

**MODERATING ROLE OF TRANSFORMATIONAL  
LEADERSHIP BEHAVIOUR ON THE RELATIONSHIP  
BETWEEN DYNAMIC CAPABILITIES AND PERFORMANCE  
OF MANUFACTURING FIRMS IN NAIROBI COUNTY, KENYA**

**Thomas O. Nyachanchu** 

Moi University, Nairobi, Kenya

[tnyachanchu@gmail.com](mailto:tnyachanchu@gmail.com)

**Ronald Bonuke**

Dept. of Marketing and Logistics, Moi University, Kenya

[bonukeronald@yahoo.com](mailto:bonukeronald@yahoo.com)

**Joel Chepkwony**

Dept. of Marketing and Logistics, Moi University, Kenya

[kemboi\\_joel@yahoo.com](mailto:kemboi_joel@yahoo.com)

**Abstract**

*The advent of globalization is forcing firms in the manufacturing sector to deploy dynamic capabilities so as sustain competitive advantage. Strategic choices and decisions made on when, where and how to deploy dynamic capabilities; depend on the transformational leadership behaviour of the top leadership, the Chief Executive Officers (CEOs). However no empirical evidence exists to indicate the role of transformational leadership behaviour on the relationship between dynamic capabilities and firm performance. The study therefore set to examine this moderating role, using explanatory research design in a cross-sectional survey; guided by the Resource-Based View theory. Primary data was obtained from 271 out of 369 firms sampled from a population of 1,496 manufacturing firms, using a structured questionnaire instrument through drop and pick. Reliability and validity tests were carried out on the research instrument and study measures. SPSS software was used to analyze and interpret the data. Regression analysis results, which were used to test hypotheses revealed, among other*

aspects, that the interaction of two of the dimensions of dynamic capabilities, namely: - sensing capabilities ( $B = -0.061$ ;  $P < 0.05$ ) and seizing capabilities ( $B = -0.068$ ;  $P < 0.05$ ), with transformational leadership behaviour, led to significant influence on firm performance.

*Keywords: Firm Performance, Sensing Capabilities, Seizing Capabilities, Reconfiguration Capabilities, Transformational Leadership Behaviour*

## INTRODUCTION

The concept of firm performance has elicited intellectual debates for many years, with empirical studies showing that firms with poor performance do not survive in the long run. In today's turbulent business environment, firms are faced with changes in technology, consumer demand, regulatory requirements, competition and globalization, among many aspects. The competitive environment is changing at an accelerating rate, culminating in a high level of uncertainty. These developments affect competitive advantage and performance of firms (Wilden *et al.*, 2013; Zott, 2003). The advent of globalization of the world economy has brought with it drastic changes to the landscape for manufacturing firms (Bititci, *et al.*, 2010). They have to undertake transformational changes so as to sustain competitive advantage. Many European economies are reviewing policies to adopt high-value, knowledge-intensive and high skilled business models for manufacturing firms to compete not on cost but on value innovation, process excellence, high brand recognition and contribution to a sustainable society (Bititci, *et al.*, 2010).

In Africa, even though many countries' economic performance has improved over the last two decades, with their average GDP rising faster than their population, this growth has been influenced by structural adjustment programs that followed macro-economic and political changes soon after their political independence. This kind of growth that is triggered by political changes is ordinarily not sustainable (Adenikinju, *et al.*, 2002). Manufacturing firms in Africa are predominantly small, with high attrition rate. They lack effective policies in unstable markets and this has led to a low survival rate (Collier and Gunning, 1999; Hatton & Williamson, 2003).

In Kenya, the government has acknowledged this sector's importance for future long term economic development and has projected its growth at 20% by year 2030 (National Industrialization Policy Framework for Kenya, 2011-2015). Despite the Government's efforts in this sector over the last three decades, geared at supporting export production through initiatives such as export processing zones, export compensation scheme, international and regional trade agreements and collaborations like the Preferential Trade Area (PTA) of Eastern and Southern Africa, Common Market for Eastern and Southern Africa (COMESA) and the now

revived East African Community (EAC), it has remained relatively underdeveloped. Firms within this sector face serious performance difficulties and lack competitiveness, making it uncertain on when they will be competitive and contribute to the sector's overall projected GDP. Notably, firms in this sector face excess capacity, technical inefficiency, minimal intra-sector research and inability to compete globally. The firms are agro-based, highly import-dependent on capital goods and operate on obsolete technology and under weak institutional frameworks. At present the firms are concentrated in major industrial parks or manufacturing clusters (such as Nairobi, Eldoret, Kisumu, Thika, Nakuru and Mombasa) where there is basic infrastructure (Koirala & Koshal, 2000; Forsyth and Solomon, 1977), with about 80% of them located in Nairobi County.

Manufacturing firms have been exiting Kenya, spelling doom to an economy that was expected to recover. According to a report carried by the Business Daily Magazine (Njiru, 2014), Cadbury Kenya, a subsidiary company of US-based Mondelez International, ceased all its factory operations in Kenya end of October, 2014. Reckitt Benckiser, a home and personal care giant, also closed its manufacturing plant in Kenya and outsourced production of its household brands. Colgate Palmolive, Eveready East Africa, Reckitt & Benckiser, Procter & Gamble, Bridgestone, Colgate Palmolive, Johnson & Johnson and Unilever, are some of the firms that either relocated or restructured their operations, opting to serve the local market through importing from low-cost manufacturing areas such as Egypt. In 2014, Tata Chemicals Magadi closed down its main factory and scaled down its production. The Kerio Valley-based Kenya Fluorspar firm has also since shut down.

Environmental dynamism is the unpredictability of the shift in customer tastes, production or service offering technologies and the general level of competition (Miller and Friesen, 1983). Firms use ordinary capabilities to ensure continuity of operations. However, in unstable environments, ordinary capabilities become weaken and unsuitable (Leonard-Barton, 1992). Dynamic capabilities are therefore important in dynamic environments since they contribute to the 'catch-up' efforts by the firms (Chmielewski and Paladino, 2007; Helfat *et al.*, 2009). Prior studies indicate that firm performance declines when the firm's environment becomes more dynamic (Wang and Ang, 2004). This is so especially when the capabilities are not flexible or aligned with the changing environment (Eisenhardt, 1989; Simerly and Li, 2000; Garg, *et al.*, 2003). Firms are therefore expected to adapt dynamic capabilities to adjust to the changing environments (Teece *et al.*, 1997; Eisenhardt and Martin, 2000).

Strategy scholars view firm performance heterogeneities as originating from either the firm's positioning within the industry structure, or the individual firm's strategy. Whereas the structure-based view focuses on structural maneuvers (Newbert, 2007), the strategy-based view emphasizes on those efforts made by a firm through development of internal routines and

synergies (Basu *et al.*, 2013). Where an appropriate strategy is lacking, a firm may not be able to sustain its business in the long-term. The real pressure on firms to make good strategic choices is coming from the contemporary customers who are becoming more aware of competitiveness and who therefore desire value for their money (Khamwon and Speece, 2005). Two of the strategy-based view theories that have come to the fore on this topic of firm performance are the Resource-Based View (RBV) of the Firm and the Dynamic Capabilities (DCs). These two theories were used to ground this study.

The strategic choices and decisions firms make, influence the deployment of dynamic capabilities. In making strategic choices on when, where and how to deploy dynamic capabilities, firms rely on the cognitive behaviours of their top leadership, the CEOs. Strategic decisions on the nature and extent to which expenses can be accommodated by the firm in the course of deploying dynamic capabilities, to derive performance, depends on the CEO's perceived leadership behaviour. The revenue generation is guided by the leadership's strategic decision. The decisions on the choice and modification of the line of products a manufacturing firm undertakes, the strategy setting, operationalization of the goals, and delivery of value to stakeholders is a complex process that heavily depends on the behaviour of the leadership of a firm. The behaviour of the firms' top leadership, how this impacts on productivity of managers and employees and in recognizing and responding to some of the more common opportunities and threats presented by dynamic environments, cannot be ignored. Many firms benefit from transformational leadership behaviour of their CEOs' that drive change in order to achieve the firm's goals based on appropriate vision, mission and shared values and norms.

## LITERATURE REVIEW

Extant theoretical and empirical literature was reviewed in order to understand the concepts of firm performance, dynamic capabilities and transformational leadership behavior. The general objective of the study was to investigate the moderating effect of transformational leadership behaviour on the relationship between dynamic capabilities and firm performance of manufacturing firms in Kenya. This enabled the conceptualization of the variables, their measures and their interplay.

### Firm Performance

Firm performance construct refers to both the financial and non-financial performance dimensions. Financial performance is the ability of a firm to satisfy investors and stockholders and is represented by profitability, sales growth and market share (Farjoun, 2002; Li *et al.*, 2008; Glick *et al.* 2005, Santos and Brito, 2012; Arend, 2014). Profitability measures an organization's

past ability to generate returns (Glick et al., 2005). Growth in sales is a firm's past ability to increase its business coverage (Whetten, 2006), bring about economies of scale and market power and hence lead to future profitability. Market share has a correlation with historical profitability and growth levels and represents the external assessment of a firm's future performance.

The non-financial dimension is about how and why modern-day world customers want firms to provide them with goods and services that match their expectations (Cronin et al., 2000). To do that, manufacturing firms must avoid defects so as to improve the perceived quality of their offerings. Customer satisfaction increases the willingness-to-pay and thus the perceived value created by a firm (Barney & Clark, 2007). Employees, on the other hand, obtain their satisfaction from investments in good human resource practices. The satisfaction of employees is a reflection of a firm's ability to attract and retain employees and to lower their attrition rates (Farjoun, 2002). Social and environmental performance is also a way of satisfying local communities (Farjoun, 2002) and governments, among other stakeholders. Satisfaction indices associated with these groups are:- safe environmental practices, increased product quality and safety, ethical advertising, minority employment and development of social projects (Polonsky & Scott, 2005; Filatotchev et al., 2009; Park and Luo, 2001; Santos and Brito, 2012). The study therefore used firm performance measures of profitability, growth in sales, market share, customer satisfaction, employee satisfaction, environmental performance and social performance (Santos and Brito, 2012; Combs et al., 2005; Carton and Hofer, 2006; Richard et al., 2009).

### **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). This is the repeatable, patterned choices and routines that provide the capacity for a firm to purposefully create, extend, or modify its resource base (Helfat, et al., 2009). The concept has three dimensions, namely:- sensing capabilities, seizing capabilities, and reconfiguration capabilities (Teece, 2007). Sensing capabilities involves recognition and monitoring of opportunities and threats from both the external and internal environment. Two scales were used. The first scale is recognition of opportunities and threats from the environment (Cao, 2011; Lichtenthaler, 2009; Danneels, 2008). The second scale is monitoring of internal capabilities (MacInerney-May, 2012). The study therefore proposed the first null hypothesis thus: -  $H_0$ : There is no significant effect of sensing capabilities on firm performance.

Seizing Capabilities is the firm's learning, reflected by the ability to create internal knowledge, to acquire external knowledge, and to assimilate internal and external knowledge through sharing for capability creation (Cepeda & Vera, 2007; Easterby-Smith et al., 2009; Vivas Lopez, 2005). Seizing capabilities was measured using three scales. These are knowledge acquisition, knowledge sharing and knowledge integration (MacInerney-May 2012; Pavlou & El Sawy, 2011; Lichtenthaler, 2009; Jansen et al, 2008). The study proposed the second null hypothesis:  $H_{0ii}$ : There is no significant influence of seizing capabilities on firm performance.

Reconfiguration Capabilities refers to the creation and integration of internally or externally acquired capabilities. It is the transformation of existing capabilities, i.e. 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 variable was measured using two scales – capabilities creation (MacInerney-May, 2012) and capabilities integration (MacInerney-May, 2012; Prieto et al. 2009; Pavlon & El Sawy, 2011). The study proposed the third null hypothesis,  $H_{0iii}$ : Reconfiguration capabilities have no significant effect on firm performance.

### **Transformational Leadership Behaviour**

For a firm to successfully adapt to changes in the environment, its leadership is a critical factor. Saowalux and Peng (2007), and Burns (1978), state two factors that distinguish ordinary from extraordinary leadership (Obiwuru *et al.*, 2011). Burns (1978) and Avolio and Bass (2004) proposed a continuum composed of three major leadership behaviours. On the one extreme is transformational leadership and on the other extreme is transactional leadership behaviour. Midway of the continuum is a laissez-faire leadership behaviour or style. Transformational leadership is acknowledged for its compelling and clear vision; mobilization of employee commitment, institutionalization of organizational change, increasing followers' awareness of what is right and important; and motivating them to perform beyond expectation. Such leaders display their behaviours associated with four characteristics. These are the idealized influence - whereby the leader is a role model due to personal characteristics and demonstrates moral behaviors, trust, integrity, honesty, purpose, competence, achievements and power for positive gain; the inspirational motivation - where followers are motivated for superior performance and the leader articulates the firm's vision and moves on to build expectations, simplicity and a sense of priority and purpose; the intellectual stimulation – whereby followers are stimulated to think through issues and problems for themselves and be able to develop their own abilities; and finally the individualized consideration –a concern for followers and appreciation of their

strengths and weaknesses with tasks assigned based on the individuals' abilities (Kirkbride, 2006; Muenjohn & Armstrong, 2008).

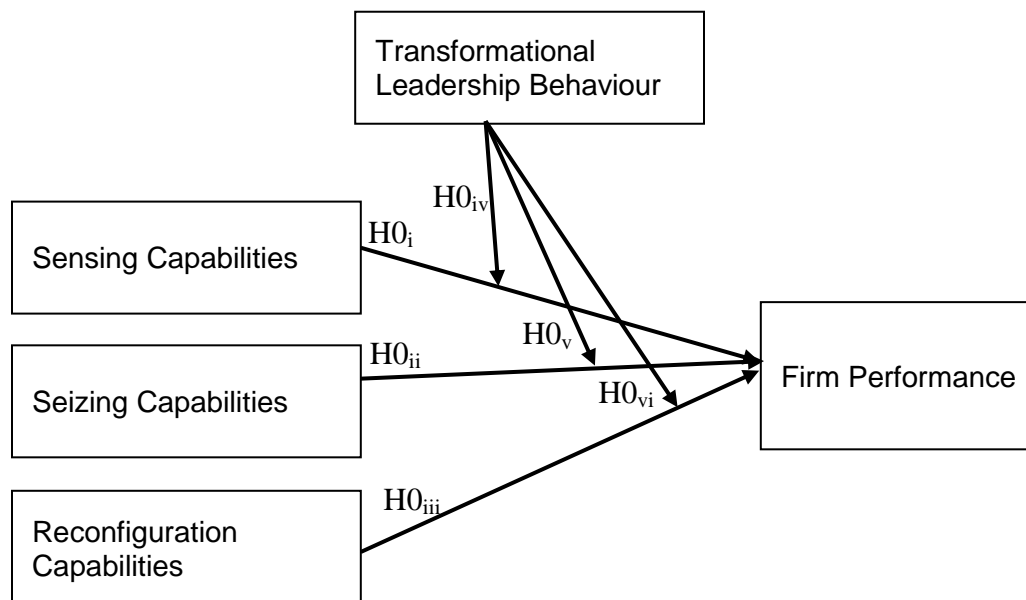
The transformational leadership behaviour, involves more than the administration of rewards or punishments. It is concerned with the transformation or change of followers' fundamental values, goals and aspirations (Rothfelder, *et al*/2012). These kinds of leaders show high standards of moral and ethical conduct. Not just because they live up to their own set of expectations but also because they have their followers' interests in mind. The subordinates identify and try to emulate their transformational leaders. Followers feel inspired and motivated and tend to truly respect and admire their leaders. They offer an optimistic and attractive vision of the future, stimulate followers' creativity and encourage team spirit and do not easily lose sight of subordinates' individual concerns. They appreciate followers' uniqueness and individually foster followers' personal development. Previous studies (Rothfelder, 2012) found that employees led by transformational leaders feel more satisfied with their overall work than subordinates of transactional or laissez faire leaders (Avolio and Bass, 2004; Currie & Lockett, 2007; Humphreys & Einstein, 2003; Erkutlu, 2008). In previous studies, the components of transformational leadership (idealized influence, inspirational motivation and individualized consideration and intellectual stimulation) were positively related to employee job satisfaction (Rothfelder *et al*, 2012; Bass and Avolio, 2004; Currie & Lockett, 2007; Erkutlu, 2008; Humphreys & Einstein, 2003). In practice, this meant that transformational leaders articulated a clear vision, set a personal example, motivated subordinates and inspired them, provided meaning to subordinates' work, acted in ways that made followers want to trust them, showed support and understanding and treated subordinates as individuals with different needs, abilities and aspirations. Followers under a transformational leader share organizational values and are usually committed to the strategic goals. They accomplish work tasks out of motivation and not because they get rewarded for accomplishments (Pearce *et al.*, 2003; Northouse, 2007). Transformational leadership raises followers' level of consciousness on the importance and value of designated outcomes and ways of achieving them. The followers are motivated to transcend their own immediate self-interest for the sake of their firm's mission and vision, through emotional, intellectual and moral engagement. The followers end up performing beyond expectations (Obiwuru *et al.*, 2011; Waldman *et al.*, 2001). From extant literature, little emphasis has been given to the role of transformational leadership behaviour on the relationship between dynamic capabilities and firm performance. Three hypotheses were formulated to test the moderating role of transformational leadership behaviour, namely:-  $H0_{iv}$ : There is no significant effect of transformational leadership behaviour on the relationship between sensing capabilities and firm performance,  $H0_v$ : Transformational leadership behaviour has no significant influence

on the relationship between seizing capabilities and firm performance; and  $H0_{vi}$ : there is no significant effect of transformational leadership behaviour on the relationship between reconfiguration capabilities and firm performance.

### Conceptual Framework

The study investigated the moderating effect of transformational leadership behaviour on the relationship between dynamic capabilities and performance of manufacturing firms in Nairobi, Kenya. The Drnevich and Kriauciunas (2011) framework was adapted and modified (as shown in figure 1) to depict the variables and to test the hypotheses.

Figure 1: Conceptual Framework – Moderating Role of Transformational Leadership Behaviour on the relationship between Dynamic capabilities and Firm Performance



Source: Drnevich and Kriauciunas (2011), modified, 2017.

### RESEARCH METHODOLOGY

A cross-sectional survey targeting manufacturing firms in Nairobi County, Kenya, was undertaken. The study used explanatory research design, duly grounded on logical positivism philosophical foundation (Saunders *et al*, 2007; Coltman, 2007; Babbie & Benaquisto, 2009). Inferential statistics were derived using moderated regression analysis to determine variable relationships (Hair *et al*, 2006) and the results were used to test the hypotheses.



The study's target population was manufacturing firms operating in Nairobi County, Kenya. Respondents were Chief Executive Officers (CEOs) of these firms and 3 of their their direct reports, i.e. senior managers (Corsten & Felde, 2005). There were 1496 manufacturing firms as provided by the Kenya Nation Bureau of Statitistics (KNBS).A sample size of 369 was determined for purposes of the study based on anticipated population of 50%, a confidence level of 95%, a relative precision of 45% to 55% or a standard error of 5% and an adjustment of 20% to cater for non-response (Macfarlane, 1992; Daniels, 1999; Naing *et al.*, 2006). A systematic random sampling approach i.e. the first listed firm, followed by every 4<sup>th</sup> firm in the list, was used to pick the 369 sampled firms (Frey *et al.*, 2000; MacNealy, 1995). A questionnaire was used to collect primary data from the sampled firms (Hair, *et al*, 2006; Malhotra and Birks, 2007). The questionnaire was based on a seven (7) point Likert-type scale and was in 2 parts. The first part was used for collection of answers to specific closed research questions on aspects of performance of the firms in the market and the extent to which sensing, seizing and reconfiguration capabilities were deployed by these firms (Robson, 2002). The second part of the questionnaire was used to collect information on transformational leadership behavior of the CEOs, using the using 4 factors of full range (9 factor) multi-factor leadership (MLQ) measurement model. According to the MLQ model, transformational leadership is measured using 4 factors, namely:- idealized influence (attributed), idealized influence (behavioral), inspirational motivation, intellectual stimulation and individualized consideration. Each factor had 4 items (Muenjohn & Armstrong, 2008). A response rate of 70.8% was achieved which was above the generally recommended threshold of between 50% and 60% (Babbie & Benaquisto, 2009; Oso & Onen, 2005). From the demographic profile of the respondents, the highest number of CEOs was that of age of between 30 and 50 years, forming 74.2% of the respondents. This meant that most of the CEOs of the manufacturing firms were relatively young, between 30 and 50 years old. It was also observed that 58.7% of the CEO's who responded were male and 41.3% were female.

Psychometric tests were carried out on the general assumptions of research, so as to avoid Type I or Type II errors (Osborne & Waters, 2002). Reliability test was done to ensure the study achieved accurate representation of the total population under study (Joppe, 2000; Kirk & Miller, 1986; Golafshani, 2003). The Table 1 shows Cronbach's alpha reliability coefficients for the variables. The Cronbach alpha coefficients were: - Sensing capabilities (0.737), Seizing capabilities (0.685), Reconfiguration capabilities (0.608) and Transformational leadership behavior (0.926. The Cronbach's alpha coefficient for firm performance (dependent) variable was 0.904. Therefore all variables had coefficients above the 0.60 cutoff (Sekaran, 2003; Hair *et al*, 2006; Garson, 2012). Validity tests were carried out to ensure that the research truly

measured that which it was intended to measure and presented the truth of the research results (Golafshani, 2003; Lewis and Ritchie, 2003; DeRue *et al.*, 2012; Arrindell *et al.*, 2005).

Table 1: Cronbach's Alpha Reliability Test

| Construct            | Dimensions                   | Count of Measures | Alpha Coefficient |
|----------------------|------------------------------|-------------------|-------------------|
| Firm Performance     | Firm Performance             | 10                | 0.904             |
| Dynamic Capabilities | Sensing Capabilities         | 8                 | 0.737             |
|                      | Seizing Capabilities         | 9                 | 0.685             |
|                      | Reconfiguration Capabilities | 7                 | 0.608             |
| Leadership Behaviour | Transformational behaviour   | 20                | 0.926             |

A principal component factor analysis was performed on all the items of the constructs in the study, using extraction with varimax rotation, in order to assess factor loadings for each variable. The sampling adequacy measure of Kaiser-Meyer-Olkin (KMO) and sphericity measure of level of significance of Bartlett's coefficients for all the variables are summarized in the Table 2. Factor loading for Firm Performance was successful for all its initial 10 items. The factor loading for Sensing Capabilities was 8 items, Seizing Capabilities (8 items), Reconfiguration capabilities (6 items) and Transformational leadership behavior (15 items). In all these cases, the Bartlett's Test of sphericity was significant,  $p < 0.05$ . The Eigene values and cumulative percentage variance contribution by the components were as shown on Table 2. These results therefore were considered acceptable (Hair *et al.*, 2006; Tabachnick, 2007; Bartlett, *et al.*, 2001) and provided the basis for proceeding to the next stage of analysis.

Table 2: Principal Component Factor Analysis Results

| N=271           | FP          | SC         | SZ         | RC         | TFLB        |
|-----------------|-------------|------------|------------|------------|-------------|
| KMO             | 0.927       | 0.834      | 0.754      | 0.723      | 0.928       |
| Bartlett's Test | 1256.728*** | 575.018*** | 329.398*** | 187.574*** | 3370.191*** |
| Eigene Value    | 5.382       | 4.477      | 4.963      | 3.370      | 13.600      |
| Cum % Var       | 53.820      | 55.961     | 49.627     | 48.144     | 68.002      |
| Factor Loading  | 10          | 8          | 8          | 6          | 15          |

Notes: \*  $p < 0.05$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.05$ ; FP: Firm Performance; SC: Sensing Capabilities; SZ: Seizing Capabilities; RC: Reconfiguration Capabilities, KMO: Kaiser-Meyer-Olkin, TFLB: Transformational Leadership Behaviour.

Descriptive analysis of the study variables showed firm performance had a mean score of 4.449 and standard deviation of 1.103. Its normal curve was skewed to the left (0.074) with a kurtosis

of -0.230. Sensing capabilities had a mean score of 3.843 and standard deviation of 0.991 with its normal curve skewed to the right (-0.257) and had a kurtosis of -0.242. Seizing capabilities had a mean score of 4.612 and standard deviation of 0.829 with its normal curve skewed to the left (0.020) and had a kurtosis of -0.149. Reconfiguration capabilities had a mean score of 4.135 and standard deviation of 0.845 with its normal curve skewed to the left (0.105) and had a kurtosis of -0.502. Transformational leadership behaviour had a mean score of 3.998 and standard deviation of 1.102 with its normal curve skewed to the right (-0.040) and had a kurtosis of -0.535. These details are captured on Table 3.

Table 3: Descriptive Statistics

| Variable                              | Mean  | Std. Dev | Skewness | Kurtosis |
|---------------------------------------|-------|----------|----------|----------|
| Firm Performance                      | 4.449 | 1.103    | 0.074    | -0.230   |
| Sensing Capabilities                  | 3.843 | 0.991    | -0.257   | -0.242   |
| Seizing Capabilities                  | 4.612 | 0.829    | 0.020    | -0.149   |
| Reconfiguration Capabilities          | 4.135 | 0.845    | 0.105    | -0.502   |
| Transformational Leadership Behaviour | 3.998 | 1.102    | -0.040   | -0.535   |

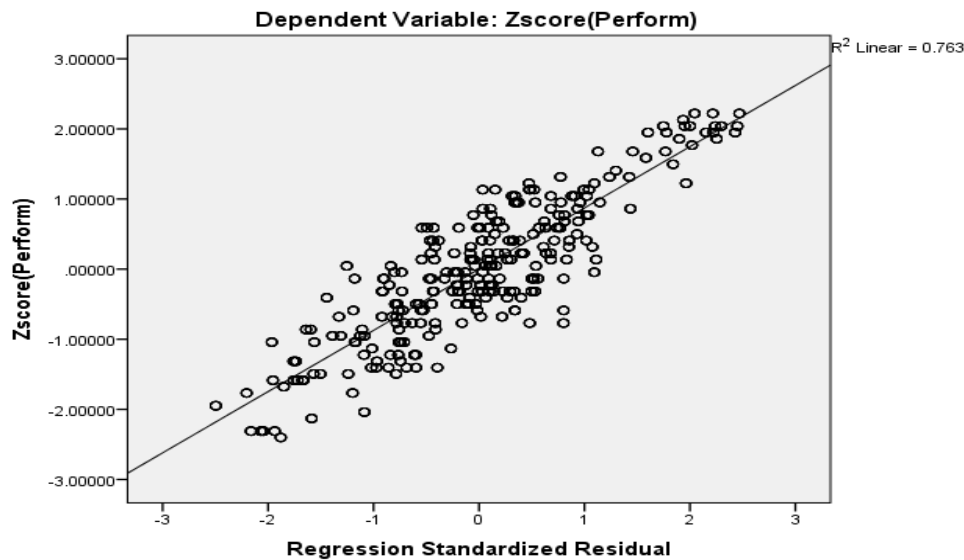
The study used Shapiro Wilk test to determine normality of the variables. The reason why Shapiro Wilk test was preferred is because the sample size for the study fell within the range of zero and 2,000 (Garson, 2012). According to Shapiro *et al*, (1968), a sample size falling within the range of 3 to 5000 is recommended. It was found that apart from sensing capabilities, the rest of the variables' data showed  $p > 0.05$ , which meant that the null hypothesis on normality test hypothesis was not rejected and the data was therefore normally distributed (Pallant, 2007; Shapiro *et al*, 1968). Although results of sensing capabilities variable showed  $p < 0.05$ , the test statistic value was 0.987, was close to 1 and accordingly demonstrated normality of data (Ahmad & Khan, 2015). Table 4 shows the normality test results.

Table 4: Normality of Variables

| Constructs                           | Kolmogorov-Smirnov |     |       | Shapiro-Wilk |     |       |
|--------------------------------------|--------------------|-----|-------|--------------|-----|-------|
|                                      | Statistic          | df  | Sig.  | Statistic    | df  | Sig.  |
| Firm Performance                     | 0.037              | 271 | 0.200 | 0.990        | 271 | 0.057 |
| Sensing Dynamic Capabilities         | 0.074              | 271 | 0.001 | 0.987        | 271 | 0.015 |
| Seizing Dynamic Capabilities         | 0.059              | 271 | 0.024 | 0.994        | 271 | 0.313 |
| Reconfiguration Dynamic Capabilities | 0.061              | 271 | 0.018 | 0.989        | 271 | 0.047 |
| Transformational Leadership          | 0.044              | 271 | 0.200 | 0.992        | 271 | 0.179 |

Homoscedasticity Test was undertaken to confirm whether the variance of errors was the same across all levels of the independent variables (homoscedasticity) or not (heteroscedasticity). A scatter plot of the distribution of the standardized residuals (errors) was done using the standardized predicted values (Huizingh, 2007). The plot, on Figure 2, shows that residuals or errors were randomly clustered close to the trend line, meaning they were evenly distributed.

Figure 2: Homoscedasticity (Standardized Residuals)



A multicollinearity diagnostics established variance inflation factors (VIF) of between 1.254 and 2.067, which were acceptably within the threshold of between 1 and 10 (Morrison, 2003). Tolerance values (TV) were between 0.484 and 0.797, well within the range of 0.2 to 1 (Agboola, 2006). The results indicate that there was no multicollinearity among the explanatory variables hence meeting the requisite assumption. These results are on Table 5.

Table 5: Collinearity Statistics

| Dependent variable: Firm Performance  | Tolerance | VIF   |
|---------------------------------------|-----------|-------|
| Sensing Capabilities                  | 0.546     | 1.832 |
| Seizing Capabilities                  | 0.721     | 1.388 |
| Reconfiguration Capabilities          | 0.678     | 1.475 |
| Transformational Leadership Behaviour | 0.484     | 2.067 |

A test of correlation of variables revealed that there was positive significant correlation between firm performance and the three dimensions of dynamic capabilities - sensing capabilities (0.394,

$P < 0.01$ ), seizing capabilities (0.360,  $P < 0.01$ ) and reconfiguration capabilities (0.413,  $P < 0.01$ ). The correlation between sensing capabilities and seizing capabilities (0.373,  $P < 0.01$ ) and also reconfiguration capabilities (0.492,  $P < 0.01$ ) was significant too. The correlation between transformational leadership behavior and firm performance was also significant (0.592,  $P < 0.01$ ). The notable aspect is that the correlation values were in all cases below 0.600 and above 0.200, thereby falling within acceptable threshold (Berry *et al.*, 2006). These results are contained on Table 6.

Table 6: Correlations of Variables

|                              | 1FP     | 2SC     | 3ZC     | 4RC     | TFLB |
|------------------------------|---------|---------|---------|---------|------|
| Firm Performance             | 1       |         |         |         |      |
| Sensing Capabilities         | 0.394** | 1       |         |         |      |
| Seizing Capabilities         | 0.360** | 0.373** | 1       |         |      |
| Reconfiguration Capabilities | 0.413** | 0.492** | 0.372** | 1       |      |
| Transformational LB          | 0.592** | 0.586** | 0.403** | 0.434** | 1    |

Pearson Correlation (2-tailed). Significance \* $P < 0.05$ ; \*\* $P < 0.01$

Regression analysis revealed that all the three independent variables - sensing capabilities ( $B = 0.061$ ,  $P < 0.01$ ), seizing capabilities ( $B = 0.048$ ,  $P < 0.01$ ) and reconfiguration capabilities ( $B = 0.124$ ,  $P < 0.001$ ); had significant influence on the firm performance. The interaction of transformational leadership behavior with these independent variables, namely:- Zscore (TFLB) \* Zscore(SC), Zscore (TFLB) \* Zscore(ZC) and Zscore (TFLB) \* Zscore(RC) showed  $B = -0.061$ ,  $P < 0.05$ ;  $B = -0.068$ ,  $P < 0.05$  and  $B = 0.029$ ,  $P > 0.05$ , respectively. These variables combined, contributed to 37.6.7% ( $R^2 = 0.376$ ) of the variance in firm performance. The regression results were used to test the following six hypotheses: -  $H_{0i}$ : There was no significant effect of sensing capabilities on firm performance,  $H_{0ii}$ : There was no significant influence of seizing capabilities on firm performance,  $H_{0iii}$ : Reconfiguration capabilities had no significant effect on firm performance,  $H_{0iv}$ : there was no significant effect of transformational leadership behaviour on the relationship between sensing capabilities and firm performance,  $H_{0v}$ : transformational leadership behaviour had no significant influence on the relationship between seizing capabilities and firm performance and  $H_{0vi}$ : there was no significant effect of transformational leadership behaviour on the relationship between reconfiguration capabilities and firm performance. The coefficient for sensing capabilities ( $B = 0.061$ ) was significant ( $P < 0.05$ ) and therefore the first null hypothesis ( $H_{0i}$ ) was rejected and it was concluded that sensing capabilities had significant effect on firm performance. The coefficient for seizing capabilities

was  $B=0.048$ ,  $P<0.05$  and the null hypothesis ( $H_{0ij}$ ) was also rejected and a conclusion reached that seizing capabilities had significant effect on firm performance. Reconfiguration capabilities' coefficient of  $B=0.124$ ,  $P<0.001$  led to rejection of  $H_{0ij}$  and conclusion that this variable had significant effect on firm performance. The Beta coefficient for the interaction (TFLB \*SC) was significant at  $B= -0.061$  ( $p<0.05$ ). Therefore the null hypothesis was rejected and it was concluded that transformational leadership behaviour has significant effect on the relationship between sensing capabilities and firm performance. The coefficient for the interaction (TFLB\*SZ) was significant ( $B=-0.068$ ;  $P<0.05$ ). The null hypothesis was rejected and alternative hypothesis adopted, that transformational leadership behaviour had a significant influence on the relationship between seizing capabilities and firm performance. The interaction (TFLB\*RC) was insignificant ( $B=0.029$ ). The null hypothesis was not rejected and the conclusion was reached that transformational leadership behaviour had no effect on the relationship between reconfiguration capabilities and firm performance. The detailed regression results from two models are indicated in Table 7.

Table 7: Regression results on Firm Performance

|                            | Unstd B<br>Coefficients | Std.<br>Error | Std. Beta<br>Coefficients | T      | Sig   |
|----------------------------|-------------------------|---------------|---------------------------|--------|-------|
| (Constant)                 | 0.056                   | 0.023         |                           | 2.437  | 0.015 |
| Zscore (SensingC)          | 0.061                   | 0.026         | 0.061 <sup>*</sup>        | 2.338  | 0.020 |
| Zscore (SeizingC)          | 0.048                   | 0.022         | 0.048 <sup>*</sup>        | 2.148  | 0.032 |
| Zscore (ReconfigC)         | 0.124                   | 0.022         | 0.124 <sup>***</sup>      | 5.605  | 0.000 |
| Zscore (TransformL)        | 0.529                   | 0.027         | 0.529 <sup>***</sup>      | 19.954 | 0.000 |
| Zscore (TFLB) * Zscore(SC) | -0.061                  | 0.029         | -0.061 <sup>*</sup>       | -2.052 | 0.040 |
| Zscore (TFLB) * Zscore(ZC) | -0.073                  | 0.028         | -0.068 <sup>*</sup>       | -2.57  | 0.010 |
| Zscore (TFLB) * Zscore(RC) | 0.029                   | 0.027         | 0.029                     | 1.082  | 0.279 |
| R                          |                         |               | 0.613                     |        |       |
| R <sup>2</sup>             |                         |               | 0.376                     |        |       |
| Adj. R <sup>2</sup>        |                         |               | 0.373                     |        |       |
| R <sup>2</sup> Change      |                         |               | 0.001                     |        |       |
| Std. Error of the Change   |                         |               | 0.791                     |        |       |
| F Change                   |                         |               | 0.939                     |        |       |

Notes: Dependent Variable: Zscore (Firm Performance). Significance: \* $P<0.05$ ; \*\* $P<0.01$ ; \*\*\* $P<0.001$ .

SensingC: Sensing Capabilities; SeizingC: Seizing Capabilities; ReconfigC: Reconfiguration Capabilities; TransformL: Transformational leadership behavior; TFLB: Transformational Leadership Behaviour; SC: Sensing Capabilities; ZC: Seizing Capabilities; RC: Reconfiguration Capabilities.

## SUMMARY AND CONCLUSIONS

The study concluded that those firms that embrace dynamic capabilities improve their performance. Hypotheses test results indicated that sensing capabilities was a predictor of firm performance. This result corroborated the findings by, among other studies, Osisioma *et al*, (2016), Li & Liu (2014), Woldesenbet, *et al* (2012), Karagouni *et al*, 2012 and Wu (2010). In their initial conceptual model, Gathungu & Mwangi (2012) highlighted that sensing capabilities were useful in the identification and assessment of opportunities. The study also showed that seizing capabilities predicted firm performance, which supported that of Pandza and Holt (2007). The study further fitted into the theoretical conceptual framework proposed by Kocoglu *et al* (2015) on the differential relationship between absorptive capacity and product innovativeness. Seizing capabilities are about pro-activeness, a response to opportunities, and is an appropriate approach for firms facing competition (Lumpkin & Dess, 2001). It was observed that reconfiguration capabilities had a significant effect on firm performance, corroborating a previous 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. The findings also support the results Cao (2011) that targeted international retailers in China on shaping, seizing and reconfiguration of opportunities and threats.

The tests of hypotheses on the role of Transformational leadership behaviour as a moderator of the relationship between the predictors: - sensing capabilities, seizing capabilities and reconfiguration capabilities; and firm performance (criterion) produced mixed results as indicated below. First, it was concluded that transformational leadership behaviour had significant effect on the relationship between sensing capabilities and firm performance. This finding supported other previous studies (Jansen *et al*, 2008). Transformational leadership behavior influences follower performance through upward knowledge management and organizational learning and impacts on firm performance (Uymaz, 2015). Second, it was also found that transformational leadership behaviour had a significant influence on the relationship between seizing capabilities and firm performance. This agrees with prior and related studies (Garcia-Morales *et al*, 2008; Muchiri & Ayoko, 2013; Goswami *et al*, 2016). It therefore means that emotional intelligence has a positive relationship with work performance and that perceived transformational leadership behaviour positively moderates the relationship between the subordinates' emotional intelligence and work performance (Chen *et al*, 2015). Third, the results however showed that transformational leadership behaviour had no effect on the relationship between reconfiguration capabilities and firm performance. This was consistent with Mesu *et al* (2015) and Vaccaro *et al* (2012). The Kenyan manufacturing sector, as is the case with many emerging economies, consists mainly of small and medium size firms that are capital intensive

and less complex and do not therefore benefit a lot from transformational leadership behaviour. Indeed previous studies have shown that firm size moderates the relationship between transformational leadership behaviour and management innovation (Vaccaro *et al*, 2012).

The study results provide insights into the degree of change of firm performance when deployment of sensing capabilities, seizing capabilities and reconfiguration capabilities are moderated by transformational leadership behavior. Practicing managers find some useful implications for application in designing strategies to be used in enhancing and sustaining firm performance. The study avails an appropriate model for use when acquiring resources and selecting the competencies and capabilities that would lead to desired results efficiently and effectively. The study highlighted the importance of transformational leadership behaviour of CEOs in fostering strategic flexibility in the deployment of dynamic capabilities in tandem with the shifting operating environment so as to influence firm performance. The applicability of capabilities may not universally influence firm performance, but is contingent on the behaviour of the top leadership of the firm. Manufacturing firms with CEOs who display transformational leadership behaviour, and are fast at sensing (scanning) for opportunities and threats; and quick at seizing any opportunities that they are able to reach, contribute to improved firm performance. The conceptualization of the model extends existing research using empirical approach and its results make a valuable contribution to strategic theories of Resource-Based View (Alvarez & Busenitz, 2001) and Dynamic Capabilities. The study also informs management practice, industry and government policy formulation to come up with appropriate guidelines in addressing any firm vulnerability to the ever changing operating environment and therefore achieve sustainable industry or sectoral performance.

### **LIMITATIONS OF THE STUDY**

Like nearly all empirical studies, there were some limitations. First, the scope of the study was restricted to manufacturing firms in Nairobi County, Kenya. This was a sectoral and geographical coverage limitation. Many manufacturing firms in Kenya, though they play a critical role in the industrial growth of the economy (Kaivanto & Stoneman, 2007; Luukkonen, 2005), are small and medium size with few large ones. This therefore might limit the generalizability of the findings to other sectors with large corporations. Second, the study used a cross-sectional design that cannot determine the gradual effects of dynamic capabilities and also transformational leadership behavior on firm performance over a period of say years. Third, the rating of transformational leadership behaviour as perceived by those managers who work directly under the CEOs is to a certain extent influenced by personal feelings. However, this multi-rater approach is an even better way of rating leadership behaviour as opposed to when



the CEOs rate themselves (McHugh, 2012). Fourth limitation was time for data collection. Time limitation meant that a response rate of less than 100% had to be accommodated, so as to reach timely observations and conclusions. Fifth, some firms required that advance appointments be made with full details of researcher's name, contact number, institution of research etc. before being allowed to drop questionnaires and going back to pick those complete ones. This was time consuming and delayed data collection.

## REFERENCES

- Adenikinju, A., Söderling, L., Soludo, C., & Varoudakis, A. (2002). Manufacturing Competitiveness in Africa: Evidence from Cameroon, Côte d'Ivoire, Nigeria, and Senegal. *Economic Development and Cultural Change*, Vol.50.
- Agboola, A. K. (2006). Assessing the awareness and perceptions of academic staff in using e-learning tools for instructional delivery in a post-secondary institution: A case study. *The Innovation Journal: The Public Sector Innovation Journal*, 11(3), 1-12.
- Ahmad, F., & Khan, R. A. (2015). A power comparison of various normality tests. *Pakistan Journal of Statistics and Operation Research*, 11(3).
- Ahuja, G., & Katila, R. (2004). Where do resources come from? The role of idiosyncratic situations. *Strategic Management Journal*, 25(8-9), 887-907.
- Alvarez, S. A., & Busenitz, L. W. (2001). The entrepreneurship of resource-based theory. *Journal of management*, Vol.27.
- 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.
- Avolio, B. J., & Bass, B. M. (2004). MLQ: Multifactor leadership questionnaire. *Mind*
- Babbie, E. R., & Benaquisto, L. (2009). *Fundamentals of social research*. Cengage Learning.
- Barney, J. and Clark D. N. (2007). *Resource-based theory*. New York: Oxford.
- Bartlett, E. J; Kottrik, W.J and Higgins, C.C., (2001). *Organizational Research: Determining Appropriate Sample Size in Survey Research*
- 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.
- 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)
- Berry, K., Wearden, A., Barrowclough, C., & Liversidge, T. (2006). Attachment styles, interpersonal relationships and psychotic phenomena in a non-clinical student sample. *Personality and Individual Differences*, 41(4), 707-718.
- Bititci, U. S., Mendibil, K. T., & Maguire, C. (2010). High value manufacturing: a case study in transformation. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, Vol. 224.
- Burns, J. M. (1978). *Leadership* New York. NY: Harper and Row Publishers.
- 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.
- Carton, R. B., & Hofer, C. W. (2006). *Measuring organizational performance: Metrics for entrepreneurship and strategic management research*. Edward Elgar Publishing.

- Cepeda, G., & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research*, 60(5), 426-437.
- Chen, A. S. Y., Bian, M. D., & Hou, Y. H. (2015). Impact of transformational leadership
- Chmielewski, D. A., & Paladino, A. (2007). Driving a resource orientation: reviewing the role of resource and capability characteristics. *Management Decision*, 45(3), 462-483.
- Collier, P., & Gunning, J. W. (1999). Explaining African economic performance. *Journal of economic literature*, 37(1), 64-111.
- Coltman, T. (2007). Why build a customer relationship management capability? *The Journal of Strategic Information Systems*, Vol.16
- Combs, J. G., Crook, T. R. & Shook, C. L. (2005). The dimension of organizational performance and its implications for strategic management research.
- Corsten, D., & Felde, J. (2005). Exploring the performance effects of key-supplier collaboration: an empirical investigation into Swiss buyer-supplier relationships. *International Journal of Physical Distribution & Logistics Management*, 35(6), 445-461.
- Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of retailing*, 76(2), 193-218.
- Currie, G., & Lockett, A. (2007). A critique of transformational leadership: Moral, professional and contingent dimensions of leadership within public services organizations. *Human relations*, 60(2), 341-370.
- Danneels, E. (2008). Organizational antecedents of second-order competences. *Strategic Management Journal*, Vol.29.
- DeRue, D. S., Nahrgang, J. D., Hollenbeck, J. R., & Workman, K. (2012). A quasi-experimental study of after-event reviews and leadership development. *Journal of Applied Psychology*, 97(5).
- Drnevich, P. L., & Kriauciunas, A. P. (2011). Clarifying the conditions and limits of the contributions of ordinary and dynamic capabilities to relative firm performance. *Strategic Management Journal*, Vol.32.
- 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. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management journal*, 32(3), 543-576.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic management journal*, Vol.21.
- Erkutlu, H. (2008). The impact of transformational leadership on organizational and leadership effectiveness: The Turkish case. *Journal of management development*, 27(7), 708-726.
- Farjoun, M. (2002). Towards an organic perspective on strategy. *Strategic Management Journal*, 23(7), 561-594.
- Filatotchev, I., Liu, X., Buck, T., & Wright, M. (2009). The export orientation and export performance of high technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies*, Vol.40.
- Forsyth, D. J., & Solomon, R. F. (1977). Choice of technology and nationality of ownership in manufacturing in a developing country. *Oxford Economic Papers*, 258-282.
- Frey, L., Botan, C. H., & Kreps, G. (2000). Investigating communication. NY: Allyn & Bacon.
- Garcia-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British journal of management*, 19(4), 299-319.
- Garden.

- Garg, V. K., Walters, B. A., & Priem, R. L. (2003). Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic management journal*, 24(8), 725-744.
- Garson, G. D. (2012). *Testing statistical assumptions*. Asheboro, NC: Statistical Associates Publishing.
- Gathungu, J. M., & Mwangi, K. (2012). Dynamic Capabilities, Talent Development and Firm Performance. *DBA Africa Management Review*, 2(3), 83-100.
- Glick, W. H., Washburn, N. T., & Miller, C. C. (2005). The myth of firm performance. In *Annual Meeting of the Academy of Management*.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-606.
- Goswami, A., Goswami, A., Nair, P., Nair, P., Beehr, T., Beehr, T. & Grossenbacher, M. (2016). The relationship of leaders' humor and employees' work engagement mediated by positive emotions:
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis (Vol. 6)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hatton, T. J., & Williamson, J. G. (2003). Demographic and economic pressure on emigration out of Africa. *The Scandinavian Journal of Economics*, 105(3), 465-486.
- 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.
- Huizingh, E. (2007). *Applied statistics with SPSS*. Sage.
- Humphreys, J. H., & Einstein, W. O. (2003). Nothing new under the sun: Transformational leadership from a historical perspective. *Management Decision*, 41(1), 85-95.
- Jansen, J. J., George, G., Van den Bosch, F. A., & Volberda, H. W. (2008). Senior team attributes and organizational ambidexterity: The moderating role of transformational leadership. *Journal of Management Studies*, 45(5), 982-1007.
- Joppe, G. (2000). Testing reliability and validity of research instruments. *Journal of American Academy of Business Cambridge*, 4(1/2), 49-54.
- Kaivanto, K., & Stoneman, P. (2007). Public provision of sales contingent claims backed finance to SMEs: A policy alternative. *Research Policy*, 36(5), 637-651.
- Karagouni, G., Protogerou, A., & Caloghirou, Y. (2012, September). Dynamic and autotelic capabilities in knowledge-intensive, low-tech ventures. In *7th European Conference on Innovation and Entrepreneurship*, Escola Superior de Gestão e Tecnologia, Instituto Politécnico de Santarém, Portugal (pp. 20-21).
- Khamwon, A., & Speece, M. (2005). Market orientation and business performance in the veterinary care industry: An empirical analysis. *BU Academic Review*, vol.4.
- Kirk, J., & Miller, M. L. (1986). *Reliability and validity in qualitative research*. Sage.
- Kirkbride, P. (2006). Developing transformational leaders: the full range leadership model in action. *Industrial and commercial training*, 38(1), 23-32.
- Kocoglu, I., Akgün, A. E., & Keskin, H. (2015). The differential relationship between absorptive capacity and product innovativeness: a theoretically derived framework. *International Business Research*, 8(7), 108.
- Koirala, G. P., & Koshal, R. K. (2000). Productivity and technology in Nepal: An analysis of foreign and domestic firms. *Journal of Asian Economics*, 10(4), 605-618.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic management journal*, 13(S1), 111-125.
- Lewis, J., & Ritchie, J. (2003). Generalising from qualitative research. *Qualitative research practice: A guide for social science students and researchers*, 263-286.

- 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.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of business venturing*, 16(5), 429-451.
- Luukkonen, T. (2005). Variability in organisational forms of biotechnology firms. *Research Policy*, 34(4), 555-570.
- MacInerney-May, K. (2012). *The Value of Dynamic Capabilities for Strategic Management*, Universität zu Köln.
- MacNealy, M. S. (1999). *Strategies for empirical research in writing*. Longman
- Malhotra, N. K., & Birks, D. F. (2007). *Marketing research: An applied approach*. Pearson Education.
- McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica*, 22(3), 276-282.
- Mesu, J., Sanders, K., & Riemsdijk, M. V. (2015). Transformational leadership and organisational commitment in manufacturing and service small to medium-sized enterprises: The moderating effects of directive and participative leadership. *Personnel Review*, 44(6), 970-990.
- Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: the third link. *Strategic management journal*, 4(3), 221-235.
- Morrison, C. M. (2003). Interpret with caution: Multicollinearity in multiple regression of cognitive data. *Perceptual and motor skills*, 97(1), 80-82.
- Muchiri, M. K., & Ayoko, O. B. (2013). Linking demographic diversity to organisational outcomes: The moderating role of transformational leadership. *Leadership & Organization Development Journal*, 34(5), 384-406.
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, 4(1).
- Naing, L., Winn, T., & Rusli, B. N. (2006). Practical issues in calculating the sample size for prevalence studies. *Archives of orofacial Sciences*, 1, 9-14.
- Nelson, R. R., & Winter, S. G. (2002). Evolutionary theorizing in economics. *The journal of economic perspectives*, 16(2), 23-46.
- Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic management journal*, Vol.28.
- Njiru, J.(2014, 2, Oct). Cadbury Kenya plans to shutter its Kenyan manufacturing operations at the end of the month, shedding 300 jobs, *Corporate News, Business Daily*.
- Northouse, P. G. (2007). *Leadership: Theory and Practice*. Thousand Oaks: Sage Publications, Inc.
- Obiwuru, T. C., Okwu, A. T., Akpa, V. O., & Nwankwere, I. A. (2011). Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research*, 1(7), 100.
- on subordinate's EI and work performance. *Personnel Review*, 44(4), 438-453.
- Osborne, J. W., & Waters, E. (2002). 1 Four Assumptions Of Multiple Regression That Researchers Should Always Test.

- Osisioma, H. E., Nzewi, H. N., & Mgbemena, I. C. (2016). Dynamic Capabilities and Performance of Selected Commercial Banks in Awka, Anambra State, Nigeria.
- Oso, W. Y., & Onen, D. (2005). A Guide to writing Research Proposals and Reports.
- Pallant, J. (2007). SPSS survival manual: A step-by-step guide to data analysis using SPSS version 15. Nova lorque: McGraw Hill.
- Pandza, K., & Holt, R. (2007). Absorptive and transformative capacities in nanotechnology innovation systems. *Journal of Engineering and Technology Management*, 24(4), 347-365.
- Park, S. H., & Luo, Y. (2001). Guanxi and organizational dynamics: Organizational networking in Chinese firms. *Strategic management journal*, Vol.22.
- Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. *Decision Sciences*, 42(1), 239-273.
- Pearce, C. L., Sims Jr, H. P., Cox, J. F., Ball, G., Schnell, E., Smith, K. A., & Trevino, L. (2003). Transactors, transformers and beyond: A multi-method development of a theoretical typology of leadership. *Journal of Management development*, 22(4), 273-307.
- Polonsky, M. J., & Scott, D. (2005). An empirical examination of the stakeholder strategy matrix. *European Journal of Marketing*, 39(9/10), 1199-1215.
- Prieto, I. M., Revilla, E., & Rodríguez-Prado, B. (2009). Building dynamic capabilities in product development: How do contextual antecedents matter?. *Scandinavian Journal of Management*, 25(3), 313-326.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management* Vol.35.
- Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers*. Vol. 2. Oxford: Blackwell.
- Rothfelder, K., Ottenbacher, M. C., & Harrington, R. J. (2012). The impact of transformational, transactional and non-leadership styles on employee job satisfaction in the German hospitality industry. *Tourism and Hospitality Research*, 12(4), 201-214.
- Santos, J. B., & Brito, L. A. L. (2012). Toward a subjective measurement model for firm performance. *BAR-Brazilian Administration Review*, Vol.9.
- Saowalux, P. & Peng, C. (2007). Impact of Leadership Style on Performance: A Study of Six Sigma Professionals in Thailand. *International DSI/Asia and Pacific DSI*, July, 2007.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students*. Financial Times.
- Sekaran, U. (2003). *Research Methods for Business: A skill-bulding approach*. New York: John Willey and Son. Inc Year.
- Shapiro, S. S., Wilk, M. B., & Chen, H. J. (1968). A comparative study of various tests for normality. *Journal of the American Statistical Association*, 63(324), 1343-1372.
- Simerly, R. L., & Li, M. (2000). Environmental dynamism, capital structure and performance: a theoretical integration and an empirical test. *Strategic management journal*, 31-49.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Multivariate analysis of variance and covariance. Using multivariate statistics*, 3, 402-407.
- Tallon, P. P. (2008). Inside the adaptive enterprise: an information technology capabilities perspective on business process agility. *Information Technology and Management*, 9(1), 21-36.
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and micro-foundations of (sustainable) enterprise performance. *Strategic management journal*, Vol.28.

- Uymaz, A. O. (2015). Transformational leadership influence on follower performance through upward knowledge management and organizational learning. *International Journal of Business and Social Research*, 5(6), 11-22.
- Vaccaro, I. G., Jansen, J. J., Van Den Bosch, F. A., & Volberda, H. W. (2012). Management innovation and leadership: The moderating role of organizational size. *Journal of Management Studies*, 49(1), 28-51.
- Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of management journal*, 44(1), 134-143.
- Wang, C. K., & Ang, B. L. (2004). Determinants of venture performance in Singapore. *Journal of small business management*, 42(4), 347-363.
- Whetten, D. A. (2006). Albert and Whetten revisited: Strengthening the concept of organizational identity. *Journal of management inquiry*, 15(3), 219-234.
- 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.
- Wu, L. Y. (2010). Applicability of the resource-based and dynamic-capability views under environmental volatility. *Journal of Business Research*, 63(1), 27-31.
- Zott, C. (2003). Dynamic capabilities and the emergence of intra-industry differential firm performance: insights from a simulation study. *Strategic management journal*, Vol.24.