions, Total Quality Management.

I. INTRODUCTION

The overriding goal of any organization is superior performance that

makes it not only stay ahead of other competitors in the market or service sector but also assume the lead in service delivery

as well as preference by the customers. In order for this superiority to be attained, the managers should put in place a strategy to attain the goal of the organization and continue innovating on the strategy to ensure that the firm outperforms its rivals. This part of the proposed study put into sight the reality of strategy as it relates to sustained performance for both profit and non-profit making organizations. In particular, there was an endeavor to examine practical organizational situations globally as way of forming a ground for the study.

1.1.1 Concept of Strategy

The concept of strategy is a multidimensional concept that has been widely used and applied in all fields of study. It not only defines an organization long term goals, purpose and objectives, but also deals with the organization competitive advantage, positioning of the organization in the environment and defines the business of the organization. Mintzberg (2002) defines strategy as a plan, ploy, pattern, position and perspective. These defining characteristics imply that strategy; specifies an intended course of action designed in advance (plan), points out manoeuvres intended to outwit a competitor (ploy), develops a pre-conception emerging from a set of actions (pattern), locates an organization in the environment in which it can develop a sustainable competitive advantage (position) and gives an organization an identity as well as revealing the way an organization perceives the external environment (perspective).

Barney (2007) defines a competitive strategy as a firm's theory of how to achieve high levels of performance in the markets and industries within which it is operating. Barney's work explains two levels of strategic decisions; business level strategies and corporate level strategies. The former strategies are actions firms take to gain advantages in a single market or industry; cost leadership, product differentiation, flexibility etc. while the latter are actions such as diversification, mergers,

acquisitions and international strategies, that firms take to gain advantages by operating in multiple markets or industries.

Porter (1979) introduces the five competitive forces framework that influences industry structure and therefore an organization's strategies and further argues that industry structure strongly influences the competitive nature and range of strategies open to the organization. Pearce et al., (2008) explains that designing viable strategies for a firm requires a thorough understanding of the firm's industry and competition and recommends that a firm's executives need to address four questions: What are the boundaries of the industry? What is the structure of the industry? Which firms are its Competitors? What are the major determinants of competition? The answers to these questions provide a basis for thinking about the appropriate strategies that are open to the firm.

1.1.2 Global Innovative Strategies

According to Hill and Mcshane (2009), a major determinant of the ability of an incumbent firm to respond to new competition is the nature of the firm's prior strategic commitments (a firm's investments in tangible and intangible assets to support a particular way of doing business; a particular business model. This argument is illustrated in the case of the U.S. automobile industry that was dominated by the stable oligopoly of General Motors, Ford and Chrysler that majored in making large cars to respond to the then market demand between 1945 to 1975. When the market shifted from large to small cars during the late 1970s, these companies lacked the assets and capabilities required to produce these cars. They were consequently overtaken by the Japanese who stepped into the market by providing compact, fuel-efficient, high quality, low-cost cars. The Japanese automobile industry then got hold of the competitive advantage courtesy of their innovative strategy.

To help Australia compete on an international level, \$36 million was invested

over four years in a Global Innovation Strategy to improve Australia's international science, research and innovation collaboration. Under the National Innovation and Science Agenda the strategy includes; establishing five 'Landing Pads' in global innovation hotspots to support entrepreneurial Australians, providing seed funding to assist Australian businesses and researchers to collaborate with international businesses and researchers through the Global Connections Fund and building strong regional linkages in the Asia-Pacific through the Regional Collaborations Programme. (Australian Government, 2016)

In some South Korean classrooms, students learn English from *Engkey*, an egg-shaped robot English teacher with a cute humanoid face. *Engkey* is controlled remotely by a native English-speaker (at home in, say, Australia or the U.S.), whose face is projected on Engkey's screen. Known as a "telepresence" robot, Engkey helps address shortages of native English teachers in South Korea. Other types of robots help students check in for class, inquire about their moods or teach them to dance (Matcher, 2015)

Turkey approved a document entitled; the National Science, Technology and Innovation Strategy. The vision of the National Science, Technology and Innovation Strategy (2011-2016) was "to contribute to new knowledge and develop innovative technologies to improve the quality of life by transforming the former into products, processes, and services for the benefit of the country and humanity". In line with these targets and within the period 2011-2016, this strategy was aimed at disseminating culture of multilateral and multidisciplinary RDI cooperation, stimulating sector and regional RDI dynamics, encouraging SMEs to become stronger actors within the national innovation system, and enhancing the contribution of research infrastructures to the knowledge creation capacity within the national innovation system.

1.1.3 Regional Innovative Strategies

The East African Community (EAC) in 2015 resolved to support implementation of the renewed Global Strategy for women's children's and adolescent's health in its 5 Member states (the Republic of Burundi, Kenya, Rwanda, United Republic of Tanzania and Uganda) by convening biennial regional high level south-to-south meetings of Ministers, Parliamentarians, Public and Private Sector Stakeholders, Civil Society, academia, and health Professionals to review progress towards women's children's and adolescent's health as envisioned in the Sustainable Development Goals (SDGs) and the Renewed Global Strategy for Women's Children's and Adolescent's Health, 2016-2030. These meetings in addition would serve as a space for holding governments and partners to account for progress and prioritize key bottlenecks and drivers; adopt strategies to scale up front-runner innovations in EAC; and inform EAC supported south-to-south collaboration. It would make use of the EAC Open Health Initiative (OHI) which focuses on a) strengthening oversight and accountability for results and resources through increasing access to high quality health data/information, b) facilitating diffusion of expertise, best practices and innovations among the EAC Partner States; c) enhancing financing and d) accelerating political momentum.

More than 250 senior representatives and advisors from regional governments, UN agencies, international and regional NGOs, CBOs, investors and donors, research institutes and the private sector gathered in Addis Ababa, Ethiopia in February, 2016 under the umbrella of The Aid & International Development Forum (AIDF) to discuss how technological innovations and best practice can improve aid delivery and development strategy in East Africa. The specific objectives of this summit were; to showcase expertise, approaches and innovations by different stakeholders in the region to discuss guidelines and regional policy options that

support technological innovations and to provide an opportunity for knowledge exchange and networking amongst public, private and civil society stakeholders.

A key goal of the COMESA treaty (1993) was to stimulate sustainable economic growth in the region through increased trade between member states. On the basis of a 1980–2010 annual panel dataset, a study by Karamariro and Ijjo (2015) examines the contribution of COMESA integration to economic growth in the region using the framework of a cross-country growth model. The researchers found no significant empirical support for a positive growth impact, as yet, on the region from the integration. However, growth in capital stock, population, world GDP and the level of openness to international trade turned out to be the most robust drivers of growth in the COMESA region over the period.

The Economic Community of West African States (ECOWAS) in a regional workshop to review the ECOWAS ICT Strategy in Nigeria's capital, Abuja on 27-28th July 2013 affirmed the need for a comprehensive regional Information and Communication Technology (ICT) strategy for the continuous growth and development of the West African region. The affirmation was made in a meeting of a group of experts, delegates and other stakeholders.

1.1.4 Innovation in the Education Sector

Traditional approaches to education must be supplemented with innovative approaches to learning. This requires governments to think differently about educators' accreditation, curricula and classroom structures. It requires flexibility to tailor education to individual students, rather than forcing students to conform to set curricula. Greater access to technology and ICT advances such as the internet, social media and tele-presence makes this possible by giving educators and students access to a global pool of information and knowledge (Cisco, 2011).

In Maier (1971) article; Innovation in Education, full participation can be

obtained in large classes and educational costs reduced by utilizing students as trainers. The article also concludes that; by dividing classes into groups or pairs, situations can be created in which students must (a) converse in a foreign language, (b) resolve a conflict, (c) conduct an interview, or (d) solve a problem together. Individuals can read and listen by themselves but they cannot discuss or experience conflict by themselves. It further argues that development of group and interpersonal skills can be achieved through participatory learning and training.

Havelock (1970) in four lengthy case studies illustrates the process of change at its best and at its worst. The change agents in these case studies represent a wide range of educational roles: student, teacher, administrator, and outside consultant. The material presented in these case studies is later used to show the stages in a planned change. The suggested stages in such a planned change are: building a relationship, diagnosing the need, acquiring relevant resources, choosing the solution, gaining acceptance, stabilizing the innovation, and generating self-renewal.

Education and learning that encourages and sustains different opinions enables greater innovation thinking. Innovation is achieved through openness, trust, and partnership and valuing diversity. The more that schools and workplaces use these skills, the more that innovation will be seen and recognized as a valued skill in its own right. Offering education and learning opportunities for innovation provides valuable knowledge and experience that can be taken forward as organizations move away from dependence on established practices for a quick-fix solution. Innovation starts with a vision, followed by the collection of evidence relating to the possibilities and potential benefits of the concept. This is achieved through the exchange of learning with many people from various education backgrounds. This knowledge exchange reduces ambiguity, improving the chances of success.

1.1.5 Innovation in Kenyan Education System

Among the seven objectives of the vision 2030 for the Education sector in Kenya is the Provision of high standards trained skills. By this the government aims at setting the bias of education towards more science and technology based courses. These courses are important in the perspective that they are able to cope with technological transformation hence provide job opportunities at the global market. The government also aims at making science and technology an integral part of all school training in Kenya; this will lead to the provision of modern science labs in schools.

The Ministry of Education of Science and Technology in 2010 rolled out Education support program (ESP) With a view to enhancing practice of STI related instruction and management systems in secondary schools. The Objectives of the Education Support Program included; developing a cost-effective model for equipping Education institutions with ICT facilities for use in teaching and learning, equipping selected educational institutions (most preferably Secondary Schools) in all constituencies able to provide a classroom which can be used as an ICT Laboratory, developing and implementing a comprehensive capacity building program including teacher professional development, supplying digital materials to schools for use in teaching and learning, facilitating the establishment of a National Helpdesk and Support Centre and the establishment of a National Education Portal for sharing of digital content and enhanced collaboration.

For this dream to be realized, there is need for the secondary school Education sector to develop the science and technology geared teaching and learning in schools to ready the graduates to pursue relevant courses at the universities and middle level colleges. Fifteen years to the 2030 timeline, the situation in Kenya is still far from this expected outcome. A recent survey indicated that only 20% of those that join the universities pursue engineering, human

medicine, veterinary medicine, actuarial science and computer science. Since the Vision 2030 strategy is specifically tooled to focus on reforms and development in nine key sectors, Science Technology and Innovation (STI) among them, scholarly works that investigate superior performance and competitive advantage in any field of study cannot ignore the levels of STI use in organizations and institutions.

The 2012-2016 strategic plan for Kapenguria Boys, one of the sampled schools states in part: “For a long time Kapenguria Boys High School has posted average academic results. The development of this strategic plan will establish basis for programs review, coordination, implementation, monitoring and evaluation and reporting. In this manner, a clearly defined roadmap for implementing the programs activities will be defined to improve our general school performance in all areas of the institution”

The strategic plan, in its SWOT analysis chapter recognizes the institution’s weaknesses as; average academic performance, poor fees payment, inadequate laboratories and lack of the library among others. On the other hand, it prides of; community support, high potential for academic improvement, goodwill from MOEST and development partners, establishment of IGA and joint examinations with other performing schools as the opportunities. The school’s strategy (Vision, Mission, Motto and core values) is geared towards academic excellence. Among its six strategic goals, that the school intended to pursue, it is worthy to single out the following relevant strategic objectives: (i) Establishing mechanisms to achieve a minimum mean score of B plain, (ii) strengthening the quality Assurance and Standards (QAS) department, (iii) building the capacities of the teachers and non-teaching staff in strategic management of educational programs, (iv) introduction of E- Learning and E- Library, (vi) constructing a modern library and four laboratories and a multipurpose hall. The

others are; (vii) benchmarking, undertaking on best practices on time management and (viii) application of innovative ways of managing time. Except for objectives (iv) and (viii), a critical look into the contents of this organizations' strategic plan reveals any school's ordinary strategic objectives that could be translated to strategic initiatives. The strategic goals and objectives do not place the organization to a leading position (Competitive advantage) compared to other schools in the County or in the nation.

1.2 Statement of the problem

In order to survive in a dynamic environment, organizations need strategies that focus on their customers and other stakeholders. The strategies should adequately respond to competition and changing environment. For a sustainable competitive advantage, an organization must have in place strategies that are superior to its competitors. If superior and competitive strategies are effectively adopted, an organization can achieve long term and sustainable profitability and competitive advantage. To achieve any competitive advantage, a firm has to look deeply into what it can achieve and how to use what it has for realization of success (Mumbi, 2013). Educational institutions are among the organizations that face cut throat competition from time to time and so cannot be exceptions in pursuing strategies to enable survive and remain relevant in very dynamic service industry.

The Kenyan Education system has severally come under scrutiny as seen through the many commissions, working committees and task forces that have been mandated to re-examine the relevance of the system and make recommendations for improvement. The recommendations of these professional teams however have been politically manipulated, shoddily implemented or even completely shelved (Otiato, 2009)

The Education for Sustainable Development (ESD) policy developed and launched by the Ministry of Education in

2017 has as its main rationale the fact that a lot remains to be done to ensure policy coherence between the education sector and other sectors for sustainable development. In particular, the policy is meant to make education sector in the country instrumental in the development of other sectors thereby creating an enabling environment for economic growth that will put the country ahead in the region. The priority action areas are on; advancing policy, transforming learning and training environments, building capacities of educators and trainers, empowering and mobilizing the youth and accelerating sustainable solutions at the local level (Ministry of Education, 2017). A critical look at this policy suggests the need to make the Education system more competitive, appropriate and responsive to the needs of the country and give it an edge in the region. The above five priority areas stated in the policy have one thing in common; the teacher and the learner are the key players in order to achieve policy coherence between the education sector and other sectors.

Total Quality Management according to Waudu and Ouya (2010) is an innovation strategy that asks people to continuously look for new ways to adapt to the changing environment and to progressively improve with an effort to bring out the best for the stakeholders as well as for the institution. This target is achieved by embracing a paradigm shift from traditional quality management to the more innovative TQM. Are these two different in any way? Whereas Total quality Management seeks for permanent success in satisfying consumers' requirements, improving quality of teaching, learning and cutting down the costs by involvement of all the stakeholders, traditional quality management pursues satisfaction of consumers' needs by crisis management, teaching and learning process is an end in itself, the cost of education has no bearing on the planning stage and the school administrators make unilateral decisions pertaining the institutions.

Achievement of the Secondary school Education objectives has mainly been hampered by broad subject content, inadequate support materials and high pupil-teacher ratios and subjects taught at secondary school though appropriate do not adequately inculcate practical skills, the learning is theoretical, even in practical subjects(KICD,2013). The Kenya Institute of Curriculum Development identifies a number of challenges that hampers the Kenyan schools from becoming centers of excellence: (i) Inadequate ICT infrastructure in schools limit the teachers and learners to embrace contemporary forms of knowledge acquisition. (ii) There is undue emphasis on examinations which undermines effective assessment; most schools use traditional written tests approaches, whereas observations and projects are rarely used. Moreover, these tests are cognitively skewed and ignore other domains of learning. (iii) Most BOGs have inadequate capacity to perform their role of managing school finances, human and material resources, physical facilities, school performance, staff and students' welfare, discipline, and procurement. It is however both interesting when the actual expectations of what prudent educational management should earn the nation.

According to Waudo and Ouya (2010), the management culture in a school is a primary determinant of the level of student success at learning, the Boards of Management, principal and teachers have a primary responsibility for that culture. There is need to redefine leadership in education to include all the elements within a school system from the superintendent to the principal to teachers, students, parents and community representatives. In addition, schools are an important place to begin a culturally rich life experience. It is also worth noting, as a step towards innovation, that schools are increasingly using the distance learning capacities they are installing as part of their technology infrastructure to reach national and international experts (Designshare.com).

The above authorities have made one clear statement on the curriculum offered in the Kenyan Education system; the content is inadequate, the graduates are likely not to meet the market demands and standards both locally and internationally. Worse still, the common unrest in Kenyan secondary schools, the declining performance in National examinations, occasionally solved by mass cheating in these examinations is an indicator to the possibility that the institutions employ the traditional quality management, are not innovative and so cannot attain any sustainable competitive advantage as institutions and even as a sector.

In conclusion, the issues at hand with the education sector in Kenya include; little or absence of political will to address relevance gaps(Otiato,2009), inability of the education system to spur economic growth(Ministry of Education,2017), unrealized total quality management in the educational institutions(Waudo and Ouya,2010) and broad teaching and learning content coupled with the teaching ill prepared to offer teaching as well as inadequate instructional materials and resources(KICD,2013). This state of affairs portends a future worrying state of affairs for the competitiveness of the education sector in Kenya both internally and in the region and in the globe. The sector is not likely to take the country anywhere closer the SMGs and the vision 2030. Hence, the subject of innovation strategies and their effects to the competitive advantage as it applies to public secondary schools will be important in underpinning this study.

1.3 Objectives

1.3.1 General Objective

The general objective of the study was to investigate the effect of innovation strategies on competitive advantage in public secondary schools in West Pokot sub County of West Pokot County.

1.3.2 Specific Objectives

The study was guided by the following objectives;

- i. To examine the effect of management related innovation strategies on competitive advantage in public secondary schools in West Pokot sub County.

Research Hypotheses

- i. Management related innovation strategies have no effect on competitive advantage in Public Secondary schools in West Pokot sub County of West Pokot County

II. LITERATURE REVIEW

2.1 Introduction

The chapter presents the literature review on similar studies conducted done on the same area of study. The specific areas covered in this chapter include; concept of strategy, innovation strategies, competitive advantage, innovation strategies adopted by Education institutions, use of innovation strategies to achieve competitive advantage. The section will also review secondary literature on the theoretical foundation of the study with a view to develop the conceptual framework for current study.

2.2 Theoretical Framework

2.2.3 Capability -Based View (CBV) Theory

Grant (1991) argued that capabilities are the source of competitive advantage while resources are the source of capabilities. Amit and Shoemaker (1993) adopted a similar position and suggested that resources do not contribute to sustained competitive advantages for a firm, but its capabilities do. Haas and Hansen (2005), as well as Long and Vickers Koch(1995), supported the importance of capabilities and suggest that a firm can gain competitive advantage from its ability to apply its capabilities to perform important activities within the firm. Amit and Shoemaker (1993) defined capabilities in contrast to resources, as 'a firm's capacity to deploy resources, usually in combination using organizational processes, and affect a desired end. They are information-based, tangible or intangible processes that are firm-specific and developed over time

through complex interactions among the firm's resources'.

Teece et al. (1997) define dynamic capabilities as, 'the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments'. Grant (1996) defines organizational capability as, 'a firm's ability to perform repeatedly a productive task which relates either directly or indirectly to a firm's capacity for creating value through effecting the transformation of inputs to outputs'. Grant (1996) also divides capability into four categories: cross-functional capabilities, broad-functional capabilities, activity-related capabilities and specialized capabilities. Sirmon et al. (2003) stressed the importance of organizational learning. They suggest that capabilities and organizational learning implicitly and explicitly are a part of any strategy within a firm. It has been argued (Zack 1999) that the ability to learn and create new knowledge is essential for gaining competitive advantage. Lee et al. (2001) discussed the influence of internal capabilities and external networks on firm performance.

2.3 Conceptual Framework

The conceptual framework shows the independent variable and how it will operationally relate to the dependent variables. Orodho (2004) says that a conceptual framework is a model of presentation whereby the researcher represents the relationship between the variables in the study. The conceptual framework for this study is derived from the main theories as already discussed in the sub-title 2.2 above. The framework is a simplified representation of the otherwise complex phenomenon involving the innovation strategies employed by institutions and how they create competitive advantage (Mutai, 2000).

The study was based on the effect of innovation strategies on competitive advantage in public secondary schools in West Pokot sub County of West Pokot County. The Conceptual Framework shows

the relationship between the dependent variable (Competitive Advantage) and the independent variables (Students' Innovation

Strategies, Departmental Innovation Strategies and Management Related Innovation Strategies).

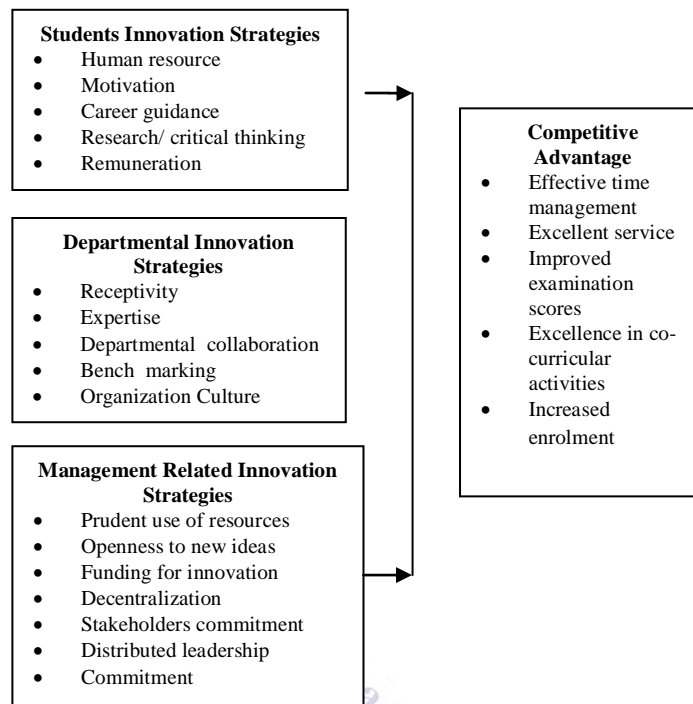


Fig 2.1: The conceptual frame work

2.3.3 Management Related Innovation Strategies

Innovation projects have the greatest chance of success where they are supported by strong leadership (State Department of Victoria, 2017). Referring to other related innovation in Education researches, the state department of Education in the government of Australia concludes that Research has shown that effective management supports innovation by; being and open to new ideas, being prepared to allow distributed leadership in areas of specialization and expertise, building trust and giving confidence to staff members who are trying new practices, ensuring any risks associated with changes to practice are identified, managed and minimized. Leadership should also provide sponsorship and commit additional resources to enable the stakeholders engage in innovative ventures.

It is also important to consider communication and promotional skills; and the need for supporting evidenced-based research. Evaluation of projects has shown

that strong leadership that helps to align an organization's culture, capability and connections will enhance the innovative potential of education practitioners. These three key elements are critical to the pace and progress of innovation and lead to further student, school and system benefits. Leaders in education settings (principals, managers, school councils, boards etc) can support innovation by giving consideration to these three key elements.

School leaders across the nation are exploring ways to better educate students and improve school performance. School-based management (SBM) offers a way to promote improvement by decentralizing control from central district offices to individual school sites. It attempts to give school constituents- administrators, teachers, parents and other community members more control over what happens in schools (Wohlstette and Mohrman, 1993). The two professors and researchers in policy related school-based management and school-based management project for

effective organizations respectively point out that control over four resources; power, knowledge information and rewards needs to be decentralized throughout the organization in order to maximize performance improvement.

Decentralization of power is necessary as an avenue for all stakeholders in the school to make decisions that influence organizational practices, policies and directions and provision of knowledge enables employees to understand and contribute to organizational performance including technical knowledge to do the job or provide the service, interpersonal skills, and managerial knowledge and expertise. The information recommended by the two researchers is mainly about the performance of the organization, including revenues, expenditures, unit performance, and strategic information on the broader policy and economic environment. Finally, rewards that are based on the performance of the organization and the contributions of individuals would be an instrumental idea for the institution to gain competitive advantage over its rivals.

In four case studies that sought to indicate how small schools had been implemented in Baltimore, New York City, the Southwest, and South Carolina, the Centre for Public Education (2008), drawing on case study data and evaluations, determined that the following factors contributed to the positive environments; small enrollments, close relationships between students and teachers, expanding learning beyond the regular school day (both through experiential learning and extra academic supports, such as tutoring and counseling) and using data to track student performance. All of these innovation factors also helped schools engage students and teachers in learning and schooling respectively.

III. RESEARCH METHODOLOGY

3.2 Research design

Orodho (2003) defines a Research design as the blueprint or plan that guides a

researcher in the various stages of research and as the scheme, outline or plan that is used to generate the answers to research problems. Kombo and Tromp (2006) defines it as the “glue” that holds all of the elements in a research project together. This study adopted a descriptive research design as it focused on the objectives of the study and the resources available (Kothari, 2004) and used a census survey. The study was conducted in a form of a survey to identify the determinants of innovation strategies that create competitive advantage among the public secondary schools in West Pokot sub County in West Pokot County, Kenya. Zikmund, Babin, Carr and Griffin (2010) define a cross sectional study as the study in which various segments of a population are sampled and data collected at a single moment in time. Cross sectional studies collect and analyze the current situation. Magetto (2013) noted that the cross-sectional design allows the researcher to collect a large amount of data from a large population in a short period.

3.3 Target Population

Kombo and Trump (2006) define the population as the entire group of elements which have similar characteristics or share at least one thing in common. It is the larger group from which the sample is taken. The key feature of the unit of this study is that they are situated in the semi-arid West Pokot County, are staffed by the Teachers Service Commission, are manned by the Boards of Management and depend on the funding from the parents and the State Department for Basic Education in the Ministry of Education.

The population of the study was composed of nine (9) public Secondary Schools in West Pokot Sub County spread in four zones namely; Siyoi, Mnagei, Kongelai and Sook as indicated under appendix iii. The sub-County was chosen because for three consecutive years, it had recorded tremendous improvement. It had performed exceptionally well in Kenya Certificate of Secondary Education (KCSE) and in co-curricular activities. Since the

study was out to investigate how the various aspects of performance have been sustained, it was particularly necessary to relate the academic performance with other areas of performance among the study universe.

Table 3.1: Sampling frame

| S/No | School | Category | Sampled principals | Academic HODs | Non-academic HODs | TOTAL |
|---------------|------------------------|----------------------|--------------------|---------------|-------------------|-----------|
| 1 | Chewoyet | Boys National | 1 | 2 | 2 | 5 |
| 2 | Tartar | Girls National | 1 | 2 | 2 | 5 |
| 3 | Kapenguria Boys | Boys Extra County | 1 | 2 | 2 | 5 |
| 4 | Chepkorinswo | Boys extra County | 1 | 2 | 2 | 5 |
| 5 | St.Cecilia Chepareria | Girls extra County | 1 | 2 | 2 | 5 |
| 6 | Kanyarkwat | Girls County | 1 | 2 | 2 | 5 |
| 7 | Kamito secondary | Boys boarding County | 1 | 2 | 2 | 5 |
| 8 | Our Lady of Peace-Pser | Mixed Boarding | 1 | 2 | 2 | 5 |
| 9 | Talau secondary | Mixed Day | 1 | 2 | 2 | 5 |
| TO TAL | | | 9 | 18 | 18 | 45 |

3.5 SAMPLING Techniques and Procedures

Cooper and Schindler (2011) say that the sample ought to be carefully selected to represent the population adequately with the researcher ensuring that the subdivisions entailed in the analysis are accurately catered for. A census method was however adopted because the target population of forty five (45) respondents was less than one hundred respondents, which is the maximum number below which census method is to be used. Questionnaires were delivered to all the targeted respondents who were staffs of the public secondary schools in West Pokot sub County of West Pokot County for data collection.

3.9 Data Analysis and Reporting

Data analysis refers to examining what has been collected in a survey, experiment or a case study and making deductions and inferences. It involves scrutinizing the acquired information and making inferences (Kombo and Tromp 2006). Data was analyzed using thematic

and content analysis. The data analysis involved the initial steps of editing and cleaning up data collected from questionnaires. The refined data was then analyzed. The researcher analyzed major concepts, contents or themes relevant to the research objective and interpreted them to draw conclusions and recommendations. Quantitative data from the field was transcribed and organized into various relevant themes and reported as they emerged. Descriptive and inferential statistics, correlation and regression analysis were applied. The study was guided by the following multiple linear regression model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon_i$ Where; Y is the Competitive Advantage β_0 Constant β_j Beta coefficients for $j = 1,2,3$ which indicate per unit change in the dependent variable as the independent variable changes by one unit.

X_1 Student's Innovation Strategies,
 X_2 departmental Innovation Strategies
 X_3 Management Related Innovation Strategies
 ϵ_i Error term or Noise for $i = 1,2,3..n$

IV. RESEARCH FINDINGS AND DISCUSSION

4.2.1 Response Rate

Since the target population was within the acceptable limits for census method to be used, less than one hundred respondents, and the researcher made a follow up on the respondents after administering the questionnaires himself. This approach yielded a response return rate of 100%.

4.2.2 Respondents Profile

The findings regarding the respondents' gender indicates that 60% were male while 40% were female. Based on the results from the study and the ratio of respondents, the researcher concluded that the male teaching staffs in public secondary schools in West Pokot Sub County are more than their female counterparts. Majority of the respondents, as shown in table 4.1 above, were aged between 26 years and 50 years amounting to 69% of the total population.

The respondents above 51 years accounted for a paltry 22.22% of the entire population. The respondents between 18-25 years constituted 8.89%, which represented the newly employed staffs of whom majorly were above 21 years, 26-40 years 22.22%, 41 - 45 years 24.44%, being the majority, 46 - 50 years 22.22% and above 51 years represented 22.22%. This is because of the period one has to take going through academic training before being employed by the Teachers service commission.

The researcher set out to establish the education levels of the respondents. The results were tabulated as follows: Diploma 22.22%, Bachelor's degree 44.44%, Post graduate teachers were 26.67% while other qualifications, which included board employed teachers with professional qualifications like ICT, Certified Public Accountants (CPA) among others constituted 6.67% of the total respondents. The findings presented in Table 4.4 above showed that bachelors' degree holders were majority followed by post graduate teachers. This showed how teachers are trooping back to school for further studies which is a good catalyst for innovations in the academic sector of this country Kenya. This enabled the researcher to conclude that West Pokot sub County of West Pokot County had acquired qualified staff for proper and commendable teaching, counseling, and training for proper upbringing of the students since these duties require expertise in their execution. Table 4.5 above shows the work experience in years of the staffs of West Pokot sub County where 2.22% had worked for less than a year, 22.22% of the respondents had worked between 1-2 years, 26.67% for between 2 and 3 years, while the majority at 48.89% had worked for between 3 and 4 years. The work experience only ended at 4 years because the County governments in Kenya are only 4 years old. This was so even if some staffs started working in the stations way before the promulgation of the constitution which ushered in the County system. In relation to the respondents' terms of employment,

86.66% were on permanent employment terms, 6.67% were on contract, while another 6.67% were on a temporary basis.

4.4.3 Effect of management related innovation strategies on Competitive Advantage

From the total respondents, 8.89% of the sampled respondents strongly disagreed with the statement that their schools ensured they learn better practices from other schools that are performing better than them in varied areas of curriculum implementation and management. A relatively smaller number of 6.67% and 4.44% disagreed and remained neutral respectively. A bigger percentage of 46.67% and 33.33%, however agreed and strongly disagreed respectively with the question on whether their schools made attempts to bench mark on better practices from other schools.

The researcher was also particular on the perceived important role of the top school management's commitment on innovation strategies and the implementation process. From the 45 questionnaires retrieved from the respondents, 4.44% of them strongly disagreed on whether their schools top management had a commitment to innovation and have strategies on their implementation. From the remaining number of respondents, few disagreed and remained neutral, each category garnering 6.67% and 2.22% respectively. The majority of the respondents strongly agreed at 55.56% while 21.11% agreed.

As regards to whether the top management is well involved in ensuring that the school continues improving in order to sustain the competitive advantage over other schools in the region, 8.89% of the respondents strongly disagreed while 4.44% of another group of respondents disagreed. The respondents that remained neutral on whether the top management was involved in ensuring that the complete advantage is sustained in their schools took 11.11%. A considerable number of respondents totaling to 51.11% agreed while another 24.44%

strongly agreed that indeed the top management is well involved in ensuring that the school continues improving in order to sustain the competitive advantage over other schools in the region.

A total of 13.33% and 8.89% respectively, strongly disagreed and disagreed to the statement implying that there is conducive working environment in their schools. Again, the majority of the respondents were positive about the; 62.22% agreed while 28.89% strongly

agreed that there is conducive working environment at their school, with 20 % of the respondents deciding to remain neutral on whether there is a conducive working environment in their schools.

4.9 Relationship between variables

The relationship between independent variables and the dependent variable was tested by use of the regression equation. The Regression analysis was made using the research predictions about the collected data

Table 4.15 ANOVA

| ANOVA ^a | | | | | | |
|--|------------|----------------|----|-------------|--------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 72.073 | 4 | 18.018 | 23.434 | .000 ^b |
| | Residual | 31.525 | 41 | .769 | | |
| | Total | 103.598 | 45 | | | |
| a. Dependent Variable: Competitive Advantage | | | | | | |
| b. Predictors: (Constant), Students' Innovation Strategies, Departmental Innovation Strategies, and Management Related Innovation Strategies | | | | | | |

The ANOVA table provided an F-test for the null hypothesis that none of the predictor variables are related to competitive advantage of the public secondary schools in West Pokot sub County of West Pokot County. The null hypotheses were rejected at $F = 23.434$, $p < 0.001$.

4.9.1 Regression results from the Analysis

The estimated regression model from the regression results was as follows;

$$Y = 0.710 + 0.323 X_1 + 0.217 X_2 + 0.366 X_3$$

The results of the relationship between Competitive advantage (dependent variable) and the independent variables (Students' Innovation Strategies, Departmental Innovation Strategies and Management related Strategies) was reported by this section of the report. The coefficients of the research variables, with expected positive signs, as indicated in the table where Students' Innovation Strategies, Departmental Innovation Strategies were less significant compared to Management related Strategies.

Students' Innovation Strategies predicted 32.3% of competitive advantage, demonstrating clearly that Students' Innovation Strategies contributed greatly to

the competitive advantage. Holding other factors constant, this was interpreted to mean that a unit change in Students' Innovation Strategies results in a 0.323 change in the competitive advantage of the public secondary schools in the sub-County. There was a significant relationship between Departmental Innovation Strategies and the competitive advantage. It predicted 21.7% of the competitive advantage with a positive coefficient of 0.217; there was also a significant relationship between Management Related Strategies and the competitive advantage, where this variable predicted 36.6% of the competitive advantage with a positive coefficient of 0.366; the set of standardized beta coefficients suggested that the effect of the predictor variable, Management Related Strategies, was the variable with the strongest effect on the competitive advantage contributing 36.6%. The study results concluded that competitive advantage of the public secondary schools in the sub-County depend on the three predictor variables.

4.10 Hypothesis testing

H_{03} : Management related strategies have no significant effect on competitive

advantage in the public secondary schools in West Pokot sub County of West Pokot County

The third and final hypothesis, Management related strategies have no significant effect on competitive advantage in the public secondary schools in West Pokot sub County of West Pokot County, hypothesized a positive beta sign ($\beta = 0.360$) of Management related strategies effect on the competitive advantage in the public secondary schools in West Pokot sub County of West Pokot County. This third null hypothesis (H_{03}) was also rejected by the researcher as evidenced by the results in Table 4.17 above. The regression output which had significantly correlated results, at the level of significance ($p > .05$) and the coefficients ($\beta = 0.360$ and $t = 6.207$) implied that management related strategies affected the competitive advantage in the public secondary schools in West Pokot sub County of West Pokot County.

RECOMMENDATIONS

Based on the research findings and the conclusions derived, the study made the following recommendations from the research results: According to the research findings, the competitive advantage in public secondary schools correlates highly with the management related strategies. It will therefore be imperative for the top management of West Pokot Sub- County to continue to plan for initiatives aimed at strengthening innovation related partnerships with top performing institutions in the country as well as innovation experts with a view to gaining and sustaining competitive advantage.

Secondly, the study recommends the enhancement of management communication and organizational cultures that promote strategic innovations for competitive advantage sustainability in public secondary schools' departments. This is by means of sharing ideas that would improve academic, management and life skill areas within the departments and to the top levels of schools management for

purposes of further research, trial and implementation. There is also need for the ministry of education to come in and train or support the training of the staffs for enhanced performance in the necessary required skills for the sustainability of the competitive advantage.

Recommendations for further study

Employee performance as regards strategy implementation is a wide topic that cannot just be conclusively discussed by a study. The researcher suggested that quite a number of additional areas needed further research by other scholars in order to aid organizations since employee performance is as important to the organizations as their major objective of profitability. Variables that affect employee performance like continuous employee training, the impact of rewarding employees handsomely to the organization profitability or overall performance towards the realization of its major objectives and other areas like the effect of teamwork in organizations on overall performance should be researched further.

CONCLUSION

The research analysis results of the study established that Public secondary schools in West Pokot sub County of West Pokot County had a Competitive advantage over other schools in the County and in Kenya as indicated by the majority of the respondents who agreed strongly that their schools aspire to continue gaining a competitive advantage over their rival schools. Improved innovation strategies could be attributed to management related innovation strategies as reflected by the results of this study where over 80% agreed/strongly agreed that work environment was conducive for anyone to work.

The top management of the public secondary schools in West Pokot sub County of west Pokot County was well involved in ensuring that the schools continued to improve in order to sustain the competitive advantage over other schools in

the County and even in the region. This was evident in the majority of respondents-62.22% who agreed while another significant 28.89% strongly agreed that the top management of the public secondary schools in West Pokot sub County of West Pokot County was well involved in ensuring that the schools continue improving in order to sustain the competitive advantage over other schools in the County and even in the region. The responses however had some negative side as regards to whether the schools have effective communication put in place to enhance strategic innovations where a sizeable number of respondents, i.e. 44.44% returning an adverse response which was construed by the research to imply that there were gaps in the way the public secondary schools top management communicate. Since lack of proper communication adversely hampers strategic innovation creation, the researcher concluded that there was a problem with the communication system/channels due to this feedback.

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How to cite this article: Ekaale EJ, Namusonge GS, Makokha EN. Effect of innovation strategies on competitive advantage in public secondary schools in west Pokot sub county, west Pokot county. *International Journal of Research and Review*. 2017; 4(11):1-16.
