

Influence of Entrepreneurial Orientation on Competitive Advantage among Mobile Service Providers in Kenya

Geoffrey Gitau¹, Elegwa Mukulu², John Kihoro³

¹ Kabarak University Business School, P.O Box Private Bag 20157, Kabarak, Kenya

² Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000-00200, Nairobi, Kenya

³ Cooperative University College of Kenya, P.O. Box 24814-00502 Karen, Kenya

Abstract: The mobile services sector in Kenya has become one of the most robust industries in Kenya. However, this industry has witnessed an extremely skewed competitive position among its three licensed mobile service providers. The study used explanatory variables drawn from reviewed literatures' to create a conceptual framework on influence of entrepreneurial orientation on competitive advantage so as to determine to what extent this skewed competitive position was being influenced by entrepreneurial orientation. A sample size n=291 was obtained from a systematic random sample of customers visiting mobile service providers' customer service centers in Nairobi through a cross-sectional survey. A firm's perceived entrepreneurial orientation and competitive advantage was measured using a set of questionnaires administered by the researcher on face to face with the participants. The data collected was analyzed quantitatively and the findings represented using narrations, tables and figures. Multiple linear regressions models were used to describe the relationship of the observed firm's competitive advantage and its perceived entrepreneurial orientation. The findings showed statistically significant difference in the influence of entrepreneurial orientation on competitive advantage among the mobile service providers in Kenya; $t = 25.517$, $p < .001$, and confidence interval 99% to conclude that there was evidence to support the claim that entrepreneurial orientation among mobile service providers in Kenya influenced their competitive advantage.

Keywords: Competitive advantage, entrepreneurial orientation, innovativeness, risk-taking, pro-activeness.

1. INTRODUCTION

The mobile services sector is a turbulent environment. It is characterized by frequent disruptive technologies introduced by innovative companies and rapid new demands for new and better services by customers (Klemettinen, 2007; Arasa & Gathinji, 2014; Bharathi, 2015). Entrepreneurial orientation (EO) comprises of the strategy-making practices and decision-making styles of managers in identifying and exploiting opportunities. It is a mindset – an entrepreneurial perspective – that is reflected in a firm's ongoing behavior (Lumpkin, 2009). An entrepreneurial firm is one that engages in product - market innovation, undertakes somewhat risky ventures, and is first to come up with “proactive” innovations, beating competitors to the punch Miller (1983). Although the term EO has been used to widely refer to the set of personal psychological traits, values, attributes, and attitudes strongly associated with a motivation to engage in entrepreneurial activities (McClelland, 1962; Timmons, 2000), EO is also a firm-level construct is closely linked to strategic management and the strategic decision making process (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zellweger & Sieger, 2010).

It has been reported that Kenya has become a centre for innovation and entrepreneurship and it is a world leader in mobile innovations as demonstrated by its ICT firms competing internationally. Kenya has emerged as an innovator in development of financial mobile app called M-PESA and field reports crisis-mapping app called Ushahidi, among others

(Ncube & Ondiege, 2013). However, despite this remarkable success, apart from the market leader, the other mobile service companies are having existential problems. One of the companies closed shop and sold off its interests to the competitors leaving only three players and of the three players left, one more is at the verge of selling off its interest also due to difficulties in performance. Paradoxically, in the midst of this turbulent environment the market leader still continues to report the highest profits in the corporate sector in East Africa to date (Nganga et al., 2014).

If a firm has superior market position, or competitive advantage (CA), it will generate superior financial returns over its competitors (Gathenya, 2012; Otieno, et al., 2012). For example, innovation creates a monopoly position and the defense of which brings further innovation to maintain virtuous circle. Upon achieving this monopoly position the firm then tends to reinforce this position by controlling and extending the period of benefit due to agreements with partners on innovation and patents (Fagerberg, 2009; Laino, 2011). Further by sustaining continued innovation the firm creates a string of the so-called "Schumpeterian rents" based on temporary monopolies and the extent of how long these competitive advantages can be enjoyed is determined by the speed of imitability by competitors (Rothaermel, 2008).

This article therefore presents empirical findings on influence of EO on CA among mobile service providers in Kenya. EO has been used as a factor that can contribute to CA of the firm in a conceptual model by Qureshi et al., (2010). In order to determine to what extent EO was influencing CA among mobile service providers in Kenya, the study was based on three explanatory factors what define parameters of EO: these are Innovativeness, Risk-taking and Pro-activeness.

2. LITERATURE REVIEW

Although embracing EO has been recommended as a means to help an enterprise to excel and overcome challenges of attaining CA (Lumpkin, 2001), its empirical research on the relationship between EO and CA has yielded inconsistent/mixed results (Jantunen et al., 2005). Therefore, EO as a frame of mind and a perspective about entrepreneurship as reflected in a firm's ongoing processes and corporate culture has continued to be a subject of academic review. This literature review has covered theories posited as significant in the phenomenon of EO and its influence on CA.

Theory on competitive advantage:

CA is a positional superiority based on the provision of superior customer value or the achievement of lower relative costs. There are three generic strategies for competitive advantage; cost leadership, differentiation and focus (Porter, 1996). A differentiation strategy assumes that CA can be gained through particular characteristics of a firm's products. Strong emphasis on service differentiation has been found to lead to higher quality of service (Gebauer et al., 2010). A firm that implements a cost leadership strategy on the other hand achieves CA by becoming the lowest cost producer or service provider in the industry. A firm may also adopt a focus strategy where it would concentrate its attention on one or more particular segments or niches of the market by avoiding servicing an entire market with a single product or service. A firm that is not coherent in its strategy would fail by being stuck-in-the middle by trying to combine cost leadership and differentiation with a single product or service (Baroto, 2012).

Entrepreneurial orientation theory:

The study has reviewed EO as conceptualization of enterprise's opportunity recognition and exploitation through innovative, risk-taking, proactive managerial responsibility (Morris et al., 2002; Zellweger & Sieger, 2010).

Innovativeness:

Innovativeness of a firm is measured by the ability of an organization to maintain a flow of internally and externally motivated new ideas that are translatable into new products, services, processes, technology applications, and/or markets. This is represented by new approaches in operational activities that encourage creation of new and better products, markets, process and new use of raw materials that the firm could be utilizing (Achrol & Kotler, 1999; Gathenya, 2012; Zellweger & Sieger, 2010).

Risk-taking:

Risk-taking propensity is perceived from the extent to which a firm devotes resources to projects that pose a substantial possibility of failure, along with chances of high returns (Venkatraman, 1989a; Qureshi et al., 2010). Risk-taking is accomplished through intelligence gathering efforts, test markets, working with lead customers, staged product launches, outsourcing of various activities tied to a new product or service, borrowing or sharing resources, and partnerships with

suppliers, distributors and competitors. The risks taken are moderate, calculated, and manageable (Morris et al., 2002; Gathenya, 2012).

Pro-activeness:

It has been argued that initiative entrepreneurial managers exemplify vision and imagination necessary to engage in opportunistic expansion (Penrose, 1959, Kraus et al. 2009). A proactive firm possesses aggressiveness and foresight to seize new opportunities - even if it is not always the first to do so (Lumpkin & Dess, 1996). This can be observed from a service provider's frequency of introducing new products and brands ahead of competition and characteristic of frequent and extensive technological and product innovation (Miller & Camp, 1985; Covin & Slevin, 1991; Gathenya, 2012).

Empirical review:

A positive correlation between entrepreneurship and firm performance in Kenya was noted by Otieno et al. (2012). The research study was undertaken on manufacturing firms in Nairobi and surrounding area, where 525 of the 698 of the manufacturing firms registered with the Kenya Association of Manufacturers (KAM) are located. It was observed that the adoption level of EO by manufacturing firms in Kenya was at 71.02%. The findings demonstrated that a majority of manufacturing firms under study had adopted EO in their manufacturing firms, thereby confirming the perceived important role EO plays in enhancing manufacturing firm's competitiveness while operating under the East Africa Community (EAC) regional integration context. However, this study did not show what the correlation of EO to varying level of firm performance was.

While investigating on the influence of EO on growth of Micro and Small Enterprises in Kerugoya in Kenya, Mwangi and Ngugi (2014) used innovativeness, pro-activeness and risk-taking as factors that comprise EO. The study found that the combined effect of innovativeness, risk taking, pro-activeness and managerial competence was statistically significant in explaining changes in growth of MSEs (p value < 0.001). In view of this empirical review the researcher adopted innovativeness, risk-taking and pro-activeness as explanatory variables in measurement of EO, in order to determine the extent to which EO influenced CA of mobile service providers in Kenya.

3. METHODOLOGY

This research was based on explanatory mixed method research design. Explanatory studies look for explanations of the nature of certain relationships and is suitable for hypothesis testing to provide an understanding of the relationships that exist between variables. Data was collected and analyzed using both quantitative and qualitative approaches. Quantitative research provides measurement of quantity or amount (Kothari, 2007) while qualitative research design used an unstructured or semi-structured research approach to produce insights into behaviour, motivations and attitudes without necessarily quantifying them. This is useful for clarifying the participants' view of the context in which they operate (Wilson, 2006). The qualitative research method was therefore used for providing unstructured explanations to reasons behind facts obtained by the quantitative design. Such responses are rich, full, down-to-earth, holistic, real, and their face validity is optimal.

A sampling frame sourced from the three participating mobile service companies based on their dealers and outlets registers of year 2014 which indicated that Safaricom had 874 dealers/outlets in the Nairobi Central Business District – CBD, Airtel had 79 outlets in the Nairobi CBD and Orange had 21 outlets in the Nairobi CBD. A fourth service provider Essar Telecoms (YU) had just ceded its business to Airtel so its outlets were added to Airtel Kenya Ltd. Nairobi CBD has been selected because it guaranteed a complete representation of all the three mobile services operators. A sample population was obtained proportionately based on the mobile service provider's market share (CCK, 2012) to yield: Safaricom (267 participants), Airtel (66 participants) and Orange (20 participants). However, Safaricom sample size was adjusted to 205 participants using a formula for adjustment of large sample sizes. Although there is nothing wrong with having a too big sample size often much money and efforts are required for large sample size. Larger sample burden more participants, the fact of diminishing marginal returns implies that the ratio of projected value to total participant burden can only get worse as sample sizes increase (Bachetti, 2010). Therefore, it was unnecessary for Safaricom to have a very large proportion in the total sample size as compared to the other mobile service providers. The adjusted sample size used in the study was $n=291$.

The study data collection closed ended questionnaires were structured into a Likert scale for interval data. The data collected was coded and analyzed using Pearson's correlation and Multiple Linear Regression. CA was measured using

SERVQUAL questionnaire instruments adapted from Mantymaa (2013) and PERVAL questionnaire instruments adapted from Rintamaki et al. (2007). The EO parameters were measured using researcher’s original questionnaire instruments based on the EO theoretical review variables of innovativeness, risk-taking and pro-activeness characteristics of the mobile service provider. The relationship of the influence of EO on CA among mobile service providers was modeled using Multiple Linear Regression given below:

$$Y = a + bX_1 + cX_2 + dX_3 + E$$

Where: **Y** is Competitive advantage of the mobile service provider

X₁, **X₂**, and **X₃** are EO parameters of Innovativeness, Risk taking and Pro-activeness, respectively

a is constant of the **Y** intercept

b, **c**, **d** are coefficients of **X₁**, **X₂**, and **X₃** respectively

E is the error term

Piloting of the data instruments was done followed by a confirmatory factor analysis, including tests for convergent and discriminant validity, and reliability for each measurement item. The reliability, expressed is a coefficient between 0 and 1.00 (the higher the coefficient, the more reliable the test is). Reliability was measured using Cronbach Alpha on the proposed data collection instruments and any item that had less than 0.7 coefficient alpha’s reliability was dropped. In the end the CA instruments administered in the data collection had 0.683 coefficient alpha, and EO instruments had 0.911 coefficient alpha.

4. FINDINGS OF THE STUDY

Data collected was analyzed using Pearson Correlation and the findings tabulated as follows:

Table 1: Correlation matrix of the research model variables

		CA	Innovativeness	Proactiveness	Risk_taking
CA	Pearson Correlation	1	.883**	.924**	.891**
	Sig. (2-tailed)		.000	.000	.000
	N	246	246	246	246
Innovativeness	Pearson Correlation	.883**	1	.837**	.797**
	Sig. (2-tailed)	.000		.000	.000
	N	246	246	246	246
Proactiveness	Pearson Correlation	.924**	.837**	1	.839**
	Sig. (2-tailed)	.000	.000		.000
	N	246	246	246	246
Risk_taking	Pearson Correlation	.891**	.797**	.839**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	246	246	246	246

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

According to the Correlation matrix represented by Table 1 above, all the three variables that represent EO as explanatory variables of CA are significant and are strongly correlated to CA. This means there is a significant relationship between CA and each of the three explanatory variables.

Further, the three variables were analyzed using a multiple linear regression model that indicated the following:

Table 2: Model summary for regression of EO against CA

R	R Square	Adjusted R Square	Std. Error of the Estimate
.959 ^a	.919	.918	.0962054

a. Predictors: (Constant), Risk_taking, Innovativeness, Proactiveness

The table above on the model summary indicates that 91.8% of CA can be explained by EO (i.e. $R^2=0.918$), according to the data analyzed.

Table 3: ANOVA table for multiple linear regression model of EO against CA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	25.325	3	8.442	912.064	.000 ^b
Residual	2.240	242	.009		
Total	27.565	245			

a. Dependent Variable: CA

b. Predictors: (Constant), Risk_taking, Innovativeness, Proactiveness

The table 3 shown above shows that the model was significant ($F(3,242)=912.064$, $p<0.001$).

Table 4: Coefficients of the multiple linear regression model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.340	.092		25.517	.000
Innovativeness	.166	.022	.271	7.691	.000
Proactiveness	.333	.030	.439	11.204	.000
Risk_taking	.144	.017	.307	8.639	.000

a. Dependent Variable: CA

The table 4 above shows that all the three parameters used to measure EO were significant ($p<0.001$) and the Multiple Linear Regression can be summarized as follows:

$$CA=2.34 + 0.271 \text{ Innovativeness} + 0.439 \text{ Proactiveness} + 0.307 \text{ Risk_taking} + \text{Error_term}$$

This indicates that the pro-activeness of a mobile service provider was the leading contributor to competitive advantage of the mobile service provider followed by the risk-taking propensity of the firm. Innovativeness of the firm was also a significant contributor to competitive advantage of the firm.

5. CONCLUSIONS

The research results presented indicated that there was statistically significant difference in influence of entrepreneurial orientation on competitive advantage among the mobile service providers in Kenya; $t = 25.517$, $p< .001$, and confidence interval 99%. So the study is of the conclusion that there was evidence to support the claim that entrepreneurial orientation among mobile service providers in Kenya influenced their competitive advantage. These findings agree with the empirical literature reviewed (Otieno et al., 2012; Mwangi & Ngugi, 2014). Therefore, the findings support the recommendation that for mobile service providers to succeed in Kenya they will need to embrace entrepreneurial orientation in the business strategy. They will need to be pro-active in identifying and exploiting business opportunities. They should also accept to commit their resources to somewhat risky opportunities beside been keen on introducing new and rapid innovations to their customers. The researcher recommends further study to focus on characteristics that make some mobile service provider's innovations to be more popular as compared to those of its competitors. This is necessary because the researcher observed that one of the mobile service provider competitive advantage has been driven largely by money transfer service and regardless of its competitors offering similar and cheaper services customers remained put with the leading service provider.

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