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# Resource Configurations on Sustainable Competitive Advantage of Food and Beverage Firms in Kenya: A Resource Based View of the Firm

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**Abstract**
The resource based view has gained immense importance in business theorizing and has been widely accepted as a theory. The Kenyan manufacturing sector contributes about 10 percent to the GDP of which agro-processing contributes 3 percent. The sector grows at about 4 percent annually and is set to be one of the main drivers of industrialization and economic growth in the Kenya. The resource based theory of the firm was tested on the food and beverage firms in Kenya on the basis of resource capability configurations that accord firms sustainable competitive advantage. From the 138 food and beverage manufacturing firms registered by the Kenya Association of Manufacturers in 2011, the study targeted 95 firms in and around Nairobi and Mombasa using purposive judgmental sampling. The study was carried out through a standardized questionnaire. The independent variables were mainly constructs of intangible assets like firm knowledge, firms' information management, strategic planning, organizational structure and organizational culture. Out of the 95 firms surveyed, 32 responded giving 33.7 percent response rate. From the multivariate ordinary least squares regression analysis, the effects of organizational structure ($p$ = 0.04, α=0.05) were found significant at 95 percent confidence interval indicating the importance of the intangible asset to firms' sustainable competitive advantage. The findings confirmed the importance of the organizational structure, whose building blocks are individuals in the firm, as a pattern of communication and relations among a group of human beings, including the process of making and implementing decisions as key contributors of firms sustainable competitive advantage in Kenya.
**Keywords:**Firm resources, Organizational structure, sustainable competitive advantage.

## INTRODUCTION

The resource based view (RBV) of the firm has been one of the most influential and cited theories in the history of management theorizing (Kraaijenbrink, Spencer and Groen, 2010). The central proposition of the Resource Based Theory (RBT) is that if a firm is to achieve a state of Sustained Competitive Advantage (SCA), it must acquire and control Valuable, Rare, Inimitable, and Non-substitutable (VRIN) resources and capabilities (Barney, 1991; 1995; 2001). Since the introduction of Strategic Management literature, the RBV (Peteraf, 1993; Wernerfelt, 1984) has earned great attention among scholars as a framework for explaining conditions under which a firm may gain a sustained competitive advantage. Given the elegant simplicity and immediate face validity, the RBV core message is appealing, easily grasped, and easily taught. Yet the RBV has also been extensively criticized for many weaknesses as a theory (Kraaijenbrink, *et al*., 2010).

The Resource Based Theory (RBT) of the firm emphasizes the role of resources and capabilities in forming the basis of competitive advantage. Broadly stated, a resource is something that a firm possesses, which can include physical and financial assets as well as employees' skills and organizational (social) processes (Armstrong & Shiminzu, 2007). A firm's resources and capabilities include all of the financial, physical, human and organizational assets used by the firm to develop, manufacture, and deliver products or services to its customers. Financial resources include debt, equity, retained earnings and others while physical resources include machines, manufacturing facilities and buildings firms use in their operations. Human resources include all the experience, knowledge, judgment, risk taking propensity and wisdom of individuals associated with the firm. Organizational resources include the history, relationships, trust, and organizational culture that are attributes of groups or individuals associated with the firm, along with a firm's formal reporting structure, explicit management control systems and compensation policies (Barney, 1991).

This study sought to examine the resource based theory of the firm on Kenyan food and beverage manufacturing sector. Kenya's manufacturing sector contributes about 10 percent of GDP annually and is growing at an average of 3-4 percent (GOK, 2010; 2011; 2013; ). The main concern is that the sector has been stagnant for decades mainly due to unfavorable policies. Although the sector has shown signs of recovery and growth, the size continues to be small compared to newly industrialized countries like Singapore, Malaysia and Indonesia (GOK, Kenya Economic report, 2009). The structure of Kenya's manufacturing sector shows that processing of food commodities and refining of petroleum products are the main industries in terms of value

 

added. Thus, manufactured exports mainly comprise agro-processed products (GOK, Kenya Economic report, 2009).

Among the major consumers of agricultural raw materials are middle and large industries that engage in value addition. Many of these industries are concentrated among the food and beverage category of processors for both the local and export market. Due to rapid population growth and accompanying migration into towns and cities with most urban population depending on fast- foods like juices, bread, snacks and other processed foods, investment in the lucrative sector has increased in the recent years leading to significant competition. This has led firms in the food and beverage sub-sector to rethink strategy and device means of sustaining competition in the industry. Many firms have explicitly embraced competitive strategies remain successful in business.

**Statement of the problem**

In highly competitive industries, firms have to employ the best strategies and use their resources to harness their potential for requisite competitive advantage. The Kenyan food and beverage processing sector is the largest (20.8%) in the manufacturing and value adding subsector of the economy (KAM 2011). This subsector has been experiencing sustained competition in the recent years necessitating employment of various strategies to gain competitive edge. However, strategies in themselves just as firm resources, do not confer competing firms the much desired competitive edge but a combination of strategies and resources in what (Newbert,2008 ) calls resource capability configurations that accords the necessary competitiveness. This study sought to analyze which firm resources have significant effects in according food and beverage value adds the necessary competitive advantage. The manipulation or configuration of those resources by the competencies exhibited by top executives and senior management of those firms was also examined in the study. Specifically, the study sought to answer the following question; "Which resources do firms in the food and beverage manufacturing sector of Kenya use for sustainable competitive advantage?"

## LITERATURE REVIEW

### *Resource Based Theory (RBT)*

Since its introduction into the strategic management literature, the resource based view (RBV) of the firm (Wernerfelt, 1984; Barney, 1986; 1991; 2001; Conner, 1991) has earned great attention among scholars as a framework for explaining the conditions under which a firm may gain sustained competitive advantage. Strategy researchers have emphasized the importance to consider the opportunities and constraints faced by firms as a result of their resource base as well as the industry characteristics when investigating a firm's decision concerning it growth (Delios & Beamish, 1999). Wernerfelt (1984) introduced the notion that firms should be analyzed from the resource side at the level of the firm, not just from the product side at the level of industry while Barney (1986,1991) argues that a firm has the potential to generate sustained competitive advantage from resources that are valuable, rare, inimitable, and non substitutable (VRIN). These resources can be viewed as bundles of tangible and intangible assets, such as a firm's management skills, its organizational processes and routines, and the information and knowledge under its control (Barney, Wright and Ketchen, 2001) tied semi permanently to the firm (Wernerfelt, 1984). To distinguish resources as inputs and capabilities within the firm to enable it to select, deploy, and organize them, the concept of "dynamic capabilities" was coined to mean 'firm's processes that use resources to integrate, reconfigure, gain and release other resources to match and create market change. Therefore, dynamic capabilities are organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die (Eisenhardt & Martin, 2000).

In his argument, Leiblein (2003) indicated that RBV assumes that firms are profit maximizing entities directed by boundedly rational managers operating in distinctive markets that are to a reasonable extent predictable and moving towards equilibrium. RBV challenges the market based view of economists by regarding resources and competitive advantage as factors specific to a firm rather than general to the industrial environment (Tseng, Tansuhaj, Hallagan, and McCullough, 2007). On scope of application of RBV, Connor (2002) argues that the RBV applies only to large firms with significant market power. However, this argument, though plausible to the extent that smaller, nimbler firms do not have adequate resources for SCA, is nullified on the grounds that intangible resources have capability to generate SCA even in small firms. However, the RBV only applies to firms striving to achieve SCA not those satisfied with their competitive position (Kraaijenbrink, *et al*., 2010).

Critiques have also argued that SCA is not actually achievable since both the skills and resources, and the way the organization uses them must constantly change leading to the creation of continuously changing temporary advantages (Fiol, 2001). In a dynamic environment, firms cannot derive SCA from static resources. Dynamic environments call for dynamic capabilities (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece and Winter, 2007) hence this does not nullify the sustainability of RBV. Furthermore, the possession of resources is not sufficient and it is only by being able to deploy these resources that SCA can be achieved (Makadok, 2001). To create SCA, a firm needs a bundle of resources and managerial capabilities to recognize and exploit the productive opportunities implicit in them ((Kraaijenbrink, *et al*., 2010). In any case, resources are valuable when

 

they enable a firm to conceive of and implement strategies that improve the efficiency and effectiveness (Barney, 1991) of operations.

**Knowledge as a resource for Sustainable Competitive Advantage**

Variously referred to as intellectual capital, intellectual property, knowledge assets, or business intelligence, corporate knowledge is viewed as the only sustainable untapped source of competitive advantage (McElroy, 2000) since knowledge is theoretically infinite. Tacit knowledge is acquired through experience (Spender, 1996). It is personal and, therefore, difficult to formalize, communicate, and share with others. To maintain and sustain competitive advantage, organizations need to focus on innovation processes intrinsically benefiting from the creative potential inherent in its staff (Yolles, 2009). Johannessen *et al*, (2001) further emphasize that to maintain competitive edge, organizations need both a sense of stability and continuity and an awareness of the potential for intrinsic continuous improvement of existing products and services. There is need to emphasize total knowledge base to promote this continuous improvement. Intrinsic knowledge development occurs through interactive and reflective learning which organizations should work on. As Zack (1999) noted, knowledge is today considered the most strategically important resource, while its acquisition through learning is essential for an organization's strategic capability. However, (Spender and Scherer, 2007) argue that no resource is probably more problematic than knowledge. The main difference between knowledge and other types of resources resides in its intangibility and non-rivalriness meaning that its deployment in one firm, or for one purpose, does not prevent its redeployment by the same or another firm or for another purpose. On the contrary, deploying knowledge may increase it (Winter & Szulanski, 2001). Resource and knowledge based research generally maintains that among the types of firm- specific resources, firm specific knowledge has the greatest potential to serve as a source of sustainable competitive advantage (Grant, 1996)

**Other Organizational Resources (Structure, Strategy and Culture) for SCA**

Furlong (2005), argues that competitive advantage is often related to the core competencies of the organization. These are those capabilities that are critical to a business achieving competitive advantage based on tacit knowledge. There are two factors that have significant influence on the ability of an organization to achieve sustainable competitive advantage. These are 'structure and configuration' and 'organizational culture' (Furlong, 2005). Contingency and configuration theories have received considerable attention both in organizational theory and strategic management research (Powell, 1992). In general, contingency theorists assert that successful performance is the result of a proper alignment of endogenous design variables (such as organizational structure or degree of planning formality) with exogenous context variables (such as environmental uncertainty, technology or organizational size), (Powell, 1992). Analysis of strategic capability for competitive advantage is critical for two reasons; first it determines whether an organization's resources and competencies fit the environment and second, it defines new opportunities to stretch and exploit an organization's unique and rare competencies in hard to imitate ways or by creating new market directions or both (Johnson & Scholes, 1999). In analyzing the link between structure-strategy-performance relationships (Furrer, Krug, Sandharsan and Thomas, 1995) indicated the importance of a fit between industry structure, strategy and organizational structure as a means of maximizing worldwide performance. The firm's organizational structure is driven by its worldwide strategy: ie, strategy drives the firm's structure which is consistent with Chandler, (1962) assertion that structure follows strategy. Firms create worldwide competitive advantage by organizing their worldwide assets in ways that match the firm's strategic response to industry conditions. The firm's strategic response to industry structure, rather than directly determining its worldwide strategy and structure, more directly determines the types of assets the firm uses to create global competitive advantage (Furrer*, et al.,* 1995).

Some researchers have suggested that capabilities are a deliberate investment in organizational structure and systems to make constant improvement in the firm's routines and practices. They include explicit efforts to continuously learn and capture the lessons from prior experience of self and others (Zollo & Winter, 2002). Csasar (2012) in an analysis of organizational structure as a determinant of performance, conceptualized it as a decision making process in an organization with building blocks being individuals in communication and relations including the process of making and implementing decisions. Simon (1997) developed a more formal understanding of organizations as information processing devices composed of boundedly rational individuals with organizational structure playing a central role in defining how information flows and is aggregated inside the organization allowing them to accomplish goals that would be otherwise unattainable by any of its individual members.

***Sustainable Competitive advantage***

Competitive advantage is the ability of a firm to out-compete other firms in its industry. Competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it (Porter, 1985). Peteraf and Barney (2003) define competitive advantage as superior differentiation and/or lower

 

costs by comparison with the marginal (breakeven) competitor in the product market. An enterprise has a competitive advantage if it is able to create more economic value than the marginal (breakeven) competitor. The economic value created by an enterprise in the course of providing a good or service is the difference between the perceived benefits gained by the purchasers of the good and the economic cost of the enterprise (Peteraf & Barney, 2003). Superior value (what buyers are willing to pay) stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset the higher price (Porter, 1985). The enduring competitive advantage in global economy lies increasingly in local things like knowledge, relationships, and motivation that distant rivals cannot match.

Sustained competitive advantage is one that persists over a long period of time (Porter, 1985; Wiggins and Ruefli (2002). Barney (1991) argues against the use of calendar time to define sustainability and considers that a sustained competitive advantage is achieved only if it continues to exist after competitors' effort to duplicate that advantage have ceased. This definition has theoretical advantage of avoiding the difficult problem of specifying how much calendar time firms must possess a competitive advantage in order for this advantage to be considered sustained (Barney, 1991). Powell (2001) argues that although the term competitive advantage and performance are used interchangeably (Porter, 1985), the two constructs are acknowledged to be conceptually distinct. Competitive advantage is conceptualized as the implementation of a strategy not currently being implemented by other firms that facilitates the reduction in costs, the exploitation of market opportunities, and/or the neutralization of competitive threats (Barney, 1991) while performance is generally conceptualized as the rents a firm accrues as a result of the implementation of its strategies (Rumelt, Schendel, and Teece, 1994).

In this study, effects of both tangible and intangible firm resources were examined for sustainable competitive advantage (SCA) in the food and beverage companies in Kenya. Emphasis was placed on intangible resources from literature on their effects on SCA. Resource- capability configurations were given emphasis. In so doing, the following hypotheses were tested;

Hypothesis: *There is a positive relationship between intangible firm resources and resource- capability configurations and attainment of sustainable competitive advantage*

## *METHODOLOGY*

### *Research Design*

This research entailed a descriptive study. Descriptive studies are undertaken for purposes of ascertaining and describing the characteristics of the variables of interest in a study and offering the researcher a profile or a description of relevant aspects of the phenomenon of interest from the individual, organization, industry or other perspectives (Sekaran, 2003). Descriptive research design is about what, where and how of a phenomenon (Cooper & Schidler, 2003). Descriptive design uses a set of scientific methods to collect raw data and create data structures that are used to describe the existing characteristics of a defined target population (Frankel & Wallen, 2000). This study sought to explicate the relationship between firm resources and SCA within the F & B firms in Kenya. The study was concerned with describing the characteristics of the competition among the F & B firms which form a unique group as Kothari (2006) posited. Descriptive studies are undertaken when the characteristics or the phenomenon to be tapped in a situation are known to exist, and one wants to be able to describe them better by offering a profile of the factors as this study sought to do. Hypothesis testing offers an enhanced understanding of the relationship that exists among the variables (Sekaran, 2003).

### *Population of the study*

The population consisted 138 food and beverage manufacturing firms in Kenya registered with the Kenya Association of Manufacturers (KAM) by 2011. KAM is the business member representative organization for manufacturing value-add sectors in Kenya. KAM promotes trade and investment, upholds standards, encourages the formulation, enactment and administration of sound policies that facilitate an enabling business environment, reduces the cost of doing business, and ensures Kenyan firms attain and maintain world class competitiveness (KAM Directory, 2011). KAM membership is divided into several sectors among which the food and beverage sector is the largest with a membership of 20.8 percent

### Sampling Frame and sample size

This study targeted medium to large sized firms. The sampling frame represented 95 companies in the Food and Beverage Industry from Nairobi and Mombasa. This was because the 95 out of 138 (68.8%) of the firms were found in these two cities hence selected through purposive judgmental sampling. The survey method was adopted in which all the 95 members were targeted by the census. Any of the top three executives among the Chief Executive/Chairman, Marketing/ Finance manager, or the Human Resources Manager were targeted as respondents. Only one executive represented each company.

Firm size was determined on the basis of employee numbers and turnover or profitability. For this study, small firms were defined as those with less than 50 employees and lower than fifty million kenya shillings (USD 588,300) in annual profits while large firms were those with over 500 employees and an annual profit of

 

over Ksh. 400 million (USD 4,705,700 at a rate of 1 USD=Ksh. 85). Medium firms were those in between. According to Canback, (2002), there are various ways of measuring firm size and more than 80 percent of academic studies use either net sales or number of employees. Firm age is determined by the number of years from the date of the initial public offering for listed companies (Mahsud *et al*, 2012) or the period from the date of incorporation for non-listed firms.

***Data collection***

This study used a standardized questionnaire to collect data. The questionnaire comprised both open and closed ended questions and sections for respondent opinion or concurrence on a 5-point Likert type scale consistent with Irungu (2007) and Waweru (2008) studies. Close ended questions are useful in giving similar or standard and comparable responses from the target individuals while being limited to the scope of what is asked. Open ended questions enable researchers to collect additional data and information that could be used and which the researcher had not anticipated in the design of the questionnaire. These questions served to extract additional general company data which was a source of qualitative information for the descriptive study.

The questionnaire was developed and refined on the basis of several sources; field interviews with corporate level executives of two of the target firms, review of previous research content to inform choice of questionnaire items appropriate for the study and discussions of preliminary drafts of the questionnaire with scholars to assess their validity. Pre-testing the questionnaires for clarity and validity before actual administration to the respondents enabled the researcher to polish the instrument and refine it to focus on the items under study. Govindarajan (1988) found that such preliminary treatment of the questionnaire enabled him to get validity, clarity and relevance of results. This was also consistent with the work of Kim and Lim ((1988) who pre-tested their questionnaire with five firms in a target sample of 44 for purposes of improving the study instrument. Newbert (2008) used two academics to identify an appropriate starting point for his study on value, rareness, competitive advantage and performance while consulting with five executives of five different technology firms who assisted him polish his study instrument to make it more relevant. To ensure confidentiality and ease of assistance by skeptical respondents, introductory letters from the researcher and relevant authorities like the Kenya Association of Manufacturers (KAM) were used together with the researcher's self introduction physically or through emails. Email attachments as a method of data collection was later found ineffective since most of the target respondents who were emailed at the start did not respond necessitating a change of tactics to drop and pick method except for Mombasa. Returned questionnaires were checked for completeness at the point of collection and data then entered into excel spreadsheets where numeric symbols for indicative figures on Likert scale responses were assigned. After ensuring the data was cleaned and free of errors, it was entered into Statistical Package for Social Sciences (SPSS) for analysis.

***Study Variables***

The dependent variable for this study was sustainable competitive advantage measured by indications of sustained firm profitability as well as turnover on a 5-point Likert scale according respondent perceptions. Other constructs for dependent variable included Return on Investment (ROI), Return on Assets (ROA), Dividend yield, and percentage growth in market share. A weighted indicative index was then established form an average of the responses on Likert type scale. For an indicator to qualify as a measure of sustainable competitive advantage, it had to be high on the Likert scale and the trend of growth constant or increasing. Such an indicator was assumed to depict superior firm performance over its competitors. Profitability is the best indicator of sustainable competitive advantage or performance although for private and unlisted firms, this is a closely guarded company secret whose data is not normally obtainable. Therefore, this study used respondents' perceived indications on the parameters of sustainable competitive advantage outlined above. This was consistent with studies by Newbert (2008) in which the content chosen for analysis of the micro and nanotechnology sectors contained a high percent of privately owned firms for which secondary data was not available. Furthermore, the data was provided by single respondents who happened to be senior level executives or scientists arguably better positioned than anyone to assess firm's internal operations and performance hence data collected was taken as more accurate. Moreover, use of perceptual performance measures is preferred by respondents since objective measures such as profits or revenues are seen as confidential (Gruber, Heinemann and Bretel, 2010). Use of multi-dimension measures based on perceptual firm performance further facilities comparison across firms and contexts such as across industries, time horizons and economic conditions (Song, Droge, Hanvanich and Calantone, 2005). Chandler and Hanks (1994) further aver that earlier studies have indicated perceptual performance measures tend to be highly correlated with objective indicators which support their validity.

The independent variables were constructs of both tangible and intangible assets of the firm mainly financial, physical, organizational, intangible (organizational structure and culture) and human capital. Further,

 

how firm resources influence attainment of sustainable competitive advantage was analyzed. Constructs for these variables were described and measured for testing the independent variables.

***Data Analysis***

Data was analyzed using the Statistical Package for Social Sciences (SPSS. The data was tested for central tendency and dispersion after confirmation of normal distribution by appropriate tests of normality; the Kolmogorov-Smirnov and Shapiro- Wilk tests. Regression analysis was carried out and interpretation of results of tests of hypotheses done using the F-test at 95 percent confidence interval. Descriptive statistics such as the mean, the range, the standard deviation and variance gave a good idea of how the respondents reacted to the items on the questionnaire and how good the items measured were. Poor spread (range) meant little variability and similarly, the mean, standard deviation and variance indicated whether the respondents ranged satisfactorily over the scale.

Reliability, which is a measure of the extent to which results are consistent over-time and which also tests if the result can be reproduced under similar methodology indicating that the instrument is reliable (Joppe, 2000) was analyzed. Cranbach alpha is used to measure reliability and ranges from 0 to 1 with acceptable values ranging between 0.7 and 0.9 (Kline, 1999). However, an alpha coefficient of 0.5 is adequate to conclude internal consistency (Nunnally (1967). In this study, for every Likert scale construct measuring aspects of independent variables, reliability tests were carried out and Cranbach alpha coefficient obtained (Appendix I). Constructs on CEO/Chairman competencies had an alpha coefficient of 0.858 while for top management competencies, the coefficient was 0.821. Constructs for employee competencies had an alpha of 0.9 while organizational resources had an alpha of 0.884 and intangible assets had a coefficient of 0.734.

Validity, which tests the authenticity of cause-and- effect relationships (internal validity) and the generalization to the external environment (external validity) and is concerned with whether the findings are really about what they appear to be about (Balta, 2008) was analyzed. Content validity was tested by discussions with experts during the questionnaire formulation stage to ensure that the measure included an adequate and representative set of items that tapped the content. To ensure content validity, the questionnaire was pre-tested on a pilot basis on two company chief executives as respondents for comprehension, logic and relevance. The feedback obtained helped in revising the instrument (questionnaire) before administering it to the wider respondents excluding the ones involved in the pre-testing. This was consistent with Dess and Davis (1984) findings that content validity of a questionnaire was enhanced through a review of its items by previous strategy researchers (Bourgeois, 1980) and pre-testing the research instrument in a field with firms not included in the sample which ascertained comprehensiveness and phrasing of the questionnaire items.

Construct validity was demonstrated by high correlations between the items that comprised the constructs. The higher the inter-correlations, the more the items were found to be relating (converging) to the construct for which they were assumed to describe. Zhou and Li (2012) used confirmatory factor analysis to test for construct validity with all items loading significantly on their expected constructs ($p<0.05$).

**Study model:**

The model of the study was as below;

$$Y_i = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu_i$$

Where;

Yi = Sustainable Competitive Advantage

$B_0$, $\beta_1$, $\beta_2$, $\beta_3$, $\beta_4$, $\beta_5$ are regression coefficients

$X_1$ = Firm's knowledge

$X_2$ = Firm's information management

$X_3$= Strategic planning

$X_4$ = Organizational structure

$X_5$= Organizational culture

**Effects of firm resource configurations on SCA**

In testing hypothesis (H1) on the relationship between firm resources and sustainable competitive advantage, both intangible and tangible assets were analyzed. The importance of tangible resources like financial, physical, organizational and human capital were assessed through 5-point Likert scale while intangible attributes, expected to confer firms with SCA like knowledge, firm's information management, strategic planning, organizational structure and organizational culture were taken to constitute predictor variables $X_3$, $X_4$, $X_5$, $X_6$ and $X_7$ respectively and their effects evaluated through regression analysis.

 

## RESULTS AND DISCUSSIONS

### Response rate

The target number of firms was 95 in and around Nairobi and Mombasa. Out of the 95 companies targeted 32 responded which was 33.7 percent response rate. This rate was considered adequate because it was over 10 percent of the total population (actually 23.9%) recommended by Kothari (2006) and yielded more than 30 valid responses which are considered critical for statistical analysis. The response rate was higher than that of Gruber *et al*., (2010) of 16 percent and also comparable to that of other studies directed at top managers or business owners (Dennis, 2003). Onyango (2011) managed 30 firms among small and medium enterprises in the food sector from a sampling frame of 10,000 possible SMEs in Nairobi. Therefore, the response rate was adequate for in-depth exploration which was done through the detailed questionnaire and large enough (over 30) to allow for statistical analysis. Gay (1981) pointed out that for correlation and descriptive studies, any justifiable number of subjects can be explored. Therefore the results of the study are very much applicable to the industry since it only represented a total population of 138 members at the time of analysis.

### Firm Resources for SCA: Financial and Physical Resources

With financial resources, there was indication of some contribution to Sustainable competitive advantage but some firms indicated no benefit or to very little extent implying that financial resources are not a critical driver of competitiveness and varies with firms.

Like physical resources, financial resources are enablers to a firm's strategic advantage but do not conform to the strict definition of valuable, rare, inimitable and non-substitutable resources since they are not heterogeneously distributed or inimitable (Barney, 1991). The findings of this study are therefore consistent with definition of strategic resources in that respondents did not necessarily consider finances as a strategic resource for competitiveness.

Physical resources, like any other tangible resources are not strategic for competitiveness in and of themselves but only when they enable firms to perform activities that create advantages in particular markets (Porter, 1991). Such resources create performance differentials by having intrinsically different levels of efficiency in the sense that they enable firms deliver greater benefits to their customers for a given cost (Peteraf and Barney, 2003). However, resources in themselves do not confer firms any competitive advantage (Mahsud, *et al*., 2011) but their integration, building, and reconfiguration to address rapidly changing environments (Treece *et al*., 1997), confer the SCA.

### Organizational Resources

Organizational resources considered in this case were the organizational structure, culture and strategy formulation. Firms' respondents indicated that some of these resources like organizational structure were significantly important in according companies in the food and beverage industry SCA. The findings were consistent with the work of other scholars on the subject of structure, culture and strategy like Chandler and Daems, (1980) that firms maximize performance when they correctly align their structure to strategy since structure follows strategy and firms must adjust their structure overtime as strategy evolves.

***Effects of intangible resources configurations on achievement of SCA***

Table 1 contains details of percentages of the average respondent concurrences on the levels to which companies in the industry employed intangible resources to gain sustainable competitive advantage.

Table 1. Use of Organizational Resources for Sustainable Competitive Advantage

| S/ NO. | Organizational resources | Level of respondent Concurrence (percent) | | | | |
|---|---|---|---|---|---|---|
| | | **Strongly disagree** | **Disagr** | **Do not** | **Agree** | **Strongly** |
| 1 | Strategic plan | 3.1 | 15.6 | 21.9 | 43.8 | 15.6 |
| | Organizational structure | 3.1 | 6.2 | 15.6 | 37.5 | 34.4 |
| | Vision, mission and core values | 3.1 | 6.2 | 12.5 | 56.2 | 21.9 |
| | Firm code of conduct | | 6.2 | 9.4 | 59.4 | 25 |
| | Customer care | | 9.4 | | 43.8 | 46.9 |
| | Customer royalty | | 6.2 | 3.2 | 37.5 | 50 |

**Source: Survey data (2013)**

*NB: There was high level of concurrence on importance of some resources like the organization strategy, its vision and mission as well as code of conduct and customer care all rated by over 80 percent of respondents as important to great extents.*

 

From the table, most respondents concurred with the ability of intangible resources to accord companies in the industry SCA when appropriately configured as shown by the high level of agreement with the indicator constructs.

**Results of tests of hypothesis.**
Results of multivariate least square regression analysis were obtained as shown in table 2 for summary model, table 3 for ANOVA and table 4 for coefficients respectively.

Table 2. Summary model for effects of firm resources on SCA.

| Model | R | R-Square | Adjusted R-Square | Std. error of the Estimate |
|---|---|---|---|---|
| 1 | .782[a] | .611 | .530 | .55240 |

a. Predictor (Constant):

**Source: Survey data analysis (2013)**

Table 3. ANOVA for effects of firm resources on SCA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 11.506 | 5 | 2.301 | 7.542 | .000[a] |
| | Residual | 7.323 | 24 | .305 | | |
| | Total | 18.830 | 29 | | | |

a. Predictors: (Constant): Effects ICT systems, Knowledge, strategic plan, organizational structure, customer care, organizational culture,
b. Dependent variable: Sustainable Competitive Advantage

Table 4. Coefficients for effects of firm resources on SCA

| Model | | Unstandardized Coefficients | | Standardized coefficient | t | Sig. |
|---|---|---|---|---|---|---|
| | | **B** | **Std. Error** | **Beta** | | |
| 1 | (Constant) | 1.693 | .598 | | 2.833 | .009 |
| | $X_3$ | .400 | .217 | .483 | 1.846 | .077 |
| | $X_4$ | -.157 | .137 | -.220 | -1.145 | .263 |
| | $X_5$ | .058 | .144 | .077 | .400 | .693 |
| | $X_6$ | .447 | .140 | .591 | 3.204 | .004 |
| | $X_7$ | -.211 | .251 | -.198 | -.839 | .410 |

a. **Dependent Variable: Sustainable Competitive Advantage.**

**Source: Survey data analysis (2013)**
The results of multivariate regression gave an adjusted $R^2$ of 0.530 with an F value of 7.542 showing a fairly high model strength meaning the predictor variables were explaining substantial variation in the dependent variable. Effects of organizational structure ($X_6$) were significant while those of other independent variables failed the significance test at 95% confidence interval. The significant effects of organizational structure, ($p$ = 0.04)) showed that this firm resource is an important one in harnessing the use and configuration of other resources to maximize on competitive advantage in the food and beverage industry. This is consistent with other scholars on the effects of structure on organizational performance. Sah and Stiglitz (1986) liken the organizational structure to use of committees for a broader set of organizational issues in determining the most appropriate decisions to take. The view focuses on organizational structure, whose building blocks are individuals in the firm, as a pattern of communication and relations among a group of human beings, including the process of making and implementing decisions (Simon, 1997). The effect of strong organizational structure in the F&B industry in Kenya is therefore significant towards information processing and enabling efficient decision making processes for sustainable competitive advantage. Newbert (2008) strongly argued for and tested resource-capability combinations rather than individual resources or capabilities on SCA by avoiding the direct link of these to performance since SCA is a precursor of performance. According to Peteraf and Barney (2003), a

 

firm has attained a competitive advantage if it has created economic value (the difference between perceived benefits of a resource-capability combination and the economic cost of exploiting them) than competitors. Clearly, resources and capabilities are inextricably bound together in the attainment of SCA.

## CONCLUSION

The RBT holds that firm resources that are valuable, rare, inimitable and non-substitutable (VRIN) used well, affords firms sustainable competitive advantage. Resources tested in this study were in four categories; financial, physical (factories and processing plants), organizational (structure and culture) and human capital. Financial and physical resource were not considered critical to firm success in this industry as per respondents views indicative of the characteristic of family businesses and family financing

The second part of the study was on how firm resource combinations and configurations confer firms requisite SCA. This objective was tackled through hypothesis test whose results confirmed the critical role of firm resources especially the human resource and the organizational structure. Results of regression analysis indicating significant effects of organizational structure confirmed that an efficient organizational structure plays a critical role of the organizing function of management which drives other firm resources.

## RECOMMENDATIONS

Firms need to identify which resources are critical for their success and which resource-capability configurations provide SCA. This is with due knowledge that neither resources nor capabilities in and of themselves or their combinations can confer SCA but proper exploitation of their characteristics like rareness, value and durability.

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