INFLUENCE OF STRATEGIC MANAGEMENT DRIVERS ON PERFORMANCE OF CONSTRUCTION FIRMS IN NAIROBI COUNTY IN KENYA

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ABSTRACT
The construction industry is a major source of employment worldwide, arguably the second largest after agriculture, and generally the primary one in urban areas. Construction (new and maintenance) are labour-intensive activities, generating many jobs per unit of investment on and off the site. Construction firms in Kenya face formidable constraints that hinder them from realizing their performance internationally and locally. These constraints which include: projects not completed on budget; projects not completed on time; projects not completed on the required technical specifications and quality which contribute to client dissatisfaction in construction firms. Measuring performance of construction firms under the influence of strategic management drivers affecting the industry is an important task which needs to be employed by corporate managers, investors and other stakeholders. This study focused on the influence of strategic management drivers on the performance focusing on the influence of corporate culture; technical capabilities; human resource capabilities and customer relationship management on performance of construction firms in Nairobi County with the aim of bridging a gap on this field. The theories used in this study are: Resource Based View theory; Network View Theory; Contingency theory and the Balance Score Card. This study used qualitative and quantitative research design. The target population was construction firms in Nairobi County registered by National Construction Authority under category NCA1 and NCA 2. The collected data was analyzed using SPSS version 21 and ANOVA. The results from the study indicated that strategic management drivers have a positive influence on the performance of large construction firms and recommended that top level management should put emphasis on these drivers in order to formulate and implement sustainable competitive strategies with the aim of being relevant in the turbulent and rapid business environment.
Key Words: Technology capabilities, corporate culture capabilities, Human resource capabilities, Customer relationship management capabilities, Performance Large construction firms, Nairobi County

Background of the Study
The business of the twenty first century irrespective of its size is going to be part of the global business community affecting and being affected by social change, events and pressures from around the world (Mahoney, 2012). This is so because the business environment is changing, dynamic, turbulent, discontinuous and highly competitive. In this era, the relationship between business and society has changed radically. Key drivers of this change have been globalization of trade, increased size and influence of corporate organizations, the repositioning of government and the rise in the strategic importance of stakeholder’s relationships, knowledge, and brand reputation (Mehta, 2014).

The construction industry is a major source of employment worldwide, arguably the second largest after agriculture, and generally the primary one in urban areas. Construction (new and maintenance) are labour-intensive activities, generating many jobs per unit of investment on and off the site (NCA, 2016). The construction industry plays a fundamental role in the development of a nation and helps in meeting one of the society’s basic needs of shelter. The industry contributes up to 10% to a country’s gross national product (Kihowry, 2015).

Porter (1985) argues that the essence of formulating comprehensive strategy is relating a company to its environment. Aremu (2010) opined that a clearly defined strategy that will lead to enthusiasm among various stakeholders which includes shareholders, suppliers, creditors, customers, and employees and as a result promote commitment that will enhance better performance of business organization. Strategic management permits the systematic management of change. It enables organization to purposefully mobilize resources towards a desired future. Sharabati & Fuqaha (2014) opined that in the globalization era, the strategic management has been considered as the most important practice which distinguishes organizations from each other’s. Strategic management is the key process to achieve organizational vision, strategy and objectives. All organizations whatever they are, whatever they do, they should perform a strategic management practices to ensure that they fit within their environment.

Performance management is a crucial tool that helps institutions in monitoring performance by focusing on areas that needs attention therefore improving operations by ensuring they are efficient and effective. According to (Marr, 2012) human resource perspective, customer relationship management perspective, technological perspective, leadership and management and corporate culture are some of the approaches that are used to measure performance of an organization. Organizations performance is assessed with the basis of specific drivers that affect their industry. Performance Management is a critical tool for continuous improvement and monitoring whether an organization is achieving its objectives. Construction firms should be an area to focus on as far strategic management drivers and performance are concerned because they play a key role in the economic development of Kenya (Chinowsky, 2007).
Statement of the problem

Construction industry is an important part of the economy in many countries and often seen as a driver of economic growth especially in developing countries. Typically, construction industry contributes to 11% of gross domestic products (GDP) in most developing countries (Giang and Pheng, 2010). This industry is complex in nature because it contains large number of project parties as clients, consultants, contractors, stakeholders, shareholders and regulators (Helen et.al, 2015). Construction firms in Kenya face formidable constraints that hinder them from realizing their performance internationally and locally (Gacheru, 2015). These constraints which include: projects not completed on budget; projects not completed on time; projects not completed on the required technical specifications; increases cases of injuries in construction activities and quality which contribute to client dissatisfaction in construction firms (Sengupta, Haser, & Cook, 2009). According to Frimpong (2003), poor risk management is to blame while Johansson et al (2012) argues that lack of experience and intellectual ability among contractors is the main reason. Other cause includes; poor organizational culture (Kagiri et al 2003). In Kenya, more than 40% of all project failures leading to litigation arise from delays in project completion (Kagiri et al 2008). In Kenya though rules and regulations on health and safety management at construction sites by the National Council for Occupational Safety and Health exist, there are reports of injuries, accidents and ill health following construction activities (Kibe, 2016).

The increase in project delays in the construction industry is hurting the economy because it results in wastage of resources, enhanced costs of projects and frustration among customers, yet housing Construction is one of the principal sectors that can revitalize economic growth in Kenya (GOK, 2007).

The construction industry around the globe faces problems and challenges. However, in developing countries like Kenya, cases of collapse of buildings which lead to subsequent loss of lives and property, poor design and execution of infrastructure are prevalent (GOK, 2015). This can be attributed to a variety of reasons which include poor designs and non-compliance, cost cutting and use of sub-standard material, lack of quality control, and use of incompetent contractors (Gicheru, Diang’a & mbiti, 2015). The construction sector was negatively affected by cheap imports, high cost of capital and disincentives to export because of delayed value added tax refunds that led to a low growth rate from 3.2 percent in 2014 to 3.5 percent in 2015 (Kenya National Bureau of Statistics, 2016). Construction firms in Kenya are facing challenges on the human personnel due to a high number of unskilled and semi-skilled labour hence failing to realize their full potential due lack of professionalism (Hasluck, 2011).

In Kenya, studies have been undertaken on the influences of strategic management drivers on organization performance in the business sector, the health sector and hotel industry with no limitation to the tourism industry and it was found that strategic management drivers have a positive influence on the performance of firms in the mentioned industries (Mutindi, Namusonge & Obwogi, 2013).

Use of the findings from previous studies as an extrapolation to other industries may not be fair enough as one influence to a certain industry may not necessarily be an influence to its counterpart. Thus, with the conclusions drawn from the past researches, it is evident that strategic drivers greatly influenced the studied sectors. To bridge the existing gap on the various industries and with the findings of the previous studies as the motivating factor, this study ought
to fill this empirical gap by answering the research question: What is the influence of strategic management drivers on performance of selected engineering firms in Nairobi County?

Research Objectives

i. To analyze the influence of technology capabilities on performance of large construction firms in Nairobi County in Kenya.
ii. To examine how corporate culture capabilities influences the performance of large construction firms in Nairobi County in Kenya.
iii. To establish how human resource capabilities influence the performance of large construction firms in Nairobi County in Kenya.
iv. To evaluate the influence of customer relationship management capabilities on performance of large construction firms in Nairobi County in Kenya.

LITERATURE REVIEW

Theoretical review

Resource-Based View

The theory upon which this study hinges upon is the resource-based theory of the firm. While this influential body of research within the field of strategic management was named by Birger Wernerfelt in his article A Resource-Based View of the Firm (1984), the origins of the resource-based view can be traced back to earlier research. Retrospectively, elements can be found in works by Coase (1937), Selznick (1957), Penrose (1959), Stigler (1961), Chandler (1962, 1977), and Williamson (1975), where emphasis is put on the importance of resources and its implications for firm performance (Conner, 1991; Rumelt, 1984; Mahoney and Pandian, 1992; Rugman and Verbeke, 2002). This theory argues that durable competitive advantage emerges from unique combinations of resources (Grant 2007) that are economically valuable, scarce, and difficult to imitate (Barney 1991). In this theory, the competitive advantage and superior performance of an organization is explained by the distinctiveness of its capabilities (Johnson, Scholes and Whittington, 2008). This theory is linked to the independent variable on human resource capabilities and corporate culture.

Contingency based Theory

The perspective of this theory originated from Joan Woodward in 1958. The development of contingency approach was stimulated by managers, consultants and researchers who tried to apply the concepts of the major schools of management to real-life situations. They often found that methods that were highly effective in one situation would not work in other situations. They discovered that a technique that works in one case may not necessarily work in all cases because of differences in their respective situations. The contingency theory draws the idea that there is no one or single best way or approach to manage organizations. Organizations should then develop managerial strategy based on the situation and condition they are experiencing. Contingency theory argues that under different circumstances, different solutions may prove effective (Shoech, 2009) instead of propagating universally applicable organization management principles, the theory tries to demonstrate that different circumstances that require different organization structures (Kihara, 2015). Organizations are affected by a number of
contingencies including size, environment and technology. These contingencies are responsible for developing the specific structures and activities of an organization. This theory is linked to the independent variable on technical capabilities due to change in technology.

**Network View Theory**

From the resource based view, it is clear that firms have the potential to provide enduring competitive advantage when they are inimitable and not readily substitutable (Peteraf, 2008). An important source of the creation of inimitable value-generating resources lies in a firm’s network of relationships (Gulati, Nohria & Zaheer, 2010).

Gnyawali and Madhavan (2011) distinguish four sets of arguments why resources in external networks are important to a firm: Relationships in a network are potential conduits to internal resources held by connected actors; External economies (i.e. capabilities created within a network of competing and cooperating firms) often complement firms’ internal resources; The rate of return on internal resources is determined by how well structured the firm’s network is; A firm’s position in a network contributes to its acquisition of new competitive capabilities. Thus, a firm’s network allows it to access key resources from its environment, such as information, access, capital, goods, services and so on, in order to gain potential to maintain or enhance a firm’s competitive advantage (Gulati et al., 2009).

**Empirical Review**

A study of performance in technology-based firms in Kenya by Kinot (2009) indicated that investment in research and development directly contributed to higher performance of a firm. However Kinot only analyzed a direct relationship between technology and performance without taking into account any mediation. Mu, Peny and Maclachian (2009) emphasized the spirit of creating novel business out of continuing practices for valuability of a product and reinvigorating sluggish companies which often accomplish their objectives through the introduction of breakthrough innovation to make it hard for competitors to copy, making a firm’s performance greater than the contenders’. In a survey study by Rhee et al., (2010), technology is linked to greater firm innovativeness. A quantitative survey by Benedetto and Mu (2011) pointed out that innovation brings out new products, services and processes which are as a result of new ideas, experimentation and creativity. Anal et al., (2011), concluded that innovativeness and performance have a positive relationship, due to the existence of uniqueness and inimitability of the products. Studies on compensation indicate that designing compensation system that reinforces the organizations business strategy can make the organization more competitive and increase its effectiveness. To create a high performance, compensation philosophy must reinforce and reflect organization culture, external environment and business strategy (GomezMejia and Balkin, 2006).

**METHODOLOGY**

The study adopted a descriptive study to establish the associations among the key study variables, to verify results and enable greater accuracy in measurement. A cross-sectional survey design was the specific design that was used. The advantage of this design over others is that data collection is less expensive and within a short time. The target population of the study consisted of 1220 construction firms in Nairobi County which experiences massive construction projects in Kenya. For descriptive statistics, ten percent of the accessible population is enough as the target population. Mugenda (2003), a sample of ten percent of the accessible will be therefore used. Disproportionate Stratified sampling will be used to select the construction firms. The
selected construction firms were selected for the study because they have clear and consistent organizational structures which imply that the results can be generalized without a lot of errors. From this, a sample of 120 construction firms was obtained. The study used Primary and Secondary data. Collection of data will be via self-administered questionnaires for the independent variables and organizational records for the dependent variable. Analysis of quantitative data was via descriptive statistics by means of SPSS (Version 21) and presentation done via percentages, means, standard deviations and frequencies. Quantitative data was measured through correlation coefficient to establish initial relationships between variables Karl Pearson’s Zero Order coefficient of correlation test will be used to compare observed data with the data the researcher had hypothesized (Kothari 2012). The model used for this analysis is multiple regression analysis which is as follows:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

Where: \( Y \) = Dependent variable (Construction firm performance), \( X_1 \) = Independent variable 1 (Technical Capabilities), \( X_2 \) = Independent variable 2 (Corporate Culture capabilities), \( X_3 \) = Independent variable 3 (Human Resource Capabilities), \( X_4 \) = Independent variable 4 (Customer Relationship Management capabilities), \( \beta_0 \) = Constant term, \( \beta_1 \) – \( \beta_4 \) = Regression coefficient for each Independent variable used to measure the sensitivity of the dependent variable (\( Y \)) to unit change in the predictor variables., \( \varepsilon \) = Random or Stochastic Term which will capture the unexplainable variations in the model.

RESEARCH FINDINGS AND DISCUSSION

**Response Rate**
Response rate is defined as the number of collected questionnaires based on the distributed and administered questionnaires. High response rates are important to ensure that there is no un-response bias and to have the findings being representative of the population targeted. In the current study, 120 questionnaires were distributed to the targeted large construction firms. Out of the 120 distributed questionnaires, 93 were successfully collected which was a response rate of 77.5%. This response rate was considered adequate following Groves et al. (2004) observation that a response rate of 50% and above is considered adequate for paper based questionnaires.

**Years of respondents working in the firm**
The first demographic characteristic enquired in the study was the years which the top level managers have been working with the firms. The results are shown in Table 1. The results show that 44 (47.3%) of the respondents had worked for 10-15 years, 22 (23.7%) of the respondents had worked for 5-9 years, 17 (18.9%) of the respondents had worked for more than 15 years and 10 (10.8%) of the respondents had worked for less than 5 years. The study indicated that most of the top level managers in these firms had 5-15 years’ experience.
Table 1: Years of working in the firm

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>10</td>
<td>10.8</td>
<td>10.8</td>
</tr>
<tr>
<td>5-9 years</td>
<td>22</td>
<td>23.7</td>
<td>34.4</td>
</tr>
<tr>
<td>10-15 years</td>
<td>44</td>
<td>47.3</td>
<td>81.7</td>
</tr>
<tr>
<td>More than 15</td>
<td>17</td>
<td>18.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Category of the firm in NCA
The results show that 55 (59.1%) of the firms were registered under NCA 1 and 38 (40.9%) were registered under NCA 2 as shown in Table 2. The study indicated that most of the large construction firms were NCA 1.

Table 2: Category of the firm

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCA 1</td>
<td>55</td>
<td>59.1</td>
<td>59.1</td>
</tr>
<tr>
<td>NCA 2</td>
<td>38</td>
<td>40.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Current employees in the firm
The results also indicated that most of the sampled large construction firms had 300 and above employees at 32.3% as indicated in Table 2.

Table 2: Current Employees

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 and below</td>
<td>17</td>
<td>18.3</td>
<td>18.3</td>
</tr>
<tr>
<td>101-200</td>
<td>21</td>
<td>22.6</td>
<td>40.9</td>
</tr>
<tr>
<td>201-300</td>
<td>25</td>
<td>26.9</td>
<td>67.7</td>
</tr>
<tr>
<td>300 and above</td>
<td>30</td>
<td>32.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Level of education
The highest level of education for the respondents was also enquired. The results are presented in Table 3. Study findings reveal that 17.2% of the respondents had PhD level of education, 34.4% of the respondents had undergraduate level of education while 36.6% of the respondents had postgraduate level of education and 7.5% of the respondents had diploma level of education. These findings indicate that the respondents had requisite level of education to understand the questionnaire items and also to respond about the subject matter.
Table 3: Level of education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD Degree</td>
<td>16</td>
<td>17.2</td>
<td>17.2</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>34</td>
<td>36.6</td>
<td>53.8</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>32</td>
<td>34.4</td>
<td>88.2</td>
</tr>
<tr>
<td>Diploma</td>
<td>7</td>
<td>7.5</td>
<td>95.7</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>4.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Influence of technology capabilities on performance of construction firms in Nairobi County in Kenya.

The findings revealed that to a great extent the construction firms embrace changes in information technology to influence the performance of the firm with a mean of 3.71. These construction firms also practice Sales Force Automation to increase our firms’ revenue with a mean of 3.65. The findings also revealed that to a moderate extent construction firms implement workforce automation to improve our performance with a mean of 3.23. The influence of technical capabilities on construction firm performance showed that technology greatly influences the performance of construction firms. These positive results are supported by an interactive research conducted by Lall (2012) who saw that technical capability as a continuous process to absorb and to create technological knowledge from the interaction with the environment and the accumulation of skills and knowledge mastered by a firm. He pointed out that, the firm’s technical skills, research and development resources and technological stand appear to be critical in passing originality and better deliberated products into the market, hence the firm’s superior performance (Lall, 2012). The concept of technological capability embraces the generation of new knowledge and learning. Calantone, Cavusgil and Zhao (2010), say that learning leads a firm to innovate, which affects its performance.

Table 4: Technical Capabilities

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>We implement workforce automation to improve our performance</td>
<td>93</td>
<td>3.23</td>
<td>.979</td>
</tr>
<tr>
<td>We embrace changes in information technology to influence the performance of our firm</td>
<td>93</td>
<td>3.71</td>
<td>.829</td>
</tr>
<tr>
<td>We practice Sales Force Automation to increase our firms revenue</td>
<td>93</td>
<td>3.65</td>
<td>.868</td>
</tr>
</tbody>
</table>
Influence of corporate culture on the performance of large construction firms in Nairobi County in Kenya

The findings of this study revealed that to a great extent the construction firms practice Healthy organization practices to improve the performance of the firm with a mean of 4.23, are committed to the organization mission with a mean of 4.17 as well as committed to the vision of the organization with a mean of 4.01. The influence of corporate culture capabilities on construction firm performance showed that the mission, vision and health organization practices greatly influence the performance of construction firms. These positive results are supported by Musek Lešnik (2008) summarized that; first, better performing companies have better, clearer and stronger mission and vision statements, and secondly, process of identification of organizational values is positively related with performance of a company. This was also supported by Kandula (2007) who concluded that key to good performance is a strong corporate culture. He further maintained that due to difference in corporate culture, same strategies do not yield same results for two organizations in the same industry and in the same location.

<table>
<thead>
<tr>
<th>Table 5: Corporate culture capabilities</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization commitment to its vision.</td>
<td>93</td>
<td>4.01</td>
<td>.814</td>
</tr>
<tr>
<td>Organization commitment to its mission.</td>
<td>93</td>
<td>4.17</td>
<td>.583</td>
</tr>
<tr>
<td>Healthy organization practices to improve the performance of the firm.</td>
<td>93</td>
<td>4.23</td>
<td>.709</td>
</tr>
</tbody>
</table>

Influence of Human Resource Capabilities on the performance of large construction firms in Nairobi County in Kenya

This study found out that human resource capabilities were influenced to a great extent by Training and development, health and safety as well as change management. Training and development to enhance employees’ skills influence human resource capabilities by a mean of 4.23, Health and safety of employees to provide a conducive working environment with a mean of 3.74 and Change management process in the organization with a mean of 3.71. The findings of this study indicated a great influence of construction firm performance by human resource capabilities. These findings are supported by (Hoque, 2009) who concluded that in order for these firms to embrace HRM practices that match their organizational setup so as to achieve super performance. These practices play a bigger role in distinguishing firms from one another and as much as an organization adopts its distinct HRM practices, it is capable of competing favorably in the industry that is operating in.
Table 6: Human Resource capabilities

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and development to enhance employees’ skills</td>
<td>93</td>
<td>4.23</td>
<td>.709</td>
</tr>
<tr>
<td>Health and safety of employees to provide a conducive working environment</td>
<td>93</td>
<td>3.74</td>
<td>.750</td>
</tr>
<tr>
<td>Change management process in the organization</td>
<td>93</td>
<td>3.71</td>
<td>.746</td>
</tr>
</tbody>
</table>

Influence of Customer Relationship Management on the performance of large construction firms in Nairobi County in Kenya
The findings of this study established that Customer Relationship Management was to a great extent influenced by customer feedback, customer service and market practices. The findings indicate that customer feedback influences performance of construction firm with a mean of 4.46, customer service with a mean of 3.77 and marketing practices with a mean of 3.78. Customer Relationship Management was measured by three constructs in this study to evaluate its influence on the performance of construction firms. The findings of this study indicated a great influence of CRM on firm’s performance. This was supported by Schultz (2012) that as competition in the construction industry intensifies; constructors have learnt to shift their strategies from customer acquisition to customer retention and loyalty, which is only possible with effective customer satisfaction.

Table 7: Customer Relationship Management

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer feedback influences the performance of our organization</td>
<td>93</td>
<td>4.46</td>
<td>.716</td>
</tr>
<tr>
<td>Our Customer Service influences the performance of our firm.</td>
<td>93</td>
<td>3.77</td>
<td>.628</td>
</tr>
<tr>
<td>We practice marketing to improve on our firm performance</td>
<td>93</td>
<td>3.78</td>
<td>.735</td>
</tr>
</tbody>
</table>

Performance of Large Construction Firms in Nairobi County, Kenya.
This study found out that the performance of the sampled firms has been improving after a trend analysis from 2012 to 2016. The construction turnover of these firms between 2012-2016 increased gradually from 500Million to over 1 Billion, however the analysis presented the averaged data over the period. The results indicated that the performance of this firm was improving because construction turnover was increasing annually over the studied period as indicated in Figure 4.1. The projection completion of these firms was also impressive and
improving since they recorded 90% and above completion rate from the required standards of 90%. The market share of the firms also grew because of undertaking massive projects in different counties in the country after the introduction of devolution system by the Government of Kenya. This was indicated since most of the firms managed to execute over 200 projects from 2012-2016 as indicated in Figure 4.2

![Construction Turnover Trend analysis](image1.png)

**Figure 2: Construction Turnover Trend analysis**

![Number of Completed Projects Trend analysis](image2.png)

**Fig 3: Number of Completed Projects Trend analysis**

**Correlation Results**

In order to determine the relationship between the variables under study, the study used Karl Pearson’s product moment correlation analysis. The findings were as shown in the table below:
### Table 8: Correlation Results

<table>
<thead>
<tr>
<th></th>
<th>Construction firm performance</th>
<th>Technical capabilities</th>
<th>Corporate Culture</th>
<th>Human Resource</th>
<th>Customer Relationship Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction firm</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical capabilities</td>
<td>Pearson Correlation</td>
<td>.027</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Culture</td>
<td>Pearson Correlation</td>
<td>.136</td>
<td>-.065</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.193</td>
<td>.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resource</td>
<td>Pearson Correlation</td>
<td>.063</td>
<td>.035</td>
<td>.050</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.550</td>
<td>.742</td>
<td>.636</td>
<td></td>
</tr>
<tr>
<td>Customer Relationship</td>
<td>Pearson Correlation</td>
<td>.027</td>
<td>-.020</td>
<td>.038</td>
<td>-.027</td>
</tr>
<tr>
<td>Management</td>
<td>Sig. (2-tailed)</td>
<td>.798</td>
<td>.852</td>
<td>.721</td>
<td>.798</td>
</tr>
</tbody>
</table>

Pearson’s correlations analysis was conducted at 95% confidence interval and 5% confidence level. The table above indicates the correlation matrix between the strategic management drivers and performance of construction firms. According to the table, there is a positive relationship between construction firms’ performance and the strategic management drivers which include Technical capabilities, Corporate Culture capabilities, Human Resource capabilities and Customer Relationship Management capabilities as indicated by Pearson’s correlation of 0.027, 0.136, 0.063 and 0.027 respectively.

### Regression Results

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions. The model summary are presented in the table below.
The study used coefficient of determination to evaluate the model fit. The adjusted $R^2$, also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. The model had an average adjusted coefficient of determination ($R^2$) of 0.553 and which implied that 55.3% of the variations in construction firm performance are explained by the independent variables understudy (Technical capabilities, Corporate Culture capabilities, Human Resource capabilities and Customer Relationship Management capabilities).

**ANOVA**

The regression tables usually report both this F-statistic and its significance. The test of significance for the F-statistic measures the probability that none of the independent variables in the model are correlated with the dependent variable beyond what could be explained by pure chance (due random sampling error). The F calculated at 5 percent level of significance was 29.812. Since F calculated was greater than the F critical (2.664), this shows that the overall model was significant.

**Table 10: ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>26575138.039</td>
<td>4</td>
<td>6643784.510</td>
<td>29.812</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>19834127.237</td>
<td>89</td>
<td>222855.362</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>46409265.277</td>
<td>93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the findings of this study, the regression model's significance statistic for the F-test indicates that there is essentially no chance that the observed correlation between one or more of the independent variables (Technical capabilities, Corporate Culture capabilities, Human...
Resource capabilities and Customer Relationship Management capabilities) and the dependent variable (Construction firm performance) is due solely to random sampling error. Thus, the data was ideal for making a conclusion on the population parameters as the value of significance was less than 5%. In addition, the study used the coefficient table to determine the study model. The findings are presented in the table below.

### Regression model Coefficients

#### Table 11: Regression model Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.997</td>
<td>1007.885</td>
<td>.002</td>
<td>.998</td>
</tr>
<tr>
<td>Technical Capabilities</td>
<td>.139</td>
<td>.038</td>
<td>.222</td>
<td>3.680</td>
</tr>
<tr>
<td>Corporate Culture capabilities</td>
<td>.377</td>
<td>.071</td>
<td>.307</td>
<td>5.295</td>
</tr>
<tr>
<td>Human Resource Capabilities</td>
<td>.158</td>
<td>.015</td>
<td>.605</td>
<td>10.321</td>
</tr>
<tr>
<td>Customer Relationship Management capabilities</td>
<td>.662</td>
<td>.118</td>
<td>.343</td>
<td>5.635</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Construction firm performance

As per the SPSS generated output as presented in table above, the equation \((Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon)\) becomes:

\[Y = 1.997 + 0.139X_1 + 0.377X_2 + 0.158X_3 + 0.662X_1\]

From the regression model obtained above, a unit change in technical capabilities holding the other factors constant would lead to change in construction firm performance by a factor of 0.139. In addition, a small change in corporate culture capabilities holding the other factors constant would increase construction firm performance by 0.377. A unit change in human resource capabilities holding the other factors constant would increase the construction firm performance by 0.158 while a unit change in customer relationship management capabilities holding the other factors constant would change construction firm performance by 0.662. This implied that customer relationship management capabilities had the highest influence on the performance of construction firms followed by technical capabilities then human resource capabilities and finally human resource capabilities.

### Conclusion

The study concluded that technical capabilities was the second highest variable that had influence on the performance of large construction firms in Nairobi County. Improved workflow automation, information technology and sales force automation were noted to have a positive influence on the performance of large construction firms. The study established that human resource capabilities was the third highest variable that had influence on the performance of large construction firm in Nairobi County. The results from the findings showed that training and
development had a greater impact on the firms performance supported by healthy and safe working environment and change management in the organizations. Finally, the study concluded that corporate culture capabilities was the lowest variable that influenced the performance of large scale construction firms in Nairobi County. Moreover, the vision of the firm, the mission of the firm and organizational practices had great influence on the firms performance.

Recommendations
The study recommends that managers be more careful when interacting with customers because it was established that CRM was key in influencing firm performance. From the literature review customer service plays a crucial role in performance of a firm since it enables them to gain a competitive edge in today’s service economy. Marketing helps sales representatives manage their time and activities as well as their clients lists, products, price lists, orders and documents thus increasing performance for many firms. The study highlighted the importance of human resource capabilities to the performance of manufacturing firms specifically in the Kenyan context, Nairobi. Management of these firms should ensure that they have competent human resource so as to gain sustainable competitive edge against their competitors.

Training and development is very important in an organization and it is the responsibility of the managers to provide their employees with these opportunities so that they can reach their full potential and improve overall organization performance. The shareholders and management should also ensure that the employees are working in safe and healthy environment so as to improve their welfare therefore increasing productivity. Change management should be well handles in the disruptive business environment with the management working with the employees successfully to implement the needed process, technology or organizational changes. Third, it is recommended that construction firms ought to identify the cultural values that have strength and yield positive influence to the respective firms. This is because firms that have a clear focus on dynamism in cultures are bound to succeed as indicated by better financial returns which are used to mark firm’s performance.

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