EFFECT OF STRATEGIC CAPABILITY ON COMPETITIVE ADVANTAGE OF INFORMATION TECHNOLOGY FIRMS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

In comparison to firms from other sectors such as insurance, banking and manufacturing, firms in IT sector in Kenya have contributed marginally to the GDP and economy in general. The general implication of this trend is that IT firms in Kenya are performing poorly and have been unable to achieve highly competitive advantage to compete with other multinational firms that have penetrated in local Market. This study therefore sought to establish the effect of strategic capabilities on competitive advantage of IT firms in Nairobi City County. The specific objectives of the study were: to establish the effect of Human Resource Capability on competitive advantage of IT firms in Nairobi City County; to establish the effect of Financial Resource Capability on competitive advantage of IT firms in Nairobi City County; to establish the effect of Knowledge Management capability on competitive advantage of IT firms in Nairobi City County and to establish the effect of Cost Efficiency Capability on competitive advantage of IT firms in Nairobi City County. The study incorporated the suggestions of the following theories that explain the contribution of each of the independent variables on CA: Resource Based View Theory, Dynamics Capability Theory, Human Capital Theory, Porter Generic Strategies Model and Porter 5 Forces Model. A descriptive research design was used in this study. The target population of the study comprised of the 143 owners of IT firms in Nairobi City County. The study adopted census survey since the population of the study is small. The instrument for primary data collection in this research was a numerical 5-point Likert scale questionnaire. The study found out that financial resource capability, knowledge management capability and cost efficiency capability had a positive and significant influence on competitive advantage of IT firms in Nairobi City County. The study further found out that Human Resource Capability had an inverse influence on competitive advantage of IT firms in Nairobi City County. The study concludes that the key staff of the firm had undergone adequate training in various areas of IT. There were adequate team development whereby team-based activities were actively developed and promoted. There was a performance-based pay which emphasizes rewarding employee contributions and achievements. IT firm strived to maintain and accurately balance its expenditure within its stream of financial resources. The financial plans and budgets were fully aligned to the organization's strategic planning. The key staff of the firm have adequate knowledge of the specific needs of the customers. The key staff of the firm have adequate knowledge of the organizational culture. The firm practices strategic pricing in terms of lower prices or more product features for the same price. The products of the firm were designed in capacity-fill, productivity as well as yield. The study recommends that the policy makers need to employ the key staff who have undergone adequate training in various areas of IT. The policy makers need to ensure that there is an effective HR policy that governs practices to acquire, cultivate and retain human resources. The firm need to strive to forecast income/expenditure, monitors and highlights emerging financial issues. The firm ought to have a flexible financial plans and budgets to allow for spending patterns to be adjusted accordingly. The management of the firm need to ensure that the key staff of the firm have adequate knowledge of the nature of the rivalry posed by existing firms. The management need to ensure that the firm focuses on economies of scale for the purpose of pricing and focuses to keep costs as low as possible but consistent with the value provided. The management need to ensure that the firm is suitably located to cut down on supply costs for instance proximity to reliable sources of various IT inputs.

Key Words: *strategic capability, competitive advantage, information technology firms, Nairobi City County, Kenya*

INTRODUCTION

Companies operate in an environment characterized by rapid changes brought about by technological advancements and globalization of the world. In order to be competitive over the competition, firms are therefore called upon to swiftly align their operations if they are to maintain their competitive position (Imbambi, 2018). The manner in which firms attain competitive advantage position which can be sustained over a period of time is of great importance to strategic management field. Famous authors in the field of strategy management such as Porter (1980) suggest the need for an organization to come up with competitive strategies if they desire to achieve a competitive position in a given industry. Kenya in the recent past has had some iconic innovation in the IT sectors such as M-pesa, Mkopa, mobile banking among others which is a positive indication of the huge potential in the sector. Therefore, this study was necessary to provide some insight on how IT firms in Nairobi can leverage on strategic capability to achieve highly competitive advantage and growth to benefit the economy.

Strategic capabilities basically describe the ability that a firm possesses in building and or extending primary capabilities to enable them align their operations competitively within the environment characterized by high changes (Schilke, 2014). Any deviations in focusing on these abilities that can avail competitiveness makes it difficult for the firm to apply the scarce, valuable capabilities which may not be easily replicated or copied by the competition, cannot be substituted because the strategists put emphasis on protecting the key areas availing prevailing competitive advantage for the organization. This enables the organization to continuously create resources and capabilities capable of yielding competitive position in the industry. The strategic abilities are incorporated within the routine processes and procedures within the organization which provide directions on the evolution in resource configuration besides operational routines (Tarutė & Gatautis, 2014). The resources owned and controlled by an organization in the form of assets and skills among its employees form a critical part of its building block in its journal to a position of competitive advantage. In fact, Pandza and Thorpe (2009) arte of the view that persons charged with strategic management in organizations need to shape, transform and combine these unique attributes and resources into strategic abilities that can bring about strategic success. An ability to achieve set result is made up of a mix of several activities capable of giving outputs that differentiate the organization from other players in the industry. Capabilities include a huge list of events which have ability to convert inputs into output that is of key to the survival of the organization. However, the unique characteristic of the resources possessed by an organization together with the capabilities on their own may not be sufficient to provide a competitive position that can be sustained over a long period of time.

A competitive position is normally one of the elements that provide a competitive edge to a business over and above the competition that it faces. Possession of strategic capabilities enable a firm to directly improve its value offering to the market or customers in terms of products or services which are a result of possession of core competencies (Wanjiku, 2017). Core competence describes an organization specific capability which helps it stand out from the rest in the industry. It is the asset that defines the essence of the firm’s business in terms of core capabilities which make it possible for the firm to compete with other firms in the industry effectively. Globally, firms in various sectors strive to achieve high competitive advantage for instance Google, Facebook, Twitter, Amazon and Yahoo are examples of firms headquartered in United States that operate in information technology sector that have used their unique strategic capabilities to achieve high competitive advantage (Marston, Li, Bandyopadhyay, Zhang & Ghalsasi, 2011). At the centre of the growth and rapid expansion of these firms are unique resources both financial and human resources, intellectual capabilities among other strategic capabilities.

Asian countries such China, India and Japan has also seen the emergence of top firms in information technology sectors that have leverage on their unique capabilities to enhance their competitive advantage (Peng, 2012). Firms such as Alibaba and Huawei in China, Samsung in South Korea have used their unique resources and are currently competing on the global markets, have expanded beyond their countries to new markets in Europe, US and Africa. In emerging economies majority of firms operating in Information and technology sectors have been unable to compete on globally fronts (Lavie, 2007). Other than South Africa, which houses top IT firms such Naspers and MTN, other IT firms in other African countries have been unable to achieve a competitive advantage can propel them on the global stage. Therefore, it is against this background that the current study sought to determine the influence of strategic capabilities on competitive advantage or organizations within the technology industry in Nairobi, Kenya.

STATEMENT OF THE PROBLEM

IT firms in Kenya face many issues, challenges in growth, high failure rate and high competition. Currently, the information technology industry is overcrowded with many firms developing products that are highly imitable. At the same time, there is high competition in the industry where new products enter the market from time to time thus leading to saturation and making the market a red ocean (Muhura, 2012). This challenge could however be dealt with when these companies had in place strategic capabilities in terms of the financial, human resource, knowledge management and cost efficiency capabilities. The current study sought to investigate the effect of strategic capabilities on competitive advantage of IT firms in Nairobi City County. Studies conducted on strategic capabilities on competitive advantage include, Tuan and Yoshi (2010) who tested a link between organizational capabilities, performance and competitiveness and revealed that organizational capabilities play an important role when it comes to competitive positioning of the firm. It was revealed that organizational capabilities significantly results into competitiveness. The study was conducted in Vietnam hence there is a contextual gap the current study would seek to fill. Similarly, Seyhan, Ayas, Sönmez and Uğurlu (2013) focused on the relationship between strategic capabilities and competitive performance in Turkey. The study found that strategic capabilities have a positive effect on competitive performance. This study also was conducted in a different context as the current study hence the need to bridge the contextual gaps. Studies conducted locally include, Imbambi, (2018) who focused influence on strategic capabilities on competitive advantage of sugar manufacturing firms. The study established a statistically significant and direct link between technology and material capabilities and competitiveness. However, the study focused on technology capability and material capability while the current study focused on human resource capability, financial resource capability, intellectual capital capability, cost efficiency capability on competitive advantage. The current study sought to bridge the existing conceptual gaps on the effect of strategic capabilities on competitive advantage of IT firms in Nairobi City County.

GENERAL OBJECTIVE

To determine the effect of strategic capabilities on competitive advantage of information technology firms in Nairobi City County.

SPECIFIC OBJECTIVES

1. To establish the effect of Human Resource Capability on competitive advantage of IT firms in Nairobi City County
2. To establish the effect of Financial Resource Capability on competitive advantage of IT firms in Nairobi City County
3. To establish the effect of Knowledge Management Capability on competitive advantage of IT firms in Nairobi City County
4. To establish the effect of Cost Efficiency Capability on competitive advantage of IT firms in Nairobi City County

THEORETICAL REVIEW

According to Schumache and McMillan (2010), a theory systemically accounts for the link existing between given events. Theories help ion explaining, describing and predicting events and phenomena in a variety of contexts. The study was informed by the Resource Based Theory, Dynamics Capability Theory, Human Capital Theory, Porter Generic Strategies Model and Porter 5 Forces Model.

Resource Based Theory

The theory was advanced by Barney (1991) to establish how firms can leverage on their resource endowment to gain competitiveness and thus performance. The theory argues that firms can gain competitive advantage by effectively utilizing the resources and capabilities in place. For the firm to attain competitiveness the available resources should be of value, with no close substitute and that they should be rare. Knowledge is one of the most strategic resources that organizations seek to today for remaining competitive (Grant, 1996).

The theory views firms as entities that angage ion creation, integration and distribution of knowledge so as to remain competitive (Vivas, 2005). The theory argues that for a firm to be competitive there is need to come up and strengthen the core and key competencies and other assets that are knowledge based (Pemberton & Stonehouse, 2000). The theory assumes that the key component in any production process and crucial source of value is the level of knowledge (Grant, 1996). The theory argues that firms leverage on internal weaknesses and strengths to sieve opportunities and manage threats and turbulences in the environment thus resulting into a sustained level of competitive advantage. To achieve CA, firms strive to acquire, utilize and exploit the specific resources of the firm and strengthen capabilities through integration of various resources in place (Zollo & Winter, 2002). Thus, adopting the resource-based theory of the firm blended with a knowledge-based approach and financial resources, KM capability and financial resource capability are explicitly recognized to be central in creating CA of IT firms in today's dynamic market place.

Dynamics Capability Theory

The dynamics capability theory by Teece (1990) developed explicitly the notion of dynamic capabilities. He argues that in an ever changing environment firms cannot survive on the same resources. They have to continuously reconfigure, re-build and renew them in order to remain successful and adapt to the rapid changes. This is achieved through dynamic capabilities which create new forms of competitive advantage in a timely manner through creation of new capabilities.

According to Teece (1990), firms should examine the ever turbulent forces of the environment thus the need for strategies. This helps the firm to adapt, integrate and reconfigure the core competencies of the organization including the skills set and other resources in line with the rapidly turbulent environment. At the same time, Teece *et al*, (2007) conceived competitiveness in the rapidly changing forces of the environment as a form of dynamic capabilities as oppose to rivalry in industry or the positioning. The term 'dynamic' was applied to refer to the need for as a firm to restructure their competences in order to align with the changing forces of the environment. Teece (1990) further noted that other scholars including Schumpeter (1934) did not effectively how large firms were more competitive compared to relatively smaller ones. Schumpeter's argument was informed by the powers of a monopoly where such firms were in better position to utilize their competences resulting into greater competitive advantage as compared to smaller and new firms in the industry.

Porter's Five Forces (1990) framework argues that in the dynamic capability context, the market structure is irrelevant. Porter argues that in this framework, firms gain competitiveness through modifying internal systems and processes to remain innovative. Porter further indicates that in the dynamic capability framework, analytical roles and function that need to be executed are considered and need to be carried out at the firm level. Therefore, adoption of this theory in the context of IT firms would significantly result into competitiveness.

Human Capital Theory

The initial development of theory is attributed to Becker (1964). According to Becker, human capital plays an important role in the process of producing goods and services. According to the theory, an educated workforce significantly helps the firm in adoption and incorporation of technologies in operations. This in turns justifies the expenditure utilized on education and training. This theory is premised on experience, the level of training and talents possessed by employees in an organization.

The theory argues that the returns and costs of a given human capital investment need to be appropriated between employees and the firm (Bartel & Borjas, 1977). The theory has however been criticized on ground that it does not explicitly consider problems and challenges related with underinvestment's or the costs of transactions which are crucial when appropriating returns and costs of given human capital (Glick & Feuer, 1984). Adopting the human capital theory in the study merges well with and human resource, and thus human resource capability is clearly acknowledged as crucial in creating CA of IT firms.

Porter Generic Strategies Model

This model was formulated by Porter (1985) and it argues that the degree which firms are able to gain competitiveness over a long period of time greatly enhances the success of the business to outdo competitors. According to Porter, firms can establish a defensive position and develop competitive advantage in the industry by use of generic strategies including focus, product differentiation and cost leadership. Porter (1980) argues that in order for firms to effectively implement these strategies, a pool of skills set and resources is paramount. These strategies also require organization to judiciously mix the leadership styles, remuneration and control systems.

These strategies may result into completely new and unique atmosphere ad culture within an organization.

Porter (1985) gave a description of three broad strategies that firms usually use to remain competitive which are summarized into strategic scope and growth. Strategic scope considers the composition and size of the market. On the other hand, strategic strength emphasizes on core competences and strengths of the firm. Porter particularly established two key competences which are differentiation of products and efficiency (product costs).

Studies on how marketing strategies influence profitability of the firm confirmed that firms whose market share were sizeable stood out to be more profitable compared to firms with smaller share in the market. Firms commanding a moderate share in the market stood out to have least profits (Aaker, & McLoughlin, 2010). This condition according to Porter is attributed to firms commanding larger share in the market stood out to be success because of their pursuit of the cost leadership strategies. On the other hand, firms commanding a smaller share in the market also were successful since they were using segmenting the market that helps them to focus on smaller but profitable niches. On the other hand, firms commanding a moderate share in the market generated least profits because they had not put in place any generic strategy that is viable. Thus with regard to pursuit of competitive advantage of IT firms majority of which are small firms, they can successfully segment their market which shall help them to focus on only profitable niches.

Porter 5 Forces Model

According to Porter and Millar (1985), firms strategize in best way to remain competitive and outdo competitors in the industry. To effectively strategies, Porter suggested five forces that include threats emanating from new entrants in the industry, rivalry with regard to other industry participants, threats emerging from substitute goods and services, the ability and power of suppliers and buyers to bargain. It is important to know that IT firms in Kenya are all beleaguered by these forces. There are new entrants into the market place which worsens the already stiff competition among existing firms. Supplier bargaining power has also been reducing with those having a huge customer base and infrastructure offering different levels of service. New substitutes services are being offered as ways to access IT using alternative means. This has been driven by the mobile phone companies offering 3G and 4G services. These firms thus need to consider strategic capability to remain competitive in the industry.

RESEARCH METHODOLOGY

Research Design

A research design determines the overall methods to use in collecting and analysis of the data to generate findings (Kothari, 2004). A descriptive research design was used in this particular study. A descriptive design helps one to effectively observe and describe certain behavior of an observation (Creswell & Creswell, 2017). The descriptive design helped the researcher to generalize the findings to the entire population (Ghauri, & Grønhaug, 2005). The design was proper to the study because it gave an account of events as they exist in their original state (Kombo & Tromp 2009). The design allowed the study to generate both numerical and descriptive data that was used in measuring correlation and coefficient between variables which led to answering the research questions.

Target Population

Mugenda and Mugenda (2003) assert that the target population is one where generalization of the findings is made possible. It is a group of items or individuals with specific features that the researcher wishes to determine (Polit & Beck, 2010). The target population of the study comprised of the 143 IT firms in Nairobi City County while the target respondents of the study comprised of owner managers of the 143 IT firms preferred as they are responsible for the day-to-day operations of the firm and were therefore well-placed to incorporate strategic capabilities for competitive advantage.

Sampling Frame, Sample Size and Sampling Technique

According to Ishak and Bakar (2014), a sampling frame is list of the total population to be examined during the research. For quantitative researchers, sampling procedures help select representative elements from the entire population. Random or probability sampling according to Zikmund *et al.* (2013) is informed by the need to ensure accurate information and to save on time. The sampling frame of the study comprised of a list of 143 IT firms in Nairobi City County. The unit of observation for the study comprised of owners of the IT firms who were selected because they were directly involved in incorporating strategic capabilities for competitive advantage. According to Kombo and Tromp (2006), to sample is to select representative elements from the population for inclusion in the study. The study adopted a census survey since the population of the study, 143 IT firms in Nairobi City County was small and within the threshold of 200 recommended by Blumberg, Cooper and Schindler (2014). Israel (1967) also argues that when the target population is less than 200, it is appropriate to use a census instead of sampling.

Data Collection Instrument

A data collection instrument is a tool that is use for precise, systematic gathering of information relevant to the research problems (Kothari, 2004). The instrument for primary data collection in this research was a numerical 5-point Likert scale questionnaire and it was administered to the 143 respondents of the study. Questionnaire has advantages of low cost, reduction in biasing error, greater anonymity, considered answers and consultations and finally accessibility to a wide geographical contact at minimal cost (Nachmias & Nachmias, 2005). Likert scale is more appropriate because it enabled standardization of responses that ease the process of analysis. The research instrument was developed based on the constructs identified in the conceptual framework. The questionnaire was organized into 6 sections in order to bring out the information required whereby section A covered general information of the respondents, section B covered Human Resource Capability; section C covered financial resource capability; section D covered KM Capability; section E covered cost efficiency capability; and section F the Competitive Advantage of the IT firms.

Data Collection Procedure

According to Ghauri and Chidlow (2017), data Collection Procedure refers to the methods that are employed to collect data after formulation of the research instrument. Before the researcher proceeds to the field to collect data, an introduction letter from Jomo Kenyatta University of Agriculture and Technology and a research permit from the National Commission for Science, Technology and Innovation was obtained. In order to increase the response rate, the researcher also included a cover letter to each of the IT firms detailing who is conducting the study; the purpose of the study; why it was important that the respondents answer the questionnaires and assuring the respondents that their responses were held in strict confidence and used only for the intended purpose. Additionally, to enhance the response rate, drop and pick method was used to collect data from the respondents whereby questionnaires were dropped and picked later to enable the respondents have enough time to respond to the questions (Steele, *et al.* 2001).

Data Analysis and Presentation

Data analysis is a set of activities that are carried out to transform raw data into information for decision making (Kothari, 2004). Once collected from the field, the collected data was cleaned and entered into SPSS software. The findings were analyzed using descriptive and inferential statistics. Descriptive analysis comprised of the use of percentages, means, overall mean and standard deviation. The inferential to be employed in the analysis included both correlation and regression analysis. The adopted model took the following form;

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where: Y = Competitive Advantage of IT firms; X_1 = Human Resource Capability; X_2= Financial Resource Capability; X_3= Knowledge Management Capability; X_4 = Cost Efficiency Capability; ε = Error term ; β_0= Regression constant or intercept; β_1, β_2, β_3, and β_4 are the unknown parameters.

RESEARCH RESULTS

The purpose of the study was to determine the effect of strategic capabilities on competitive advantage of information technology firms in Nairobi City County. The study was guided by the following specific research questions; what is the effect of Human Resource Capability on competitive advantage of IT firms in Nairobi City County? To what extent does Financial Resource Capability affect competitive advantage of IT firms in Nairobi City County? How does Knowledge Management Capability affect competitive advantage of IT firms in Nairobi City County? What is the effect of Cost Efficiency Capability on competitive advantage of IT firms in Nairobi City County?

Human Resource Capability

The study established that majority of the respondents agreed that the key staff of the firm had undergone adequate training in various areas of IT. Respondents agreed that there were adequate team development whereby team-based activities were actively developed and promoted. Respondents indicated that there was a performance-based pay which emphasizes rewarding employee contributions and achievements. Majority of the respondents agreed that the key staff of the firm were highly qualified in IT software development, application and training.

Respondents agreed that key staff of the firm had adequate experience in IT and related disciplines. Respondents agreed that there was an effective HR policy that governs practices to acquire, cultivate and retain human resources. Respondents agreed that staff enjoy reduced status distinctions and information is easily shared. The findings of regression analysis established that the variable significantly influenced competitive advantage.

Financial Resource Capability

The findings established that the majority of the respondents agreed that their firm strives to maintain and accurately balance its expenditure within its stream of financial resources. Respondents agreed that the financial plans and budgets were fully aligned to the organization's strategic planning. Majority of the respondents agreed that enough financial resources were set aside for the acquisition of the required assets. Majority of the respondents agreed that their firm had adequate financial resources for its day-to-day operations.

The study further established that respondents agreed that their firm practices strategic financial resource budgeting to maximize efficient use of the available resources. The firm strives to forecast income/expenditure, monitors and highlights emerging financial issues. The firm has flexible financial plans and budgets to allow for spending patterns to be adjusted accordingly. The findings of regression analysis established that financial resource capability had a positive influence on competitive advantage.

Knowledge Management Capability

The study established that majority of the respondents agreed that the key staff of the firm have adequate knowledge of the specific needs of the customers. Majority of the respondents agreed that the key staff of the firm have adequate knowledge of the organizational culture. Most of the key staff of the firm have adequate knowledge customer tastes and preferences. Majority of the respondents agreed that the key staff of the firm have adequate knowledge of the products and their use. Most of the key staff of the firm has adequate knowledge of customer behavior. Majority of the respondents agreed that knowledge management was properly aligned to other resources to support a variety of important organizational operations and activities.

Majority of the respondents agreed that the key staff of the firm have adequate knowledge of the nature of the rivalry posed by existing firms. Majority of the respondents agreed that their key staff of the firm had adequate knowledge of the available technology. The study further established that knowledge management had a positive and significant influence with competitive advantage.

Cost Efficiency Capability

The study findings established that majority of the respondents agreed that the firm practices strategic pricing in terms of lower prices or more product features for the same price. Respondents agreed that the products of the firm were designed in capacity-fill, productivity as well as yield. Respondents agreed that their firm offers appropriate level of value at an acceptable price. respondents agreed that attention was paid to key cost drivers such as economies of scale and supply changes.

The study further pointed out that majority of the respondents agreed that their firm focuses on economies of scale for the purpose of pricing. Respondents moderately agreed that their firm focuses to keep costs as low as possible but consistent with the value provided. Respondents agreed that their firm was suitably located to cut down on supply costs for instance proximity to reliable sources of various IT inputs. The study further found that cost efficiency had a positive and significant influence with competitive advantage.

INFERENTIAL STATISTICS

Correlation Analysis

The researcher conducted correlation analysis to establish the how the variables were related with each other. The findings is as shown in Table 1.

Table 1: Correlation Analysis

		Competitive advantage	Human resource capability	Financial Resource Capability	Knowledge Management Capability	Cost efficiency Capability
Competitive advantage	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	112				
Human resource capability	Pearson Correlation	-.605**	1			
	Sig. (2-tailed)	.000				
	N	112	112			
Financial Resource Capability	Pearson Correlation	.731**	-.298**	1		
	Sig. (2-tailed)	.000	.001			
	N	112	112	112		
Knowledge Management Capability	Pearson Correlation	.587**	-.176	.596**	1	
	Sig. (2-tailed)	.000	.063	.000		
	N	112	112	112	112	
Cost efficiency Capability	Pearson Correlation	.549**	-.368**	.499**	.273**	1
	Sig. (2-tailed)	.000	.000	.000	.004	
	N	112	112	112	112	112

**. Correlation is significant at the 0.01 level (2-tailed).

The findings of correlation analysis are established in Table 1. Huber (2004) held that in the interpretation of results for the linear relationships in the study, for a weak correlation, “r” ranges from ± 0.10 to± 0.29; in a moderate correlation, “r” ranges between ±0.30 and ±0.49; while in a strong correlation, “r” ranges from ±0.5 and ± 0.9.

The findings established that human resource capability had a Pearson correlation of -0.605 an indication of a strong positive correlation with competitive advantage. Financial resource capability had a Pearson correlation with 0.731 an indication of a strong positive correlation with competitive advantage. Knowledge management capability had a Pearson correlation of 0.587 an indication of strong positive correlation with competitive advantage. Cost efficiency capability had a Pearson correlation of 0.549 an indication of a strong positive correlation with competitive advantage.

Regression Analysis

The findings of the coefficient of correlation and coefficient of adjusted determination are as shown in Table 2.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865[a]	.748	.739	2.04441

a. Predictors: (Constant), Cost Efficiency, Knowledge Management, Human Resource Capability, Financial Resource

The study established that coefficient of correlation R was 0.865 an indication of strong positive correlation with the study variables. The study further established that adjusted coefficient of correlation was 0.739 which translates to 73.9%. Therefore, 73.9% changes in competitive advantage is caused by the four dependent variables; cost efficiency, knowledge management, human resource capability, financial resource. the residual of 26.1% can be explained by other factors beyond the scope of the current study.

The researcher conducted a regression model at 95% significance level. The findings of $F_{\text{Calculated}}$ and F_{Critical} is as shown in Table 3.

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1330.212	4	332.553	79.566	.000[b]
Residual	447.216	107	4.180		
Total	1777.429	111			

a. Dependent Variable: Competitive Advantage

The study found out that $F_{\text{Calculated}}$ was 79.566 and $F_{\text{Critical (4, 107)}}$ is 2.45656; hence $F_{\text{Calculated}} > F_{\text{Critical}}$, therefore the overall regression model was significant. The findings further established that the study had a p value of $0.000<0.05$ an indication that the at least one variable significantly influenced competitive advantage of IT firms in Nairobi.

In order to establish the individual influence of the variables on competitive advantage, the researcher carried out regression coefficient. The findings are as shown in Table 4.

Table 4: Regression Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.964	2.985		2.333	.022
Human resource capability	-.469	.063	-.392	-7.439	.000
Financial resource capability	.373	.063	.402	5.951	.000
Knowledge management capability	.335	.084	.241	3.988	.000
Cost efficiency capability	.115	.048	.138	2.379	.019

a. Dependent Variable: Competitive Advantage

$$\mathbf{Y = 6.964 + 0469X_1 + 0.373X_2 + 0.335X_3 + 0.115X_4}$$

Where: Y = Competitive Advantage of IT firms; X_1 = Human Resource Capability; X_2= Financial Resource Capability; X_3= Knowledge Management Capability; X_4 = Cost Efficiency Capability

The findings in Table 4 show that when all the variables were held constant to zero, competitive advantage would be at 6.964. A unit decrease in human resource capability when holding all of the variable’s constant, competitive advantage would be at 0.469. A unit increase in financial resource capability while holding all of the variable’s constant, competitive advantage would be at 0.373. A unit increase in knowledge management capabilities while holding all of the variable’s constant at zero, competitive advantage would be at 0.335. A unit increase in cost efficiency while holding all of the variable’s constant, competitive advantage would be at 0.115.

The study found out that human resource capabilities had a p value of 0.00<0.05 an indication that the variable significantly influenced competitive advantage. The finding are contrary to Chuang *et al.,* (2015) who established that HR capabilities significantly influenced effectiveness in organizational context. Muhura (2012) who showed that the dynamic capabilities of the firm enabled it to effectively compete in the industry. The capabilities include efficient networks of distribution, competent staff and technology adoption, innovation and brand. There were adequate measures of safeguarding these capabilities of the company.

The study pointed out that financial resources capability positively and significantly influenced competitive advantage as supported by a p value of 0.000<0.05. The findings is supported by Xiao *et al.* (2014) who states that financial resources capability improves the firms performance and firms should strive a balance between expenses and the revenue streams. Proper financial operation and governance require managers to regularly forecast and monitor both revenues and expenditures to be incurred in the course of business operations.

The study established that knowledge management had a p value of 0.00<0.05 an indication that the variable had a positive and significant influence with competitive advantage. The findings are in support of Amaeshi *et al.*, (2015) who found out that integration of maintenance function into production and manufacturing operations and its efficient and effective implementation is critical for a manufacturing firm to enjoy competitive advantage. Similarly, Maletic *et al.* (2014) established that technology adoption significantly impacts on profitability of the firm.

The study further found out that cost efficiency had a p value of $0.019<0.05$ an indication that the variable had a positive and significant influence with competitive advantage. Bushuru, Namusonge, Oteki, and Wandera (2014) established that low cost sourcing and technology adoption were found to be critical in improving effectiveness of the supply chain function and early suppliers' involvement was found to be positively correlated to supply chain performance.

CONCLUSIONS

Human Resource Capability

The study concludes that human resource capability had an inverse effect on competitive advantage. The key staff of the firm had undergone adequate training in various areas of IT. There were adequate team development whereby team-based activities were actively developed and promoted. There was a performance-based pay which emphasizes rewarding employee contributions and achievements. The key staff of the firm were highly qualified in IT software development, application and training. The key staff of the firm had adequate experience in IT and related disciplines. There was an effective HR policy that governs practices to acquire, cultivate and retain human resources. Staff enjoyed reduced status distinctions and information is easily shared.

Financial Resource Capability

The study concludes that financial resource capability had a positive influence on competitive advantage. IT firm strived to maintain and accurately balance its expenditure within its stream of financial resources. The financial plans and budgets were fully aligned to the organization's strategic planning. Enough financial resources were set aside for the acquisition of the required assets and the firm had adequate financial resources for its day-to-day operations. The firm practiced strategic financial resource budgeting to maximize efficient use of the available resources. The firm strived to forecast income/expenditure, monitors and highlights emerging financial issues. The firm had flexible financial plans and budgets to allow for spending patterns to be adjusted accordingly.

Knowledge Management Capability

The study further concludes that knowledge management had a positive and significant influence with competitive advantage. Key staff of the firm has adequate knowledge of the specific needs of the customers. Key staff of the firm have adequate knowledge of the organizational culture. Key staffs of the firm have adequate knowledge customer tastes and preferences. Key staffs of the firm have adequate knowledge of the products and their use. Key staffs of the firm have adequate knowledge of customer behavior.

Cost Efficiency Capability

The study further concludes that cost efficiency capability had a positive and significant influence with competitive advantage. The firm practices strategic pricing in terms of lower prices or more product features for the same price. The products of the firm were designed in capacity-fill, productivity as well as yield. The firm offers appropriate level of value at an acceptable price. Attention was paid to key cost drivers such as economies of scale and supply changes. Firm focuses on economies of scale for the purpose of pricing. The firm focuses to keep costs as low as possible but consistent with the value provided. The firm was suitably located to cut down on supply costs for instance proximity to reliable sources of various IT inputs.

RECOMMENDATIONS

Human Resource Capability

The study recommends that the policy makers need to employ the key staff who have undergone adequate training in various areas of IT. The policy makers need to ensure that there is an adequate team development whereby team-based activities is actively developed and promoted. The policy makers need to ensure that there was a performance-based pay which emphasizes rewarding employee contributions and achievements. The key staff of the firm need to be highly qualified in IT software development, application and training. The key staff of the firm need to have an adequate experience in IT and related disciplines. The policy makers need to ensure that there is an effective HR policy that governs practices to acquire, cultivate and retain human resources.

Financial Resource Capability

The study recommends that IT firm need to strive to maintain and accurately balance its expenditure within its stream of financial resources. The financial plans and budgets need to be fully aligned to the organization’s strategic planning. Enough financial resources need to be set aside for the acquisition of the required assets and the firm need to have an adequate financial resource for its day-to-day operations. The firm need to practice strategic financial resource budgeting to maximize efficient use of the available resources. The firm need to strive to forecast income/expenditure monitors and highlights emerging financial issues. The firm ought to have a flexible financial plans and budgets to allow for spending patterns to be adjusted accordingly.

Knowledge Management Capability

The study recommends that the key staff of the firm need to have adequate knowledge of the specific needs of the customers, organizational culture and adequate knowledge of the available technology. The management ought to ensure that the key staff of the firm has adequate knowledge of the products and their use. Knowledge management need to be properly aligned to other resources to support a variety of important organizational operations and activities. The management of the firm need to ensure that the key staff of the firm have adequate knowledge of the nature of the rivalry posed by existing firms.

Cost Efficiency Capability

The study further recommends that the firm need to practice strategic pricing in terms of lower prices or more product features for the same price. The management need to ensure that the products of the firm were designed in capacity-fill, productivity as well as yield. The firm need to offer appropriate level of value at an acceptable price. The management need to pat attention to key cost drivers such as economies of scale and supply changes. The management need to ensure that the firm focuses on economies of scale for the purpose of pricing and focuses to keep costs as low as possible but consistent with the value provided. The management need to ensure that the firm is suitably located to cut down on supply costs for instance proximity to reliable sources of various IT inputs.

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