Influence of Organizational Innovation Capabilities on Sustainable Competitive Advantage among Private Hospitals in Kenya

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Abstract
The purpose of this study was to establish the influence of organizational innovation capabilities on sustainable competitive advantage among private hospitals in Kenya. Positivism research philosophy guided the study and a descriptive correlational research design was used. The study population consisted of 690 managers from the 46 level 5 private hospitals across Kenya. Stratified simple random sampling technique was used to select a sample size of 253 managers from the population. A structured questionnaire was applied to collect data. The study used structural equation modelling for analysing the data. The study findings established that organizational innovation capabilities had significant positive effect on Sustainable Competitive Advantage (SCA) among the private hospitals in Kenya (β=0.617, CR=3.904, p < 0.05). The study has practical implications for top management in private hospitals in Kenya to continually support acquisition and development of new resources. Management should also make required investment in Research and Development (R&D) activities to provide improved services to clients, and always encourage creativity amongst the employees and other stakeholders in order to improve on their organization offerings and appeal.

Key Words: Organizational Innovation Capabilities, Sustainable Competitive Advantage, Private Hospitals, Kenya

Introduction
Sustained competitive advantage (SCA) is the key to organizational success in today’s dynamic and complex operating environment (Barney, 1991). It comprises of an organization’s resources and abilities that are difficult to be surpassed by rivals, thus proving a superior long term advantage (Barney, 1997; Hoffman, 2000; Hossain et al., 2021). This long term advantage according to Porter (1985), can be influenced by generic strategies. Besides, Barney (2002) argued that value, rareness, imitability, and organization aspects of an organization’s resources are the key sources of gaining and sustaining competitive advantage. The perceived source of competitive advantage, whether from internal or external factors, has led to different schools of thought (Singh et al., 2018). Some scholars have addressed it from a market based model which views it as being driven by external factors (Barney, 1997; Torres et al., 2018) others view it from a resource based model, thus pegging its influence as being driven by factors internal to the organization (Barney, 1991; Bharadwaj et al., 1993; Li et al., 2021). This difference in schools of thought adds to the dilemma of what exactly constitutes a strategy that would enable an organization to achieve and sustain its competitive edge (Mahdi & Nassar, 2021).
The existing empirical and theoretical literature have indicated that to cope in this turbulent environment is to develop SCA (Longo et al., 2019; Singh et al., 2020). However, the current dynamic environment, constraints the traditional strategic planning and strategy creation processes which are characterised by prolonged analysis and meticulous planning (Mazzoni et al., 2021; Sousa, 2010). The hypercompetitive environment has forced organizations to seek new competitive advantage sources at an increasingly shorter time span (Baskarada & Koronios, 2018). The nascent is further complicated, as identified opportunities are unpredictable and short-lived (Eisenhardt & Bingham, 2017) which then demands for agility and speed (Appelbaum et al., 2017), as best strategies are inept if they take too long to actualize (Glassman et al., 2015). Thus, to actualize and sustain a competitive advantage in the nascent environment, organizational innovation comes to fore. Creativity and innovative capabilities can enable organization to better cope with environmental volatility through establishment of unique organizational processes and distinct strategies (Nelson & Quick, 2006).

Where an organization becomes synonymous with innovation, it establishes a dynamic and sustainable strategic position that competitors cannot match (Racela, 2014; Vadastreanu et al., 2015). Accordingly, the propensity of an organization to innovate represents a dynamic capability that influences the overall competitive advantage sustainability significantly (Labitzke et al., 2014). Organizations are more exposed than ever before to the threats, as well as the opportunities posed by rapid technological change, which is compounded by customers better access to information (Agwunobi & Osborne, 2016). Inculcating innovation in the organization requires practical tools, mechanism and processes that employees routinely use in order to convert innovation into organizational capability (Ukko et al., 2016). Innovation capability as a theoretical framework, describes the organizational undertakings that can enhance the success of innovation activities (Lawson and Samson, 2001). Hence, focus is directed on the defining factors which are the dimensions that underlie an organization capability to innovate (Ukko et al., 2016). Linking innovation activities with strategy as well as having a shared vision of innovation, is integral when developing innovation capability (Saunila, 2016).

However, despite the general empirically supported significance of organizational innovation, research in the field remains fragmented, weakly grounded in theoretical realms, not exhaustively tested in different settings and areas (Chatzoglou & Chatzoudes, 2018). There remains a need for further research into the relationship between organizational innovation and its performance as the extant empirical investigation is weak (Laforet, 2011). Nonetheless, the poor empirical investigation and research fragmentation also extends to the examination of the relationship between organizational innovation and competitive advantage (Ardyan et al., 2017; Chatzoglou & Chatzoudes, 2018; Mady et al., 2022; Yada et al., 2017). In addition, less interest has been directed to indicating the effects of different constructs of innovation capabilities such as effective resource management, enabling work environment, and stakeholders engagement on Sustainable competitive advantage(Ukko et al., 2016).

The business environment volatility has not spared any sector including the healthcare sector, and hospitals have continued experiencing tough competition within their business ecosystem (Siciliani & Straume, 2019). In Kenya the healthcare space experiences the same turbulence as witnessed in other regions which puts pressure on the organizations in the sector. The healthcare sector in comprises the public and private sector, where the former is generally government owned or run. The private sector consists of the for-profit or commercial, faith
based organization (FBO) and non-governmental organization (NGO) sub sectors (Muga et al., 1999; NEA, 2016). Collectively, the healthcare facilities are segregated into 6 levels defined by services and facilities offered. This is scaled from level one that comprises the least offering to level 6 that offers the most, relative to the other levels (KMPDC, 2021; Mariita, 2019). Level 6 comprises of only 2 government referral hospitals. Hence the apex of the most advanced, and competitive for the private sector is the level 5 that comprises of 42 private and 4 public health care facilities (KMPDC, 2021).

The turbulence in the external environment has not spared the health sector in Kenya and even private multi-practice hospitals (PMPHs) in Kenya are facing intense competition from different sources and having just a multispecialty offering does not suffice (Singh et al., 2020). This inability to cope and adjust to the changes has resulted in diminished patient and stakeholders’ confidence, poor performance, losing patients to competitors and being faced with imminent danger of bankruptcy (Cooper et al., 2011; Agwunobi & Osborne, 2016; Singh et al., 2020). Consequently, hospitals are struggling to overcome the heightened competition due to inability to match up to the increasing health care demands (Gudwani et al., 2012; Singh et al., 2020). In the Kenyan context, a study revealed that despite facilities being well equipped with highly specialised equipment, the healthcare system faces challenges of ineffective processes and inadequate personnel for undertaking tasks, as well as healthcare financing challenges (KHF, 2018) factors that directly impede their attainment of sustainable competitive advantage. This study sought to establish the influence of organizational innovation capabilities on sustainable competitive advantage among private hospitals in Kenya.

**Literature Review**

**Theoretical Review**

This research was anchored on the resource based view (RBV) theory by Wernerfelt (1984) which depicts resources and capabilities as bundles of tangible and intangible assets, which that includes management skills, organization processes and routines. These can enable an organization to conceive, choose and implement strategies that enhance their positioning. From the extant literature it can be established that these assets are important for understanding the sources of sustained competitive advantage (Barney et al., 2011). This theory indicates that innovation capability is a significant success factor for the growth and future performance of organizations, and is considered a valuable resource by which the organizations can sustain competitive advantage (Ukko et al., 2016). Thus developing innovation capability is regarded as critical for the success of organizations (Lillis et al., 2015; Saulina, 2016; Tang et al., 2015). Though studies have been undertaken to explore the relationship between capabilities and strategy formulation (Aktürk & Kurt, 2016; Bowman & Ambrosini, 2003; Lopez-Cabarros et al., 2015), there is little comprehension on how innovative capabilities develop in the service organization (Lillis et al., 2015), despite the dominance of the sector in most developed economies (Donofrio, 2010). This has indeed made research into the aspect as one of the top research priorities in science of service (Ostrom et al., 2010), as innovative capability can be an avenue to obtain and sustain competitive advantage in the service organizations (Barney, 1991; Lillis et al., 2015).

**Empirical Review**

Extant literature has factored innovation capabilities as the main force behind organizational success as mirrored in its competitive advantage sustenance. Chatzoglou and Chatzoudes (2017) affirmed this outlook in their study findings that looked at the role of innovation in building competitive advantage. The empirical data that was analysed using structural equation
modelling technique found that most of an organization’s propensity to develop competitive advantage can be explained by organizational innovation. This is further supported by the findings where innovation antecedents, namely intellectual capacity, knowledge management and organizational capabilities are seen to have significant influence on each other. Thus insinuating the need to have and enhance all the factors together and collectively to realize sustained competitive advantage (Chatzoglou & Chatzoudes, 2018). Another study by Anning-Dorson (2018) established that innovation is a critical strategic option with the capability to address the growing dynamic environmental demands that require organizations to develop SCA. Further, Kuncoro and Suriani (2018) examined product innovation relationship with sustained competitive advantage. In its finding, product innovation was found to have a positive significant influence on sustained competitive advantage, whereby it explained 45.3 percent of its variance. These findings showed that the better the product innovation, the better the competitive advantage sustainability.

The extreme rise in competition that characterises the hospitality sector leads to greater emphasis on unravelling the underlying factors that influence sustained competitive advantage (Hossain et al., 2021). In this regard, Mady et al.(2022) purposed to examine the impact of eco-innovation drivers on SCA. In its findings, process innovation and organizational innovation were found to positively impact sustained competitive advantage. This may be as a result of the SME managers taping into these form of eco innovation in order to have cost advantages as opposed to differentiation especially with limited environmental awareness (Li, 2014). This findings were supported by results obtained from other studies (Barforoush & Etebarian, 2021; Colicchia et al., 2017; Jabbour et al., 2017; Miroshnychenko et al., 2017) that found product and process innovation could influence competitive advantage. These findings were in line with Srivastava’s which showed that sustained competitive advantage is attained by organization through their ability to develop competences that they can service their customers better than their competitors (Srivastava et al., 2013). Also in support was the study by Schreibar et al. (2016) that found that product innovation was mainly to expand and sustain an organization’s market by fulfilling its demands.

In a heightened competitive market environment, continuous innovation is reckoned as one of the key drivers for organization to sustain their market position and attain competitive advantage (Keiningham et al., 2020). A study by Li et al.(2021) sought to examine how mature organizations can attain sustained competitive advantage through innovation in a dual innovation context. Where dual innovation was defined as organization capability to simultaneously pursue both exploratory and exploitative innovation (Xie & Gao, 2018). The results established that dual innovation in both its collaborative and complementary nature is positively associated with sustained competitive advantage. Equally, it was found to have a significant impact on performance which subsequently had a significant influence on sustained competitive advantage. These findings are supported by results of Xie and Gao (2018) which found that dual innovation has a positive influence on organization performance and long term sustainability. However other studies (Howell, 2015; Ilayda & Kumar, 2017) have found that not all innovation enhances sustained competitive advantage and in some cases the enhancement is subject to certain conditions such as enabling work environment, engagement of stakeholders and effective resource application.
Conceptual Framework
Figure 1 presents the conceptual framework which illustrates the hypothesized relationships. Organizational innovation capabilities is the ability of an organization to continuously learn, transform knowledge, ideas, and exploit its resources with the aim of generating innovative new outcomes/ offerings (Iddris, 2016), that are beneficial to both the organization and its stakeholders (Lawson & Samson, 2001). Organizational innovation capabilities demand the deployment and interaction of an organization’s resources, with the aim of enabling innovation and facilitation of superior performance realization (Mendoza-Silva, 2020). Hence possession of effective resource management and its dispensation plays a critical role (Rahman et al., 2015) in the organization ability to continuously acquire innovation, explore ideas, institute innovative attempts, absorb failure and eventual channelling out new offerings (Wan et al., 2005). An organization that fosters an enabling work environment that supports ideation and creativity is critical to its ability to be innovative as supported by several theoretical studies (Lawson, 2001; Skarzynski & Gibson, 2008; Wan et al., 2005). This is because innovation capability requires an open, collaborative culture, and incentives that reward challenging the status quo. Engagement with external stakeholders such as customers, suppliers, industry associates as well as competitors enables an organization gather missing external inputs and knowledge that affects its innovation capability and of which in isolation it cannot provide (Saunila & Ukko, 2014). The dependent variable is sustainable competitive advantage which is measured through market share, sustainability of accreditation(s), corporate image, and superior quality of products/services (Agwunobi & Osborne, 2016).

Methodology
This study was guided by the positivism research philosophy and a descriptive correlational research approach as the study sought to describe, explain and validate the findings of the influence of social capital integration capabilities of the PMPHs on sustaining their competitive advantage. Correlation aspect helped in testing and explaining the relationships among the variables under consideration (Creswell & Creswell, 2018).

The target population for this study comprised of 690 employees drawn from the 46 level 5 private hospitals located in Kenya, as at March 2021 (KMPDC, 2021). The unit of analysis who were the employees consisted of the 4 administrative heads, 10 heads of specialist units/ departments, and the CEO/Administrator of each of the 46 hospitals. The sample size 253 was derived based on Yamane (1967) sample size formula.

This study used a structured questionnaire to collect primary data. Descriptive statistics that included means and standard deviations were used in the analysis to provide a summary of the
results while structural equation modelling (SEM) was used to test the influence of social capital integration capabilities on sustained competitive advantage. SEM was performed using Analysis of Moment Structures (AMOS) package that was added on into Statistical Package for Social Science (SPSS) version 26. The hypothesized regression equation was:

\[
\text{Sustained competitive advantage} = \beta_0 + \beta_1 \text{Organizational innovation capabilities} + \epsilon
\]

**Findings**

A total of 253 questionnaires were administered to the respondents, with 215 being properly completed and returned. This corresponded to a response rate of 85 percent. Males made up 61.9 percent of the respondents, while females made up 38.1 percent. Besides, 30.7 percent of the respondents were between the ages of 36 and 40, while just 0.5 percent were beyond the age of 63. Majority of the study respondents (50.7%) had postgraduate degrees, while just 3.3 percent had college diplomas or certificates. Additionally, 39.1% of the respondents had worked in the private hospitals for a period between 6 and 10 years while only 2.8% had worked in the private hospitals for more than 20 years. Further, most of the respondents (65.6%) were heads of departments and 6.5% were CEO or administrators. Moreover, most of the respondents (71.2%) had worked in their current positions in the private hospitals for five years or less while only 0.9% had worked in their current positions in the private hospitals for more between 16 and 20 years.

**Descriptive Analysis for Organizational Innovation Capabilities**

The prevalence of organizational innovation capabilities was assessed on a five-point Likert scale (strongly disagree to strongly agree). Means (M) and standard deviations (SD) were used to analyze the responses. The descriptive statistics provided in Table 1 indicate that most of the respondents agreed that their private hospitals exhibited organizational innovation capabilities in all the three dimensions assessed. These comprised of enabling work environment (M = 4.16, SD = 0.46), stakeholder engagement (M=4.10, SD = 0.47) and effective resource management (M = 3.92, SD = 0.53). The standard deviations were low (below 1) indicating that there were minimal deviations around the means.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Resource Management</td>
<td>2.14</td>
<td>5.00</td>
<td>3.9176</td>
<td>.52720</td>
</tr>
<tr>
<td>Enabling Work Environment</td>
<td>2.00</td>
<td>5.00</td>
<td>4.1621</td>
<td>.46333</td>
</tr>
<tr>
<td>Stakeholder Engagement</td>
<td>2.57</td>
<td>5.00</td>
<td>4.0997</td>
<td>.47212</td>
</tr>
</tbody>
</table>

**Confirmatory Factor Analysis and SEM for Organizational Agility Capabilities**

CFA was conducted in order to assess the extent to which the observed data fitted the pre-specified empirical model. The findings indicated that the model was a good fit ($\chi^2 = 182.45; \text{DF}=122; \text{CFI}=0.95; \text{GFI}=0.97; \text{RMSEA}=0.05$). The study hence proceeded to fit the SEM. However, some diagnostic tests were conducted which included the test of outliers, linearity tests, test of normality of residuals, and heteroscedasticity test. The SEM was then fitted to assess the influence of organizational innovation capabilities (OIC) on sustainable competitive advantage (SCA). The latent variables in the path diagram are effective resource management (ERM), enabling work environment (EWE) and stakeholder engagement (SE). Results in
Figure 2 shows that based on the estimated structural equation model, for every magnitude increase in organizational innovation capabilities (OIC), sustainable competitive advantage (SCA) increases by 0.62. In this model, the R-square value implied that organizational innovation capabilities explained 38 percent of the variance in the sustainable competitive advantage ($R^2 = 0.38$) of private hospitals in Kenya.

\[ \chi^2 = 182.45; \text{DF}=122; \text{CFI}=0.95; \text{GFI}=0.97; \text{RMSEA}=0.05 \]

**Figure 2: SEM for Influence of Organizational Innovation Capabilities on Sustainable Competitive Advantage**

The study also developed the regression weights and estimates for the SEM model. The results are summarized in Table 2.

**Table 2: Regression Coefficients for Organizational Innovation Capabilities on Sustainable Competitive Advantage**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Estimate</th>
<th>Beta</th>
<th>S.E</th>
<th>CR</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.464</td>
<td></td>
<td>.211</td>
<td>2.193</td>
<td>.029</td>
</tr>
<tr>
<td>ERM (&lt;---)OIC</td>
<td>2.329</td>
<td>0.853</td>
<td>.588</td>
<td>3.961</td>
<td>0.000</td>
</tr>
<tr>
<td>EWE (&lt;---)OIC</td>
<td>2.510</td>
<td>1.021</td>
<td>.614</td>
<td>4.090</td>
<td>0.000</td>
</tr>
<tr>
<td>SE (&lt;---)OIC</td>
<td>1.000</td>
<td>0.922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCA (&lt;---)OIC</td>
<td>1.620</td>
<td>0.617</td>
<td>.415</td>
<td>3.904</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Study findings provided in Table 2 reveal a positive and statistically significant link between organizational innovation capabilities (OIC) and sustainable competitive advantage (SCA) (Beta = 0.617, CR=3.904, p < 0.05). As a result, the null hypothesis was rejected, thus...
concluding that organizational innovation capabilities have a significant positive influence on sustainable competitive advantage. The findings further indicate that an increase in organizational innovation capabilities would lead to a direct change of 0.617 in the sustainable competitive advantage of private hospitals. The resultant regression equation was;

\[ SCA = 0.464 + 0.617 \times OIC + \epsilon \]

The equation indicates that when organizational innovation capabilities are lacking in the private hospitals, sustainable competitive advantage of the private hospitals will be 0.464. Besides, improvement in organizational innovation capabilities would result to an improvement in sustainable competitive advantage, and vice versa.

**Discussion**

The study findings indicated that organizational innovation capabilities had a positive and significant influence on sustainable competitive advantage among private hospitals in Kenya. These findings led to the rejection of the null hypothesis that there is no significant influence of organizational innovation capabilities on sustainable competitive advantage, and acceptance of the alternative hypothesis. These findings support the RBV theory since it considers innovation capability as a significant success factor for the growth and future performance of organizations, and is considered a valuable resource by which the organizations can sustain competitive advantage (Ukko et al., 2016). Moreover, other authors such as Lillis et al. (2015), Saulina (2016) and Tang et al. (2015) consider innovation capabilities such as enabling work environment, effective resource management and effectively engaging with stakeholders as critical not just for short-term organizational performance but also for sustainable advantage of organizations. The findings from the study regarding the positive influence of organizational innovation capabilities on sustainable competitive advantage also resonate with the observation by Karia and Asaari (2016) who posited that the RBV provides a vital theoretical foundation to demonstrate the link between organizational innovation capability and sustained competitive advantage.

The findings of the positive influence of organizational innovation capabilities on sustainable competitive advantage converges with findings from previous studies. The findings collaborate the findings by Chatzoglou and Chatzoudes (2017) that affirmed the positive role played by organizational innovation capabilities in building sustainable competitive advantage. The study by Chatzoglou and Chatzoudes (2017) that analyzed empirical data that using structural equation modelling technique found that 65 percent of an organization propensity to develop competitive advantage can be explained by organizational innovation. This however shows that an organizations competitive advantage and indeed its sustenance is a multi-facet capability integration and not just a single capability driven outcome. Another study with similar findings was by Anning-Dorson (2018) which determined that organizational innovation capacity was vital for creation of competitive advantage. Another study by Burgess and Steenkamp (2006) determined that innovation is a critical strategic option with the capability to address the growing dynamic environmental demands that require organizations to develop sustainable competitive advantages.
Conclusion

The study concludes that organizational innovation capabilities are vital for sustainable competitive advantage among private hospitals in Kenya. Besides, the study determined that effective resource management, enabling work environment and stakeholder engagement were vital in the healthcare sector for hospitals seeking to attain sustainable competitive advantage. Based on this, it is recommended to senior management in private hospitals should effectively manage the limited resources that the hospitals have, create an enabling work environment, and effectively engage with stakeholders. Furthermore, senior management in private hospitals should continually support acquisition and development of new resources, make required investment in R&D activities to provide improved services to clients, and always encourage good working relationship between management and other employees. Besides, top management in private hospitals should always support an innovation culture in their employees and encourage communication across functional units. Additionally, as a key stakeholder in the healthcare sector, the government of Kenya through the ministry of health should be a critical source of information to improve operations in private hospitals. Moreover, the Ministry of Health should be in the frontline in supporting collaboration between private hospitals, universities, and other research centers to enable them to develop innovation capabilities for sustainable competitive advantage.

This study focused on the influence of organizational innovation capabilities on the sustainable competitive advantage of private hospitals in Kenya. While the study provided important findings, there are several other areas where further research may be done. First, these findings may not be generalizable to other lower-level private hospitals due to their differing resource capacities. Therefore, further research on organizational innovation capabilities and sustainable competitive advantage among hospitals in Level 4 category or lower, is recommended. Such a study would provide findings that would take into account the unique context and nature of these lower-level private hospitals that could be limited in resources as compared to those in level 5.

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