Moderating Effect of Organizational Ambidexterity on the Relationship between Dynamic Capabilities and Performance of Food and Beverages Companies in Kenya

*Rono C. Leah; Korir M. K. & Komen J. J. *School of Business & Economics, Moi University, Kenya

Corresponding Author's Email Address: chemelykos@gmail.com

Abstract

The main objective of the study was to assess the moderating effect of organizational ambidexterity on the relationship between dynamic capabilities and performance of Food and Beverages Companies in Kenya. The specific objectives of the study were to assess the effect of sensing, seizing and reconfiguration capabilities on performance and also the moderating effect of organizational ambidexterity on the relationship between dynamic capabilities and performance of Food and Beverages firms. The study adopted positivist philosophy and utilized descriptive and explanatory research design. Primary data was gathered by a census strategy on target population of 98 Food and Beverages Firms registered under Kenya Association of Manufacturers. Structured questionnaires were utilized in collecting data whereas inferential as well as descriptive statistics were employed in analyzing data. To test the linear variables' association, Pearson correlation was employed whereas to analyze data so as to test the study hypothesis, multiple regression model was utilized. The findings showed that sensing capabilities (β =.392, p=.000), seizing capabilities (β =.194, p=.000) and reconfiguration capabilities (β =.174, p=.001) positively and significantly affect performance of food and beverages firms in Kenya. There was moderation of organizational ambidexterity on the relationship between dynamic capabilities and performance of food and beverages firms in Kenya (CI=.00, .05; p=.00; $R^2=.33$).

Keywords: Dynamic capabilities, sensing capabilities, seizing capabilities, reconfiguration capabilities, organizational ambidexterity, performance.

INTRODUCTION

Firm performance is a concept that matters to managers of business and business research scholars. Dynamic capabilities are the link between resources of firm and business setting and thus, this concept offers a helpful lens over which to observe ways in which manufacturing firms adapt their resource base to yield newfangled aptitudes and succeeding greater organizational performance (Lawton and Rajwani 2011). Over the past decade, a rising number of scholars have anticipated dynamic capabilities to be the core of firm approach (Wilden *et al.*, 2013); value creation (Helfat, *et al.*, 2009); firm performance (Lopez, 2005; Teece, 2007) and competitive advantage (Eisenhardt & Martin, 2000; Winter, 2003; Zahra & George, 2002). The quest for how and when to react to climate choppiness and getting dynamic in the market has prompted a few researchers and vital supervisors to see Dynamic capacities as being vital to procedure and firm execution (Teece, 2017).

Food and Beverages firms is the biggest assembling sub-segment in Kenya in that in contributes 30% assembling GDP and 40% of all representatives in the assembling division (GOK, 2018). Further measurements from Kenya Association of Manufacturers have demonstrated that specific firms reported designs to close down their plants and move activities to Egypt and different nations because of

decreased benefits, rivalry, government strategies (KAM, 2018b) subsequently the premise this investigation is looking to decide the impact of dynamic capacities, authoritative ability to use both hands on manageable execution of food and drinks firms in Kenya.

Objectives of the study

The study's broad objective was to investigate the moderation of organizational ambidexterity on the relationship between dynamic capabilities and performance of food and beverages Kenyan firms. Specifically, the study sought to:

- 1. Assess the effect of sensing capabilities on performance of food and beverages firms in Kenya;
- 2. Determine the effect of seizing capabilities on performance of food and beverages firms in Kenya.
- 3. Examine the effect of reconfiguration capabilities on performance of food and beverages firms in Kenya.
- 4. Establish the moderating effect of organizational ambidexterity on the relationship between dynamic capabilities and performance of food and beverages firms in Kenya.

Research Hypotheses

- 1. There is no significant effect of sensing capabilities on performance of food and beverages firms in Kenya.
- 2. There is no significant effect of seizing capabilities on performance of food and beverages firms in Kenya.
- 3. There is no significant effect of reconfiguration capabilities on performance of food and beverages firms in Kenya.
- 4. There is no moderating effect of organizational ambidexterity on the relationship between dynamic capabilities and performance of food and beverages firms in Kenya.

LITERATURE REVIEW

Dynamic capabilities Dynamic capabilities represent a class of higher order capabilities that influence the rate at which a firm is able to respond to environmental changes (Easterby-Smith *et al.*, 2009; winter, 2003). Firms should capture value from opportunities by mobilizing their existing resources towards new innovative ways (Teece, 2014). Sensing capabilities is the strategic sensemaking capacity which refers to firms' capabilities of identifying opportunities, threats, changes and competitors' possible responses to the focal enterprise's actions (Li and Liu, 2014) which requires constant scanning, searching of both external and internal capabilities of the firm (O'Reilly & Tushman, 2008; Panzda & Thorpe, 2009). Sensing capabilities is the company's capacity to take care of products, services opportunities, processes, selection of business models and identifying talent to organize firm's operational work (Cao, 2011).

Seizing capabilities ought to be the first priority in each business and in order for this to occur, it is important that the organizations be future oriented, have acceptable management abilities and be prepared to now and again strategize so as to flourish (McGrath, 2001). Reconfiguration capabilities is a firm's learning, reflected by the ability to create internal knowledge, to acquire external knowledge and to assimilate internal and external knowledge through knowledge sharing

(Cepeda & Vera, 2007; Easterby-Smith et al., 2009; Vivas Lopez, 2005; Zahra & George, 2002).

Ambidextrous organizations will be capable of creating synergies between the acquirer and target to generate valuable future exploitative opportunities (Jansen *et al.*, 2008; Nemanich & Vera, 2009; Rao-Nicholson *et al.*, 2016). The existing research indicates that ambidexterity is key to organizational success and survival in the market (Benner & Tushman, 2003; Jansen, *et al.*, 2006; Junni *et al.*, 2013; Tushman & O'Reilly, 1996) and improves performance and innovation (Junni *et al.*, 2013; He Wong, 2004).

Theoretical Perspective

The strategy-based theorists believe that internal configuration of firm resources and capabilities are far more important to firm performance than the macro, structural indicators (Basu *et al.*, 2013). The two strategy-based view theories that have come to the fore of firm performance are Resource-Based View (RBV) and Dynamic Capabilities (DCs) hence have been used to ground this study. RBV theory holds that firms in the same industry perform differently because, even in equilibrium, they differ in terms of the resources and capabilities they control (Amit & Zott, 2001;Barney, 2005;Fahy, 2000; De Oliveira & Evaldo Fensterseifer, 2003; Clulow *et al.*, 2003; Fahy *et al.*, 2004; Jantunen, 2005; Palacios Marques & Jose Garrigos, 2006; Halawi *et al.*, 2006).

The resource-based view (RBV) is a managerial framework used to determine the strategic resources with the potential to deliver comparative advantage to a firm (Barney, 1991) and can be exploited by the firm in order to achieve firm performance. RBV perspective recognizes the firm's capabilities to assemble, integrate and manage these resources (Aragon-Correa & Sharma, 2003). The key to firms' success or performance lies in their ability to find or create competences that are truly distinctive (Ghobadian & O'Regan, 2008).

Conceptual framework

The study proposed a conceptual model hypothesized that dynamic capabilities affect performance of food and beverages firms in Kenya.

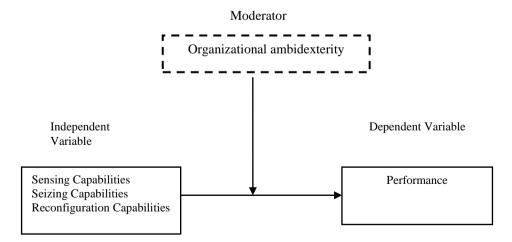


Figure 1: Conceptual Framework

Source: Researcher (2020)

According to theoretic models in literature review, the conceptual framework was adopted. In the framework, dynamic capabilities were operationalized in terms of sensing, seizing and reconfiguration capabilities.

METHODOLOGY

Research Philosophy

The study used positivistic paradigm so as to attain an objective opinion of the association between performance of food and beverages companies in Kenya and dynamic capabilities. The research employed explanatory design where the unit of analysis was senior managers drawn from a target population of 98 firms which form members of Kenya Association of Manufacturers (KAM, 2019). The data was collected through census on four senior managers of Food and Beverages firms in Kenya.

Data Collection and Instrumentation

Primary data was collected on moderation of organizational ambidexterity and sustainable indicators of performance by use of semi-structured questionnaire. The tool was espoused from premeditated management studies that have been carried out on analogous variables with slight adjustments designed at tackling the specific objectives (He and Wong, 2004; Lubatkin *et al.*, 2006; Tushman and O'Reilly, 1996). On a 5-point Likert Scale, closed-ended questions were constructed in order to offer structured comebacks to ease quantitative analysis, hypotheses testing and making of inferences to draw conclusion. Senior managers in Human Resource, Marketing, Production and Finance Departments were given the questionnaires because they are presumed to be well-informed about study area and they are the ones that handle key matters on dynamic capabilities of the firm.

Pilot study was undertaken to assist in establishing the degree of clarity of the proposed research instruments and to also identify issues in the research design that needed to be addressed prior main study (Zikmund, 2003). Construction of questionnaire were according to scales, items and measures from former literature and additional checks done through pilot study which was done among 50 non-food manufacturing firms located in Eldoret town hence enabling the researcher to know the level at which data collected and procedures for analysis yielded unswerving findings and provided guarantee that similar outcomes could be anticipated on somewhat other succeeding analogous junctures as noted by Kimberlin & Winetrstein (2008).

The first scale was the recognition of opportunities and threats from the environment which consisted of four items, adopted from prior studies (Cao, 2011; Lichtenthaler, 2009; Danneels, 2008; Jansen, 2005) while the second scale was monitoring of internal capabilities was measured using four items adopted from a previous study (MacInerney-May, 2012). Seizing capabilities had three scales which included knowledge acquisition, knowledge sharing and knowledge integration (MacInerney-May2012; Lichtenthaler, 2009; Jansen *et al.*, 2005). The study also adapted the scales and measures used by Santos and Brito (2012) to measure performance where 9 scales multidimensional model of firm performance measures was used in this study were sales growth, market share, profitability, financial liquidity, return on investment, financial liquidity, customer satisfaction, employee satisfaction, environmental performance and social performance (Rongwei *et al.*, 2010; Arend, 2014; Santos & Brito, 2012). Ozer and Tinaztepe

(2014) observed that Firm performance is one of the most important constructs in management research.

Model Specification

Pearson correlation coefficients were utilized to decide the degree or quality of association existing between the free and the needy factors. Numerous relapse model was utilized to examine the information so as to decide the centrality of the theories of the investigation. So as to accomplish targets 1 to 4, the immediate impacts, straight relapse models were tried for reasons for Ho1 - H04. The test statistics that were computed and derived include the coefficients of determination (R^2); the ANOVA, the beta coefficient (β) and the *p*-values. Multiple regression analysis was utilized to test for direct relationship between dynamic capabilities and sustainable performance using the specified linear equations below:

$$Y = \beta_0 + \beta_1 X_a + \beta_2 X_b + \beta_3 X_c + \varepsilon_1$$

Where:

Y: dependent variable (performance)

 β_0 : Constant

X₁: Dynamic capabilities

X₂: Sensing capabilities

X₃: Seizing capabilities

X₄: Reconfiguration capabilities

 β_1 - β_4 : The effect of slope coefficients denoting the impact of the associated independent variables over the dependent variable coefficient of regression ϵ : Error terms

The coefficients measured the independent variables' effect (sensing, seizing and reconfiguration) on the dependent variable.

Moderation Effect of Organizational Ambidexterity on the relationship between Dynamic Capabilities and Sustainable Performance

This study assessed whether organizational ambidexterity possessed a moderating influence on the association of performance (H_04) and dynamic capabilities. Hierarchical multiple regression analysis was used to test the moderating effect of organizational ambidexterity on the association between performance and dynamic capabilities hence provide evidence on whether to reject or not reject H_04 as shown in Figure 2.

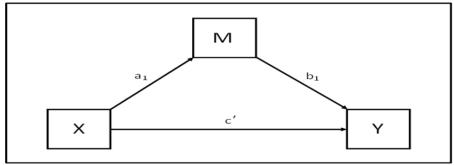


Figure 2: Testing of moderation effect

Source: Hayes, (2017)

A single regression equation forms the basic moderation model:

 $M = a_0 + a_1 X + a_2 W + a_3 x W + \epsilon$

Where:

Y: performance

a₁ sensing capabilities

a_{2:} seizing capabilities

a₃: reconfiguration capabilities

W: organizational ambidexterity

ε: represents the error term that is variation due to other unmeasured factors.

Data analysis

Reliability of the research instrument

The collected data was tested using Cronbach's alpha coefficients (Iacobucci & Duhacheck, 2003; Simatupang & Sridharan, 2005) discretely for every variable in order to assess homogeneity and consistency of the measures of variable (Hudson *et al.*, 2001: Suliman & Iles, 2000). Pilot study was done in non-manufacturing firms in Eldoret town and the results are shown in Table 1 hence the results enabled the researcher to know the level at which collected data and procedures for analysis yielded steady findings and gave accessible guarantee that similar outcomes could be anticipated on whichever additional succeeding analogous instances (Kimberlin & Winetrstein, 2008).

Table 1: Reliability Results

| Table 1: Renability Results | | | | | | | |
|-----------------------------|-------------|------------------------------|------------|--|--|--|--|
| Construct | alpha | Dimensions | No. of | | | | |
| | coefficient | | Cronbach's | | | | |
| Competitive advantage | .793 | Competitive advantage | 9 | | | | |
| Dynamic capabilities | .863 | Sensing capabilities | 11 | | | | |
| | .827 | Seizing capabilities | 11 | | | | |
| | .875 | Reconfiguration capabilities | 11 | | | | |
| | .761 | Organizational ambidexterity | 14 | | | | |

Source: Research Data (2020)

Reliability was assessed using the Cronbach Alpha test and those items that were found to have an alpha coefficient of .6 and above were accepted (Fraenkel & Wallen, 2000); an alpha between .80 & .95 considered to have very good reliability because it implies very minimal error hence the results are replicable (Zikmund *et al.*, 2013) although coefficients of .62 are acceptable in social science research (Hair *et al.*, 2010). Pretest tool showed that the data collection tool was reliable enough with alpha coefficients ranging from .761 to .875 for organizational ambidexterity and reconfiguration capabilities respectively.

Response Rate

Total of 98 firms were selected for the study with four senior managers being the respondents hence making the total number of questionnaires to be 392. Results showed that 321 (81.89%) firms were found to be useful for further analysis and the remaining 71 firms (18.11%) did not respond even after several visits and telephone calls (Table 2). The high percentage of response eased assembling of satisfactory data that may well be comprehensive to determine the relationship of dynamic capabilities and sustainable food and beverages performance in Kenya.

Table 2: Response Rate of Firms

| Responses | No. of firms | % Represented |
|---------------------------|--------------|---------------|
| Administered | 392 | 100 |
| questionnaires | | |
| Returned questionnaires | 321 | 81.89 |
| Unreturned questionnaires | 71 | 18.11 |
| | | |
| Used questionnaires | 321 | 81.89 |
| | | |

Source: Researcher (2020)

Correlation Analysis Results

Undertaking of correlation analysis was meant to quantify the possibility of any existing linear association between the dependent variable and the other variables through determining the magnitude and direction of the possible relationships considering that both variables are at interval level of measurement and the data is parametric in nature. Correlation is significant statistically at .05 levels if *p*-values are .05 and are not statistically significant if *p*-values are greater than .05. Pearson correlation coefficient was used to measure the relationships between the variables (Hair *et al.*, 2013 and Field 2009) as shown below:

Table 4: Correlation Analysis Results

| Items Reconfiguration Ambidex | Performance terity | Sensin | Seizing | |
|--------------------------------------|-----------------------|--------|---------|---|
| Performance | 1 | | | |
| Sensing capabilities | .683** | 1 | | |
| Seizing capabilities | .846** | .385** | 1 | |
| Reconfiguration capabilities | .778** | .401** | .427** | 1 |
| Organizational ambidexterit .398** 1 | y .374* | .175 | .279** | |

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher (2020)

Results in Table 4 showed that the relationship between sensing capabilities and performance is positive and significant (.683, p-value = .01) which suggests that there was 68% chance that sensing capabilities will increase performance. These results also showed that seizing capabilities was positive and significant (.846, p-value = .01) implying that seizing capabilities increases 84.6% of performance while reconfiguration capabilities was positive and significant (.778, p-value = .01) showing that 78.8% of reconfiguration will lead to performance while organizational ambidexterity had a positive and significant results (.374, p = .05) showing that it accounts for 37.4% of performance.

Testing H₀1 . H₀3 Results

A regression test to determine the direct effects of the independent variables was done and the findings revealed that 36.0% disparity of performance was projected

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

by sensing, seizing and reconfiguration ($R^2 = 36.0$) and their combined projection significant as displayed by F-change (35.27), p (.000) and Durbin Watson (1.908). The results demonstrate that all the three variables - sensing capabilities (β =.392, p<.000), seizing capabilities (β =.194, p<.000) and reconfiguration capabilities (β =.174, p<.001) influence performance significantly as shown in Table 5.

Table 5: Testing $H_01 - H_03$

| Model | Unstand | lardized | Standardized | | | Collinearity Statistics | |
|------------------------------|----------------|------------------|------------------|-------|------|----------------------------|--------|
| | Coeffici | ents | Coefficients | | | | |
| Variables | Beta values | Standar Error | d Beta values | t | Sig. | Tolera | nceVIF |
| (Constant) | 1.176 | .253 | | 4.648 | .000 | | |
| Sensing capabilities | .462 | .061 | .392 | 7.594 | .000 | .766 | 1.306 |
| Seizing capabilities | .125 | .034 | .194 | 3.653 | .000 | .727 | 1.376 |
| Reconfiguration capabilities | .146 | .044 | .174 | 3.323 | .001 | .743 | 1.345 |
| R | .600a | | | | | | |
| R Square | .360 | | | | | | |
| Adjusted R Square | .350 | | | | | | |
| Std. Error of the Estimate | .332 | | | | | | |
| R Square Change | .360 | | | | | | |
| F Change | 35.272 | | | | | | |
| Sig. F Change | .000 | | | | | | |
| Durbin Watson | 1.908 | | | | | | |

a. Dependent Variable: Performance

 H_01 stated that sensing capabilities had no significant influence/effect on performance and the findings in the table showed that sensing capabilities had coefficients of estimate which was positive and significant ($\beta_1 = .392$, p-value = .000) which is less than (.05) implying that there was .392-unit increase in performance for each unit increase in sensing capabilities. This therefore led to hypothesis rejection and conclusion made that sensing capabilities had a significant influence on performance. Hypothesis test results indicated that sensing capabilities was a predictor of competitive advantage corroborating the findings by Osisioma et al, (2016), Li & Liu (2014), Woldesenbet et al., (2012), Karagouni et al, 2012 and Wu (2010) among other studies. Firms that display the propensity to sense opportunities and threats so as to make timely decisions in implementing strategic decisions and changes efficiently end up pursuing the right direction in order to achieve competitive advantage (Li & Liu, 2014).

 H_02 stated that seizing capabilities had no significant effect on performance. The findings displayed that seizing capabilities had a significant and positive effect on performance according to the β_2 = .194 with a p-value of .000 which is less than (.05) implying that seizing capabilities had a positive and significant effect on performance thus null hypothesis was rejected prove that seizing capabilities which comprise of correcting decisions and executing them so that they simultaneously align with the enterprises' assets and strategic goals (Li & Liu, 2014) through capturing value from opportunities by mobilizing existing resources towards these new innovative goals (Teece, 2014). Cao, (2011) used seizing capability to refer to firm's ability to attend to products, process or service opportunities, selection of business models and identifying talent to coordinate firm's functional activities by making the correct decisions and executing them so that they simultaneously align

b. Predictors: (Constant), sensing capabilities, seizing capabilities, reconfiguration capabilities, Source: Researcher (2020)

with the enterprises' assets and strategic goals in order to maintain competitive advantage (Li & Liu, 2014).

 H_03 of the study stated that reconfiguration capabilities had no significant effect on performance and the study findings showed that reconfiguration capabilities had coefficients of estimates which were positive and significant (β_3 = .174; p-value = .001) which is less than (.05) thus null hypothesis was rejected confirming that reconfiguration capabilities had a positive and significant effect on performance. This is the transformation of existing capabilities for example to change the form, shape, or appearance of capabilities existing within the firm (Teece, 2007) and redeployment or recombination of existing capabilities (Ahuja & Katila, 2004). Reconfiguration capabilities had a significant effect on firm performance as per the study carried out on the Indian SMEs (Batra $et\ al.$, 2015) that concluded that firms which reconfigured their resources according to the prevailing opportunities were more likely to succeed.

 H_04 stated that there is no moderating effect of organizational ambidexterity on the relationship between dynamic capabilities and performance. The study findings (Table 6) showed that organizational ambidexterity moderates the relationship between dynamic capabilities and performance (LLCI = .00, ULCI = .05; $\beta = .12,$ p-value = .00, R^2 change from .20 to .33) hence rejecting the null hypothesis. This objective contributed to the body of knowledge in that no research has been done on the moderation effect of organizational ambidexterity on the relationship between dynamic capabilities and performance of food and beverages firms in Kenya.

Table 6: Testing H₀4 Results

| | M | | Y (Moderation) | |
|---------------------------------------|----------|-------|----------------|-------|
| Variables | В | p- | β | p- |
| | | value | | value |
| Size of the firm | 03 | .57 | 00 | .99 |
| Age of the firm | .11 | .04 | 01 | .91 |
| Dynamic capabilities | .31 | .00 | .52 | .00 |
| Organizational ambidexterity | .19 | .001 | | |
| Dynamic capabilities x organizational | .12 | .00 | | |
| ambidexterity | | | | |
| R^{2} | .20 | .00 | .33 | |
| F | 15.85*** | .00 | 38.51*** | |
| CI = .00, .05 | | | | |

Source: Researcher, (2020)

SUMMARY OF THE FINDINGS

The research was guided by four objectives out of which all the four were supported as follows:

Objective 1 was to examine effect of sensing capabilities on performance and the relationship was positive and statistically significant (β = .392, ρ =000). The objective was therefore attained because there was a significant effect of sensing capabilities on performance leading to rejection of the hypothesis. Objective 2 was to assess effect of seizing capabilities on performance. The relationship was positive and statistically significant (β = .194, ρ =000) hence the objective was attained considering that there was a significant effect of seizing capabilities on

performance thus the hypothesis is rejected. Objective 3 was to determine the effect of reconfiguration capabilities on performance and the results were positive and statistically significant ($\beta=.174,\ \rho=.001$) hence the objective was attained as shown by the significant effect of reconfiguration capabilities on performance leading to rejection of the hypothesis. Objective 4 examined the moderating effect of organizational ambidexterity on the relationship between dynamic capabilities and performance. The outcomes (LLCI = .00, ULCI = .05 β =.12 and p-value of .00) proved that organizational ambidexterity moderates the relationship between dynamic capabilities and sustainable performance hence H_04 was rejected.

CONCLUSION

This study's empirical findings verified the significant association between dynamic capabilities and performance of food and beverages companies in Kenya. The study also confirmed that organizational ambidexterity regulates the association amid dynamic capabilities and performance. Based on the hypothesis, the findings agreed with reviewed literature.

The results further showed that firms deploying appropriate dynamic capabilities embrace the possibility for an enduring performance specifically in a tempestuous environment for example those of manufacturing firms. Additionally, it was established that companies/firms having a robust assurance to arraying dynamic capabilities are additionally victorious and sustain their performance in the market than firms that do not deploy their dynamic capabilities. The outcomes propose that firms require to unceasingly deploying all firm-related capabilities as per Dynamic Capabilities View and Resource-Based View because disregarding the positioning of a sole dynamic capability may undesirably distress the placement of additional dynamic capabilities because they are interrelated and intertwined. In conclusion, the study finding present vital inferences for academic as well as empirical deliberate management literature together with practices.

RECOMMENDATIONS

Continuous studies might emphasis on a profounder investigation of every dynamic capability, particularly on the positions and paths influencing the expansion of dynamic capabilities. A longitudinal examination would likewise be important because the consequences of sending and creating dynamic capacities normally can't be found temporarily. The equivalent or a comparable report could likewise be led in different ventures or a cross-industry investigation could uncover shared characteristics and varieties in conveying dynamic abilities across businesses. Further, future investigations investigating the dynamic abilities field should include other subjective methodologies, for example, center gatherings

The study explored the evolving concept of performance in the framework of dynamic capabilities and hierarchical ability to use both hands in food and drinks firms where there is contemporary unsteady working climate that represents a regularly changing client needs consequently firms' have to endeavor to endure. This requires a change in perspective from the regular assembling generally the standard or practice to an interest based and target market-put together creation has thus center with respect to supervisor's style of affecting firm responsiveness in incorporating, constructing and reconfiguring inside as well as outside assets together with skills for endurance, using dynamic abilities.

REFERENCES

- Ahuja, G., and Katila, R. (2004). Where do resources come from? The role of idiosyncratic situations. Strategic Management Journal, 25(8-9), 887-907.
- Amit, R., & Zott, C. (2001). Value creation in e-business. Strategic management journal, 22(6-7), 493-520.
- Aragon-Correa, J. A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. Academy of management review, 28(1), 71-88
- Arend, R. J. (2014). Entrepreneurship and dynamic capabilities: How firm age and size affect the capability enhancement-SME performance relationship. Small Business Economics. Vol. 42
- Barney, J. B. (2005) Expectations, Luck and Business Strategy. Knowledge Management: *Critical Perspectives on Business and Management*, 2(10, 219).
- Barney, J. B., (1991). "Firm Resources and Sustained Competitive Advantage." Journal of Management, Vol. 17, No. 1, 1991, pp. 99–120
- Batra, S., Sharma, S., Dixit, M. R., & Vohra, N. (2015). Strategic orientations and innovation in resource-constrained SMEs of an emerging economy. The Journal of Entrepreneurship, 24(1), 17-36.
- Benner, Mary J. and Tushman, Michael L. (2003). Exploitation, exploration and process management: The productivity dilemma revisited. *Academy of Management Review*, 28: 238-256.
- Basu, S., Mir, R., Nassiripour, S., & Wong, H. (2013). Dynamic capabilities or positioning? Integrating environmental and resource-led antecedents of firm performance. *Journal of Management and Marketing Research*, 12, 1.
- Cao, L., (2011). Dynamic capabilities in a turbulent market environment: empirical evidence from international retailers in China. Journal of Strategic Marketing, 19(5), 455-469.
- Cepeda, G., & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research*, 60(5), 426-437.
- Clulow, V., Gerstman, J., & Barry, C. (2003). The resource-based view and sustainable competitive advantage: the case of a financial services firm. *Journal of European Industrial Training*, 27(5), 220-232.
- Danneels E. (2008). Organizational antecedents of second-order competences. Strategic Management Journal, Vol.29.
- De Oliveira Wilk, E., & Evaldo Fensterseifer, J. (2003). Use of resource-based view in industrial cluster strategic analysis. *International Journal of Operations & Production Management* 23(9), 995-1009.
- Easterby-Smith, M., Lyles, M. A., & Peteraf, M. A. (2009). Dynamic capabilities: current debates and future directions. *British Journal of Management*, 20(s1).
- Eisenhardt, K. and Martin, J. (2000), "Dynamic capabilities: what are they? *Strategic Management Journal*, Vol. 21 Nos 10/11, pp. 1105-1121.
- Fahy, J. (2000). The resource-based view of the firm: some stumbling-blocks on the road to understanding sustainable competitive advantage. *Journal of European industrial training*, 24(2/3/4), 94-104.
- Fahy, J., Farrelly, F., & Quester, P. (2004). Competitive advantage through sponsorship: Aconceptual model and research propositions. *European journal of Marketing*, 38(8), 1013-1030.
- Field, A. (2009). Discovering statistics using SPSS. (3rd ed). British Library Cataloguing in Publication data. Sage publications. ISBN 978-1-84787-907-3
- GOK, (2018). *Economic Survey Results*, Kenya National Bureau of Statistics, Nairobi, Government Printers.
- Ghobadian, A., & O'Regan, N. (2008). Where do we fit in the swings and roundabouts of strategy? Journal of Strategy and Management, 1(1), 5-14.
- Hair, J. F., Black, W.C., Babin, B. J., & Anderson, R. E. (2013). Multivariate Data Analysis. (7th ed.). Prentice Hall, Upper Saddle River, New Jersey.
- Hair, J. F., Black, W.C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.
- Halawi, L. A., McCarthy, R. V., & Aronson, J. E. (2006). Knowledge management and the competitive strategy of the firm. *The learning organization*, 13(4), 384-397.
- Hayes, A. F. (2017). Introduction to Mediation, Moderation, and Conditional Process Analysis. Second Edition. A Regression-Based Approach
- He Z. and Wong P. (2004), "Exploration and exploitation: An empirical test of the ambidexterity hypothesis", *Organization Science*, 15, 4, 418-494.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2009). Dynamic capabilities: *Understanding strategic change in organizations*. John Wiley & Sons.
- Hudson, M., Smart, A., & Bourne, M. (2001). Theory and practice in SME performance measurement systems. *International journal of operations & production management*, 21(8), 1096-1115.
- Iacobucci, D., & Duhacheck, A. (2003). Advancing alpha: Measuring reliability with confidence. Journal of consumer psychology, 13(4), 478-487.

- Jansen, J.J., George, G., Van Den Bosch, F.A. and Volberda, H.W. (2008), "Senior team attributes and organizational ambidexterity: the moderating role of transformational leadership", *Journal of Management Studies*, Vol. 45 No. 5, pp. 982-1007.
- Jansen, J.J., Van Den Bosch, F.A. and Volberda, H.W. (2006), "Exploratory innovation, exploitative innovation, and performance: effects of organizational antecedents and environmental moderators", *Management Science*, Vol. 52 No. 11, pp. 1661-1674.
- Jansen, Justin P., Van den Bosch, Frans A. and Volberda, Henk (2005). Managing potential and realized absorptive capacity: How do organizational antecedents matter? Academy of Management Journal, 48: 999-1015.
- Jansen, J. (2005), Ambidextrous Organizations: A Multiple-Level Study of Absorptive Capacity, Exploratory and Exploitative Innovation and Performance, p. 19.
- Jantunen, A. (2005). Knowledge-processing capabilities and innovative performance: an empirical study. European Journal of Innovation Management, 8(3), 336-349.
- Junni, P., Sarala, R., Taras, V., and Tarba, S. (2013). Organizational Ambidexterity and Performance: A Meta-Analysis. Academy of Management Perspectives, 27(4):299–312.
- KAM (2018 b), Manufacturing in Kenya under the "Big 4 Agenda". A sector deed dive report.
- KAM (2019), Manufacturing Priority Agenda. Closing the manufacturing gap through the Big 4 Agenda for shared prosperity report
- Kimberlinm C. L., & Winetrstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System harmacy*, 65(23).
- Karagouni, G., Protogerou, A., & Caloghirou, Y. (2012, September). Dynamic and autotelic capabilities in knowledge-intensive, low-tech ventures. In7th European Conference on Innovation and Entrepreneurship, Escola Superior de Gestão e Tecnologia, Instituto Politécnico de Santarém, Portugal (pp. 20-21)
- Lawton, T. C., & Rajwani, T. (2011). Designing lobbying capabilities: Managerial choices in unpredictable environments. European Business Review, 23, 167–189.
- Li, D.-y., & Liu, J. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. *Journal of Business Research*, 67(1), 2793-2799.
- Lichtenthaler, U. (2009). Absorptive capacity, environmental turbulence, and the complementarity of organizational learning processes. *Academy of Management Journal*, Vol.52.
- Lopez, S. V. (2005). Competitive advantage and strategy formulation: The key role of dynamic capabilities. Management decision, Vol.43
- Lubatkin, M.H., Simsek, Z., Ling, Y., Veiga, J.F., (2006). Ambidexterity and performance in small-to Medium-Sized firms: the pivotal role of top management team behavioral integration. J. Manage. 32 (5), 646–672.
- MacInerney-May, K. (2012). The value of dynamic capabilities for strategic management. Unpublished doctoral thesis. Universität zu Köln.
- McGrath, R.G. 2001. Exploratory learning, innovative capacity, and managerial oversight. Academy of Management J. 44 118-131.
- Nemanich, Louise and Vera, Dusya (2009). Transformational leadership and ambidexterity in the context of an acquisition. Leadership Quarterly, 20: 19-33.
- O'Reilly, C.A., Tushman, M.L., (2008). Ambidexterity as a dynamic capability: resolving the innovator's dilemma. Res. Organ. Behav. 28, 185–206.
- Osisioma, H. E., Nzewe, H. N. & Mgbemena, I. C. (2016) Dynamic capabilities and performance of selected commercial banks in Akwa, Anambra State, Nigeria. European Journal of Business and Social Sciences, 4(10), 98-110.
- Ozer, F., & Tınaztepe, C. (2014). Effect of strategic leadership styles on firm performance: A study in a Turkish SME. *Procedia-Social and Behavioural Sciences*,150, 778-784.
- Palacios Marqués, D., & Jose Garrigos Simon, F. (2006). The effect of knowledge management practices on firm performance. *Journal of knowledge management*, 10(3), 143-156.
- Pandza, K. and Thorpe, R. (2009), "Creative search and strategic sense-making: missing dimensions in the concept of dynamic capabilities", *British Journal of Management*, Vol. 20, supplement, pp. S118-31.
- Rao-Nicholson, R., Khan, Z., Akhtar, P. et al. (1 more author) (2016) The Impact of Leadership on Organizational Ambidexterity and Employee Psychological Safety in the Global Acquisitions of Emerging-Market Multinationals. The International Journal of Human Resource Management, 27 (20). pp. 2461-2487.
- Rongwei, R., Zhang, J., & Yan, Z. (2010). An Empirical Study of Resources, Dynamic Capabilities and Performance of Village firms in Clusters of China. *Data-base of China Industrial Enterprises*, 1-17.
- Santos, J. B., & Brito, L. A. L. (2012). Toward a subjective measurement model for firm performance. BAR-Brazilian Administration Review, Vol.9.
- Simatupang, T. M., & Sridharan, R. (2005). The collaboration index: a measure for supply chain collaboration. *International Journal of Physical Distribution & Logistics Management*, 35(1), 44-62.

- Suliman, A., & Iles, P. (2000). Is continuance commitment beneficial to organizations? Commitment-performance relationship: A new look. *Journal of Managerial Psychology*, 15(5), 407-422.
- Teece, D. J., (2017). Dynamic Capabilities and (Digital) Platform Lifecycles, in Jeffrey Furman, Annabelle Gawer, Brian S. Silberman, Scott Stern (ed.) Entrepreneurship, Innovation, and Platforms (Advances in Strategic Management, Volume 37) Emerald Publishing Limited, pp.211-225.
- Teece, D.J. (2014) The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms. *The Academy of Management Perspectives*, 28, 328-352.
- Teece, D. (2007). "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance", *Strategic Management Journal*, Vol. 28 No. 13, pp. 1319-1350.
- Tushman, Michael L. and O'Reilly, Charles A. (1996). The ambidextrous organization: managing evolutionary and revolutionary change. *California Management Review*, 38: 1-23.
- Tushman M.L. and O'Reilly C.A. (1996), "Ambidextrous organizations: Managing evolutionary and revolutionary change", *California Management Review*, 38, 8-29.
- Vivas Lopez, S. (2005). Competitive advantage and strategy formulation: The key role of dynamic capabilities. *Management decision*, 43(5), 661-669.
- Wilden R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic capabilities and performance: strategy, structure and environment. Long Range Planning, Vol.46.
- Winter, S. G. (2003). Understanding dynamic capabilities. Strategic management journal, Vol.24.
- Woldesenbet, K., Ram, M., & Jones, T. (2012). Supplying large firms: The role of entrepreneurial and dynamic capabilities in small businesses. *International Small Business Journal*, 30 (5), 493-512.
- Wu, L. Y. (2010). Applicability of the resource-based and dynamic capability views under environmental volatility. *Journal of Business Research*, 63(1), 27-31.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. Academy of management review, 27(2), 185-203.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business research methods. Cengage Learning. Hon, A. H. (2012).
- Zikmund, W.G. (2003) Business Research Methods. 7th Edition, Thomson South Western, Ohio.