International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

Influence of Knowledge Management on Competitive Advantage in Medium and Large Garment Companies in Kenya

Antony Mulyungi Mwendwa[1], Dr. Wallace Atambo (PhD)[2], Mike Iravo (PhD)[3], Dr. Rukia Atikiya (PhD)[4]

[1, 2, 4]Jomo Kenyatta University of Agriculture and Technology, P.O. BOX, 62000-00200, Nairobi, Kenya

[3]Professor, Jomo Kenyatta University of Agriculture and Technology P.O. BOX, 62000-00200, Nairobi, Kenya

Abstract: ***This study sought to establish the influence of knowledge management on competitive advantage in medium and large garment companies in Kenya. A cross-sectional survey design was adopted using both qualitative and quantitative approaches. From a target population of 170 firms, 83 firms were drawn to form the sample for the study. Data was collected through questionnaires where a response rate of 86.7% was attained. Using linear regression analysis and analysis of variance, Null hypothesis was tested with the results indicating a moderate and positive linear relationship at statistically significance levels R = 0.415, R^2 = 0.172, p value = 0.000. It was therefore concluded that knowledge management is a predictor of competitive advantage in medium and large garment companies in Kenya. In regard to population under this study, the research recommends the adoption of incentives and culture that supports knowledge acquisition and utilization in Kenya's garment industry.***

Keywords: Knowledge management, Knowledge-Based View of the Firm, Competitive advantage

1. Introduction

The textile and garment industries were the archetypal drivers of early industrialization in both advanced and less developed countries (Natsuda, Goto,Thoburn, 2010). Currently, the garment sector still remains the main springboard for national development, and often is the typical starter industry for countries engaged in export-oriented industrialization due to its low fixed costs and its emphasis on labor-intensive manufacturing (Gereffi & Frederick, 2010). Globally the garment and textile industries employ 75 million people worldwide and has an estimated worth of $4.4 trillion (Solidarity Centre, 2016).

Although the global garment industry has been expanding at a rapid rate since early 1970s and providing employment to tens of millions of workers, the industry has endured regulative and economic challenges. For instance, the Multi-Fiber Arrangement (MFA), which established quotas and preferential tariffs on apparel and textile items imported into the United States, Canada, and other European nations was phased out by the World Trade Organization (WTO) between 1995 and 2005 (Gereffi & Frederick, 2010). Consequently, many poor and small developing economies that relied on apparel exports such as Sri Lanka, Mexico, Turkey and Kenya were pushed out of the global trading system by much larger, low-cost rivals, such as China, India, and Bangladesh (MacCarthy & Jayarathne, 2010). As with other industries around the world, the global economic recession of 2008 had negative ramifications on the garment sector as well; it led to factory shutdowns, sharp increases in unemployment, and social disorder as displaced workers sought new occupations (Gereffi & Frederick, 2010).

Equally notable are the impacts of consumer and competitive pressures; information and trends for instance, are moving around the globe at tremendous speeds, presenting consumers with more options. Changes in lifestyle due to sociocultural factors and need for uniqueness is forcing the industry players to renew merchandise constantly in order to deal with the growing competition in the market (Bhardwaj & Fairhurst, 2010). Additionally, complex global supply networks have emerged to flood clothing in world markets. The nature of these global networks poses significant challenges for rival firms such as the need for quick and precise response to customer demands and the need for innovative operational competencies (MacCarthy & Jayarathne, 2010).

1.2 Statement of the Problem

Since becoming a sovereign state in 1963, promoting the garment sector has remained a key priority of Kenya's economic policy (Onyango & Ikiara, 2011). The Kenya's garment sector is considered by policy makers, stakeholders and researchers as a potential source of job opportunities and a path to economic growth (Rael & Beatrice, 2012). However, since the phasing out of government protectionism and global quota systems in favor of liberalization in 1990s, Kenya's apparel sector has undergone a sustained decline to 50% of peak period (Fukunishi, 2013; World Bank; 2015; Chemengich, 2013). As the Kenya's clothing industry currently struggles to stay afloat in the fierce competition of liberalized markets, its counterparts in Asia, Europe and Central America are dominating the global markets and positively contributing to their respective national GDPs (Gereffi & Frederick, 2010). Consequently, adequate knowledge of determinants of competitive advantage can aid Kenya's garment firms in understanding the factors impeding competitiveness, and the factors that can help enhance it.

The major challenge in achieving the foregoing is, however, presented by the inadequacy of relevant studies focusing specifically on the Kenyan context; the apparel industries in Kenya and Sub-Saharan Africa have indeed been

extensively studied, but with more focus on the sector's recurrent challenges (Rael & Beatrice, 2012; Fukunishi, 2013), the role of preferential trade agreements (Chemengich, 2010; Mulangu, 2015) and the impact of imported second hand garments (Maina, 2013). Further, many studies on Kenya's apparel sector tend to focus on SMEs (Akoten & Otsuka, 2007; Ndalira, Ngugi & Chepkulei, 2013) and foreign owned companies in the Export Processing Zones (Rolfe & Woodward, 2005; Kindiki, 2011, Chemengich, 2010) while disregarding large garment firms that are mainly locally owned and governed by the Kenyan laws. Also, whereas the domain of competitive advantage and its determinants in garment sector has a vast empirical literature, such studies have for the most part focused on Asia (Sheng, Zhou & Li, 2011; Joarder, Hossain & Hakim, 2010), Central America and Europe (Gereffi & Frederick, 2010) while overlooking sub-Saharan countries such as Kenya.

Compounding these challenges are the varied views in regard to factors which constitutes critical determinants of competitive advantage; Harasim and Dziwulski (2012) for instance argues for the criticality of organizational culture and intellectual capital in an enterprise's levels of competitiveness. Camisón and Villar-López (2011) have highlighted the importance of organizational learning capabilities, whereas Viswanadham (2012) and McIvor (2013) have cited the central role of value delivery and manufacturing location decisions. Other researchers have proposed the notion of core competencies based determinants which are related to internal capabilities of organizations. On this basis, Prahalad and Hamel (1990) have routed for knowledge management as the major determinant, Liedong and Rajwani (2017), Haibin (2014) Nazlina (2016) have emphasized the importance of managerial networking, whereas Hill and Gareth (2012) have invented a framework of determinants which consists of four pillars namely; efficiency, quality, innovation and customer responsiveness. In view of the aforementioned knowledge gaps and divergent views, this study sought to examine independently and within the Kenya's garment industry context, one of the variables (i.e. knowledge management) which is recurrently identified as a key determinant of competitive advantage.

The overall objective of this study was therefore, to determine the influence of knowledge management on competitive advantage in medium and large garment companies in Kenya.

1.3 Theoretical Framework

The veritable explosion of knowledge management (KM) in the business scene has left many authors struggling to make sense of the large contemporary body of highly diverse work (Baskerville & Dulipovici, 2015). A notable consequence of this sense making has been the emergence of many theories which seeks to unravel the role and essence of the knowledge management phenomenon. Among the major theories on knowledge management are intellectual capital **(**Nerdrum & Erikson, 2001), knowledge economy (Demarest, 1997), core competencies (Prahalad & Hamel, 1990), dynamic capabilities (Eisenhardt & Martin, 2000), knowledge clusters and networks (Inkpen & Tsang, 2005), knowledge-based view of the firm (KBV) (Kirsimarja & Aino, 2015) and continuity management theory (Beazley, Boenisch & Harden, 2002). This study was specifically anchored on knowledge-based view of the firm for two main reasons; firstly, as a school of thought, the KBV logic is seemingly founded upon concepts that are drawn from numerous KM theories such as intellectual capital, core competencies, knowledge clusters and networks, and core competencies theories. Consequently, KBV appeared as a highly comprehensive theory upon which an exploration on knowledge management phenomenon could be anchored. Secondly, it was noted through theoretical review that KBV owes its roots to resource based theory of competitive advantage (RBT). Anchoring this study on KBV thus helped make sense of the theoretical link between knowledge management and competitive advantage.

1.3.1 Knowledge-Based View of the Firm (KBV)

The knowledge-based view considers knowledge as a distinctively unique resource (Kirsimarja & Aino, 2015) and views the ability to use, share, and create knowledge as a source of sustained competitive advantage (Sajadirad, 2018; Martín-de Castro, et al., 2011). The theory indeed suggests that the primary reason for the existence of a firm is its superior ability to integrate multiple knowledge streams, for applying prior knowledge to tasks as well as for creating new knowledge (Nguyen, Phan & Nguyen, 2016). Knowledge-based theory also indicates that a firm's ability to create, transfer, and deploy knowledge may be affected by the firm's internal attributes (Blome, Schoenherr & Eckstein, 2014) including absorptive capacity (Flatten, et al., 2011) and common knowledge (Edwards, 2012).

The knowledge-based view has its main foundation in the resource-based view (RBV) of the firm which focuses on strategic assets as the main source of competitive advantages (Moreno, Pinheiro & Joia, 2012; Kirsimarja, & Aino, 2015). It can therefore be inferred that knowledge is the main strategic resource and when properly managed, it allows the firm to create economic, social, intellectual and cultural value (Von Krogh, Nonaka & Rechsteiner, 2012). According to KBV, a firm is a knowledge-bearing entity that manages its knowledge resources through its combinative dynamic capabilities (Singh & Rao, 2016). From this perspective, it is recognized that knowledge resources underlie the company's products and services, and at the same time, that a firm utilizes its organizational capability to continually create new knowledge resources and exploit those that already exist (Donate & Guadamillas, 2011).

Some researchers have argued that whereas KBV has received tremendous attention as the basis for explaining differences in firm performance, the theory is still a contested and unmapped terrain with no unified clear-cut theories. In Witherspoon, et al. (2013) view, what is often lacking from KBV is an underlying definition of knowledge that allows future scholars to generate operationalizable models of the firm and its performance. López-Nicolás and Meroño-Cerdán (2011) have noted that, while all KBV scholars seem to agree that there are two types of knowledge - explicit and tacit – such scholars have also developed their own typologies in conjunction with their specific theories

(such as internal vs. external knowledge, know-how vs. know-what). It has further been noted that whenever scholars of KBV discuss organizational structure, it is mainly in the debate about the value and role of hierarchy (Mills & Smith, 2011). Hierarchies, according to Martín-de Castro, Lopez-Saez & Delgado-Verde (2011), have some negative features when it comes to knowledge tasks; tacit knowledge for instance is better coordinated in team-based settings, and flatter hierarchies may be more effective in the management of firms (Quintane, et al., 2011) in particular when managing dynamic capabilities (Zheng, Zhang & Du, 2011).

Many researchers still maintain that KBV connects well to a parallel stream of knowledge management in practice (Fransson, Håkanson & Liesch, 2011; Srećković & Windsperger, 2011; Reus, 2012; Alguezaui & Filieri, 2014; Blome, Schoenherr & Eckstein, 2014; Grant, 2015; Hörisch, Johnson & Schaltegger, 2015). They have noted that over the last few years, managers have become increasingly aware of the importance of managing the information resources and the knowledge of their employees, and that various techniques and instruments have been developed to this end.

2. Literature Review

2.1 Knowledge Management (KM)

Knowledge management as defined by Thakur and Sinha (2013) refers to the systematic process of creating, acquiring, synthesizing, learning, sharing and using knowledge and experience to achieve organizational goals. Thakur and Sinha (2013) further, asserts that the proper flow of information is essential for the growth and competitiveness of business entities. Girard and Girard (2015) defines knowledge management as the process of creating, sharing, using and managing knowledge and information in an organization. Leal-Rodríguez et al. (2013) regards knowledge management as a vital asset for competitive advantage and which dynamic firms ought to pay considerable attention to. Extant literature indicates that knowledge management for organizational competitiveness can be fostered by undertaking frequent knowledge audits (Jafari and Payani, 2013); embracing a knowledge sharing culture (Gholami et al., 2013) and rewarding knowledge sharing behavior (Boer, Berends & Van Baalen, 2011).

2.1.1 Knowledge Audits

Knowledge audits as per Jafari and Payani (2013) are surveys that measures knowledge use, organizational receptiveness to knowledge, value of available knowledge, KM opportunities, deficiencies, and gaps and problem areas. Drus and Shariff (2011) reaffirms the foregoing by pointing out that knowledge audits helps identify what knowledge is missing and how the omissions restricts organization's activities. Ragsdell, et al. (2013), considers knowledge audits as the first critical step in the implementation of knowledge management (KM) practices in organizations. Chan and Lee (2011) explains that the results of knowledge audit enables an organization to identify the intrinsic strengths and weaknesses of its KM processes thereby generating the ability to unveil and exchange best practices between different parts of the organization (Ragsdell, et al., 2013). In Daghfous', Ahmad's and Angell's (2013) view, effective knowledge audits ought to cover six critical areas namely; acquisition and learning of knowledge, storage and maintenance, application, dissemination, creation of new knowledge, and the enforcement of performance metrics related to knowledge management.

2.1.2 Knowledge Sharing Culture

There are various components that characterize the organizational context in which people work (e.g. leadership, structure and sharing), and they all reflect and constitute an organization's culture (Marouf, 2016). According to Alvesson (2012), culture includes the values, norms and ways of behavior shared by the members of an organization. Casimir, Lee and Loon (2012) offers a practitioner account of best practices, outlining how enterprises can develop and impart a knowledge sharing culture; they identify trust, collaboration and open communication as some of the elements which enhances a knowledge sharing culture. Zhu, et al. (2013) argues that the level of trust prevailing among the members in an organization determines the extent of knowledge disclosure, as well as the degree of screening and sharing between two parties. Islam, et al. (2011) and Chen, Chuang & Chen (2012), conceives culture as a critical factor in knowledge management systems (KMS) deployment.

2.1.3 Rewards for Knowledge Sharing

The role of motivation in organizational performance, and more so in imparting a knowledge sharing culture has been examined by numerous scholars (e.g. Chang & Chuang, 2011; Hau & Kim, 2011) with mixed observations being arrived at; Boer, Berends and Van Baalen (2011) argues that knowledge cannot be shared effectively if individuals are not motivated to share it, considering that knowledge resides within individuals. Sunardi an Tjakraatmadja (2013) hypothesizes that employees generally expects four personal benefits from knowledge sharing namely, status and career advancement, better professional reputation, emotional benefits and intellectual benefits. Hung et al. (2011) asserts that, extrinsically motivated employees are driven by the benefits and rewards derived from sharing their knowledge. Other scholars argues that rewards can have negative effects on knowledge sharing intentions (Hau & Kim, 2011; Casimir, Lee & Loon, 2012). Further, some researchers have found a total absence of link between organizational rewards and knowledge sharing behavior (Hung, Lai & Chang, 2011; Seba, Rowley & Lambert, 2012). These variations in findings suggest that more empirical studies are needed in regard to the relationship between rewards and knowledge sharing intentions in organizations.

2.2 Competitive Advantage (CA)

Although the literature in the field of strategic management has extensively identified the sources and determinants of competitive advantage, it does not provide a unified definition of competitive advantage (Sigalas and Pekka Economou, 2013). Accordingly, existing literature reveals that there are multiple meanings of competitive advantage, and that there is hardly an agreement on a single conceptually clear definition; According to Amini et al.

(2012), a firm has a sustained competitive advantage when it implements a unique value creating strategy which current and potential competitors are unable to duplicate. Porter (2011) defines competitive advantage as the productivity growth that is reflected in either lower costs or differentiated products that charge premium prices. Santos-Vijande, López-Sánchez and Trespalacios (2012) describes competitive advantage as the degree to which a firm exploits opportunities and neutralizes threats**.** Hill and Jones (2012), indicates that generic distinctive competencies – comprising of innovation and customer responsiveness - helps a firm build competitive advantage, either by differentiating a firm's products or by lowering the cost structure. Celep, Zerenler and Sahin (2013) defines competitive advantage as the sum of definite differences among firms which gives some superiority over others. Seemingly, Celep, Zerenler and Sahin (2013) definition effectively captures many of the fore-stated perspectives on competitive advantage, and therefore represents the meaning of CA as applied in this study.

In concert with the many definitions of competitive advantage, there is equally a rich literature on how CA ought to be measured**.** López-Nicolás & Meroño-Cerdán (2011) have intimated that a comprehensive view of firm's competitive performance considers not only financial perspective but also other factors which allow for monitoring of value creation. This view is supported by Rahman and Ramli (2014) who posits that the indicators for CA falls into two main streams; financial and non-financial performance measures. In measuring a firm's level competitiveness, profit growth rate (Li & Liu, 2014; Santos-Vijande, López-Sánchez & Trespalacios, 2012; Sachitra, 2017), reduction in operating costs (Farole, Reis & Wagle, 2010; Kortelainen & Karkkainen, 2011; Jell, 2012) market share growth (Allred et al., 2011; Wang, Lin & Chu, 2011), net income and returns on assets (Du Toit, Ortmann & Ramroop, 2010) are often adopted as financial performance indicators of competitive advantage. In measuring non-financial outcomes, researchers tend to focus on indicators such as employee and customer satisfaction (López-Nicolás & Meroño-Cerdán, 2011), employees' growth (Rahman & Ramli, 2014), balanced scorecard (Kozena and Chladek, 2012), benchmarking (Attiany, 2014), and the rate of new product development (López-Nicolás & Meroño-Cerdán, 2011). For this study, competitive advantage was measured along the dimensions of sales turnover, market share growth and profit growth. The adoption of these three set of indicators is based on their high degree of reliability as proven by various researchers (e.g. Allred et al., 2011; Wang, Lin & Chu, 2011; (Li & Liu, 2014; Santos-Vijande, López-Sánchez & Trespalacios, 2012). Further, the indicators are evidently highly quantifiable and therefore easy to operationalize in a survey study.

3. Methodology

A cross-sectional survey design was adopted for this study. Both qualitative and quantitative data were collected using closed ended questionnaires on a sample of 83 garment companies from an aggregate population of 170 companies. Out of a total of 83 questionnaires that were administered, 72 were properly filled, returned and found suitable for analysis. This represented a response rate of 86.7%. Descriptive analysis was conducted to generate numerical values for qualitative data (opinions) collected from respondents. Correlational tests were further carried out in order to establish if a conclusive cause and effect relationship existed between knowledge management and competitive advantage.

4. Results

4.1 Descriptive Results for Knowledge Management (KM)

Before conducting regression analysis to test the hypothesis, descriptive analysis were undertaken to generate quantitative statistics on the respondents' opinions. The output was computed in terms of means and standard deviations. Pertaining descriptive data that were subjected to the fore stated analysis, the respondents had been asked to rate the frequency with which their firms undertook nine (9) practices highly associated knowledge management (KM). The 9 practices (statements) were drawn from the three KM indicators under study which comprised of the extent of knowledge audits, the degree of knowledge sharing culture, and the extent of rewards for knowledge sharing. The researcher used a 5 point likert scale to assess the opinions of the respondents on each statement item. A score of 1 represented never, 2 represented rarely, 3 represented sometimes, 4 represented frequently and 5 represented always.

Results of the study as presented in table 4.1 revealed that, in as far as knowledge management was concerned; the garment firms rarely assessed the status of knowledge flow to determine the nature of missing knowledge (as reflected by a mean of 1.86), rarely evaluated options to determine the most effective methods for imparting new knowledge in the workforce (2.11), but they sometimes assessed how effectively knew knowledge was being applied in organizational activities (2.61). The companies also rarely took measures to create a climate of trust for ease of knowledge disclosure (2.12), rarely encouraged social interactions among employees (2.51), but they at times took measures to resolve internal conflicts which could hinder the willingness to share knowledge (2.62). Further, the firms generally never invented incentives aimed at encouraging knowledge sharing behavior (1.64), never evaluated rewards for knowledge sharing to ensure that they were valued by employees (1.73), and never reviewed rewards for knowledge sharing to ensure that their intended objective was being achieved (1.6).

A summary of the results along the knowledge management indicators (table 4.2) revealed that, the firms rarely carried out knowledge audits (2.19), rarely fostered a knowledge sharing culture (2.41) and never rewarded knowledge sharing behavior (1.64). Generally, the participating firms rarely had a focus on knowledge management as depicted by the overall mean of 2.08, for the nine statements on knowledge management.

The scanty attention to knowledge management in Kenya's manufacturing sector and generally in many developing

economies has been highlighted in previous empirical works; Goedhuys, Janz and Mohnen (2013) for example found that, whereas developing countries recognized the importance of knowledge management in high and medium-tech industries, they had for long neglected its importance in low-tech industries such as the low-skilled, labor-intensive garment sector for which they typically had a revealed comparative advantage. Owino, Cosmas and Jagongo (2012) notes that managers in Kenya's manufacturing sector indeed appreciate the strategic need for knowledge management at the organizational apex, but goes on to point out that this urge is yet to be inscripted into the organizational policy framework. Their findings further reveals that the lack of knowledge sharing culture, leadership, time, rewards, recognition, climate of trust and openness influences the institutionalization of knowledge management. In a study aimed at identifying the main factors influencing the outcomes of tailoring apprenticeship in Kenya, Apunda, De Klerk and Ogina, (2017) concluded that, limited knowledge flow pertaining to clothing production and processes contributed significantly to poor performance in garment producing firms.

4.2 Descriptive Results for Competitive Advantage (CA)

The respondents were asked to rate their organizations' performance along three parameters (sales turnover, market share and profit), which are highly associated with a firm's levels of competitiveness. Each response was measured along a 5 point likert scale where a score of 1 represented "has decreased greatly" (DG), 2 represented "has decreased slightly" (DS), 3 represented "has not changed (NC), 4 represented "has increased slightly" (IS), and 1 represented "has increased greatly (IG). The results were as depicted in table 4.3.

Results in table 4.3 shows that majority of firms (70.8%) had posted a slight or great decrease in sales turnover, and that sales growth had stagnated in 25% of the firms with only 4.2% posting partial or high growth in sales. In regard to market share growth the findings shows that, a large proportion of the firms (77.7%) reported either a slight or great decrease, 16.7% had not posted any growth, and that slight growth was attained by just 5.6% of the garment firms under study. The results further revealed that 83.3% of the firms had experienced partial or great decline in profit margins, and that profit growth had stagnated in 11.1% of the firms with only 5.6% of the companies posting either small or great growth in profits. The overall mean of 2.07 implied that the degree of competitiveness had declined in the participating firms in the past five years.

4.3 Test for the hypothesis

Regression analysis was conducted to establish if knowledge management had a significant influence on competitive advantage in medium and large garment companies in Kenya. The study hypothesized that; Ho: Knowledge management (X_1) does not have a significant influence on competitive advantage in medium and large garment companies in Kenya. To test the hypothesis, the model; $Y= \beta0 + \beta1X1 + e$, was fitted (where Y=Competitive advantage, β0=Constant, β1= Regression coefficient for Knowledge Management, X_1=Knowledge Management, e=Error term). The test was done at 0.05 level of significance. Results of the analysis were as shown in table 4.4. The test was done at 0.05 level of significance. Results of the analysis were as shown in table 4.4.

The coefficient (R) of 0.415 as shown in table 4.4 implies that, there was a moderate and positive relationship between knowledge management and competitive advantage in medium and large garment companies in Kenya. An R square of 0.172 indicates that 17.2% of the variation in competitive advantage can be explained by a unit change in knowledge management. The adjusted R Square of 0.161 indicates that knowledge management explains only 16.1% of the variation in competitive advantage, while 83.9% is explained by other factors not included in the model. The adjusted R square is usually considered a more accurate indicator of the relationship between the independent and the dependent variable, because it excludes the effect of extraneous variables from the model.

Further, an analysis of Variance (ANOVA) was conducted to test for the significance of the relationship between knowledge management and competitive advantage. As shown in table 4.5, it is evident that the overall regression model achieved a high degree of fit, as reflected by an R^2 of 0.172, F = 14.584, p=0.000. The results imply that the model is statistically significant in explaining the relationship between knowledge management and competitive advantage in medium and large garment companies in Kenya.

A beta coefficient test of the model was also conducted to determine the expected change in the criterion variable for each unit change in the predictor. The beta coefficient value ($\beta = 0.283$) as tabulated in table 4.6 implies that, a unit change in knowledge management led to a corresponding change in competitive advantage at the rate of 0.283. The p value = 0.000 indicates that the change in competitive advantage resulting from a change in knowledge management was not by chance and was therefore significant. Since the p value for the constant $\alpha = 0.527$ was greater than p= 0.05, the effect of the constant on the model was not significant. This indicates that much of the variation in competitive advantage was influenced by knowledge management and not the constant. Upon the substitution of coefficients in the model above, the equation; $Y= 0.899+0.283X1$, was obtained.

The null hypothesis (Ho) suggested that knowledge management does not have a significant influence on competitive advantage in medium and large garment companies in Kenya. Results in table 4.4 however, indicates a moderate and positive relationship between knowledge management and competitive advantage. Further, results of the (ANOVA) as shown in table 4.5 indicates that the relationship between knowledge management and competitive advantage is highly significant at 95% confidence. The null hypothesis (Ho) was therefore rejected and the alternative hypothesis that, knowledge management has a significant influence on competitive advantage was accepted.

Previous studies have investigated the relationship between KM and competitive advantage, with the bulk of the findings providing support for positive and significant relationship between KM and CA (e.g. Kmieciak & Michna, 2018; Byukusenge & Munene, 2017; Kanat & Atilgan, 2014; Sunardi & Tjakraatmadja, 2013); Casimir, Lee & Loon, 2012). Following their study on knowledge management orientation and innovativeness in medium sized enterprises in Poland, Kmieciak and Michna (2018) noted that knowledge, and most notably market knowledge which is directly related to market information about customers, competitors, suppliers and distributors, and internal knowledge such as, technology or specialized skills of operation is a strategically important resource for a firm and it serves as a basic source of competitive advantage. Byukusenge and Munene (2017) on their part noted that, businesses that strive to remain competitive ought to put more effort on the management of their knowledge resources that are necessary in increasing profits, sales growth, and market share.

Findings by Leal-Rodríguez et al. (2013) indicates that effective management of knowledge at different levels of the organization generates capabilities that are unique, which in turn increases competitiveness through innovation. Kanat and Atilgan (2014) have shown that, external knowledge management systems bring value chain members closer together and add value to the product (i.e. increased quality, customer perceptions of brand platforms) throughout the value chain. They also found that, knowledge creation and knowledge transfer increases the performance and success of supply chain management in the clothing sector. Sunardi & Tjakraatmadja (2013) have shown that rewards and incentives play an enabling role in knowledge management implementation and in determining the degree of competitiveness within a selected medium-sized manufacturing enterprises in Indonesian. Gholami et al. (2013), like many other researchers, reported a significant relationship between KM and business performance. In this case, knowledge sharing had higher factor loading compared with other KM practices. Evidence by Casimir, Lee and Loon (2012) suggests that social interactions and affect-based trust between employees facilitates knowledge sharing and superior organizational performance.

Nonetheless, the foregoing findings (indicating a positive and significant relationship) contradicts the findings made in other studies. For instance, research by Chen and Huang (2012) and Schiuma, Andreeva, and Kianto (2012), indicates that KM does not have a direct effect on business performance except through innovation. These researchers have therefore emphasized a focus on innovation as an antecedent to sustainable competitive advantage. Additionally, Molnar, Nguyen, Homolka, and Macdonald (2011) and Durst and Edvardsson (2012) have noted that research on KM application in medium enterprises, particularly in developing countries, are few. As a result, Tee, Oon, Kuek, and Chua (2012) suggested the need for more research to enrich the empirical studies on the relationships between KM and a firm's level of competitiveness.

5. Conclusions, recommendations and suggestions for further research

5.1 Conclusion

On the basis of foregoing findings, this study concludes that knowledge management moderately and positively influences competitive advantage at statistically significance levels in medium and large garment companies in Kenya ($R = 0.415$, Adjusted $R^2 = 0.161$, $F = 14.584$, $p=0.000$). Notably, the findings reinforces the logic advanced in knowledge-based view that, performance differences between organizations accrue due to their different stocks of knowledge and their differing capabilities in using and developing knowledge (Sajadirad, 2018; Nguyen, Phan & Nguyen, 2016). The results further, reaffirms the assertions made in prior studies (e.g. Kmieciak and Michna, 2018; Gholami et al, 2013; Byukusenge & Munene, 2017), that knowledge management contingencies and knowledge types (e.g. information about customers, competitors, suppliers, technology and specialized skills of operation) leads to superior firm performance. Accordingly, medium and large garment manufacturing firms in Kenya should embrace KM initiatives such as knowledge audits, knowledge sharing culture and rewarding knowledge sharing behavior, in order to enhance competitive advantage.

5.2 Recommendations

Based on findings, this study recommends greater attention to KM in the Kenya's garment industry, particularly to KM indicators that were explored in this study. In as far as knowledge audits are concerned, Kenya's garment firms should expend resources and effort in identifying, measuring and assessing the most important stocks of knowledge and critical gaps and improvement opportunities. Such gaps could be in the form of knowledge related to projects, regulations, patents, licenses, products and technological advancements in the firm and the sector. In relation to culture, the firms needs to remold their management styles, employee attitudes and cultural norms that pose challenges for KM and ensure that they embrace the forms of culture that supports knowledge sharing and other KM behaviors. In as far as rewards are concerned, Kenya's garment firms needs to acknowledge that employees are more motivated to share knowledge when presented with both intrinsic and extrinsic motivation. Extrinsic rewards should therefore be provided in tangible forms such as salary increments, bonuses, commissions, benefits and prizes. Intrinsic (psychological) rewards on the other hand ought to be availed in the form of improved work environment, opportunity to take part in prestigious projects and generally by making tasks interesting, stimulating and engaging.

5.3 Suggestions for Further Research

This study focused on three knowledge management indicators. These were by no means exhaustive. There is therefore, the need to replicate this study and to conduct other studies using other KM variables. Taking into consideration that it takes time for cause and effect relationships to reliably manifest itself in survey studies,

there is also a need to conduct this study using a longitudinal approach.

References

[1] Akoten, J. E., & Otsuka, K. (2007). From tailors to mini-manufacturers: the role of traders in the performance of garment enterprises in Kenya. *Journal of African Economies*, *16*(4), 564-595.
[2] Alguezaui, S., & Filieri, R. (2014). A knowledge-based view of the extending enterprise for enhancing a collaborative innovation advantage. *International Journal of Agile Systems and Management*, *7*(2), 116-131.
[3] Allred, C. R., Fawcett, S. E., Wallin, C., & Magnan, G. M. (2011). A dynamic collaboration capability as a source of competitive advantage. *Decision sciences*, *42*(1), 129-161.
[4] Alvesson, M. (2012). *Understanding organizational culture*. SAGE Publications Limited.
[5] Amini, A., Darani, M., Afshani, M., & Amini, Z. (2012). Effectiveness of marketing strategies and corporate image on brand equity as a sustainable competitive advantage. *interdisciplinary journal of contemporary research in business*, *4*(2), 192-205.
[6] Apunda, E. A., De Klerk, H. M., & Ogina, T. (2017). Technical knowledge and skills development in the informal sector in Kenya: The case of custom tailors. *International Review of Education*, *63*(3), 341-361.
[7] Baskerville, R., & Dulipovici, A. (2015). The theoretical foundations of knowledge management. In *The essentials of knowledge management* (pp. 47-91). Palgrave Macmillan, London.
[8] Beazley, H., Boenisch, J., & Harden, D. (2002). *Continuity management: Preserving corporate knowledge and productivity when employees leave*. John Wiley & Sons.
[9] Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*, *20*(1), 165-173.
[10] Blome, C., Schoenherr, T., & Eckstein, D. (2014). The impact of knowledge transfer and complexity on supply chain flexibility: A knowledge-based view. *International Journal of Production Economics*, *147*, 307-316.
[11] Boer, N. I., Berends, H., & Van Baalen, P. (2011). Relational models for knowledge sharing behavior. *European Management Journal*, *29*(2), 85-97.
[12] Boer, N. I., Berends, H., & Van Baalen, P. (2011). Relational models for knowledge sharing behavior. *European Management Journal*, *29*(2), 85-97.
[13] Byukusenge, E., & Munene, J.C. (2017). Knowledge management and business performance: Does innovation matter? *Cogent Business & Management*, 4: 1368434.
[14] Camisón, C., & Villar-López, A. (2011). Non-technical innovation: Organizational memory and learning capabilities as antecedent factors with effects on sustained competitive advantage. *Industrial Marketing Management*, *40*(8), 1294-1304.
[15] Casimir, G., Lee, K., & Loon, M. (2012). Knowledge sharing: influences of trust, commitment and cost. *Journal of knowledge management*, *16*(5), 740-753.
[16] Celep, E., Zerenler, M., & Şahin, E. (2013). Customer Relationship Management as a tool for sustainable competitive advantage and exemplar companies with worldwide success. *Mediterranean Journal of Social Sciences*, *4*(10), 731.
[17] Chan, P. C. W., & Lee, W. B. (2011). Knowledge audit with intellectual capital in the quality management process: an empirical study in an electronics company. *Electronic Journal of Knowledge Management*, *9*(2), 98.
[18] Chang, H. H., & Chuang, S. S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & management*, *48*(1), 9-18.
[19] Chemengich, M. (2010). Impact of AGOA on the textile and apparel industry of Kenya. *Prepared for ACTIF African Country Reports, Nairobi, Kenya*.
[20] Chen, S. S., Chuang, Y. W., & Chen, P. Y. (2012). Behavioral intention formation in knowledge sharing: Examining the roles of KMS quality, KMS self-efficacy, and organizational climate. *Knowledge-Based Systems*, *31*, 106-118.
[21] Chen, Y. Y., & Huang, H. L. (2012). Knowledge management fit and its implications for business performance: A profile deviation analysis. *Knowledge-based systems*, *27*, 262-270.
[22] Daghfous, A., Ahmad, N., & Angell, L. C. (2013). The knowledge-enabled customer relationship management (KCRM) knowledge audit: model and case illustration. *Vine*, *43*(2), 185-209.
[23] Demarest, M. (1997). Understanding knowledge management. *Long range planning*, *30*(3), 321-384.
[24] Donate, M. J., & Guadamillas, F. (2011). Organizational factors to support knowledge management and innovation. *Journal of knowledge management*, *15*(6), 890-914.
[25] Drus, S. M., & Shariff, S. S. (2011). Analysis of knowledge audit models via life cycle approach. *vol*, *16*, 176-180.
[26] Du Toit, J. P., Ortmann, G. F., & Ramroop, S. (2010). Factors influencing the long-term competitiveness of commercial milk producers: evidence from panel data in East Griqualand, South Africa. *Agrekon*, *49*(1), 80-101.
[27] Durst, S., & Edvardsson, I. R. (2012). Knowledge management in SMEs: A literature review. *Journal of Knowledge Management*, *16*, 879–903.
[28] Edwards, A. (2012). The role of common knowledge in achieving collaboration across practices. *Learning, culture and Social Interaction*, *1*(1), 22-32.
[29] Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they?. *Strategic management journal*, *21*(10-11), 1105-1121.
[30] Farole, T., Reis, J. G., & Wagle, S. (2010). Analyzing trade competitiveness: A diagnostics approach.
[31] Flatten, T. C., Engelen, A., Zahra, S. A., & Brettel, M. (2011). A measure of absorptive capacity: Scale development and validation. *European Management Journal*, *29*(2), 98-116.

[32] Fransson, A., Håkanson, L., & Liesch, P. W. (2011). The under-determined knowledge-based theory of the MNC. *Journal of International Business Studies*, *42*(3), 427-435.
[33] Fukunishi, T. (2013). *Performance and dynamics of African firms: a comparative analysis of garment firms in Kenya and Bangladesh* (Doctoral dissertation, University of London).
[34] Gereffi, G., & Frederick, S. (2010). The global apparel value chain, trade and the crisis: challenges and opportunities for developing countries. *Global value chains in a postcrisis world: A development perspective*, 157-208.
[35] Gholami, M. H., Asli, M.N., Nazari-Shirkouhi, S., & Noruzy, A. (2013). Investigating the Influence of Knowledge Management Practices on Organizational Performance: An Empirical Study. *Acta Polytechnica Hungarica, 10(2), 205-216.*
[36] Girard, J., & Girard, J. (2015). Defining knowledge management: Toward an applied compendium. *Online Journal of Applied Knowledge Management*, *3*(1), 1-20.
[37] Goedhuys, M., Janz, N., & Mohnen, P. (2013). Knowledge-based productivity in "low-tech" industries: evidence from firms in developing countries. *Industrial and Corporate Change*, *23*(1), 1-23.
[38] Grant, K. (2015). Knowledge management: an enduring but confusing fashion. *Leading Issues in Knowledge Management*, *2*, 1-26.
[39] Haibin, Y. A. N. G. (2014, September). Managerial Ties and Exploratory Innovation: An Opportunity-Motivation-Ability Perspective. In *Annual Conference of Strategic Management Society*.
[40] Hamel, G., & Prahalad, C. K. (1990). The core competence of the corporation. *Harvard business review*, *68*(3), 79-91.
[41] Harasim, W., & Dziwulski, J. (2012). The influence of intellectual capital in the organization on creating the competitive advantage. *Zeszyty Naukowe Nowoczesne Systemy Zarządzania*, (7)
[42] Hau, Y. S., & Kim, Y. G. (2011). Why would online gamers share their innovation conducive knowledge in the online game user community? Integrating individual motivations and social capital perspectives. Computers in Human Behavior, 27, 956–970.
[43] Hill, C. W., Jones, G. R. (2014). Strategic management: theory: an integrated approach. Cengage Learning.
[44] Hörisch, J., Johnson, M. P., & Schaltegger, S. (2015). Implementation of sustainability management and company size: a knowledge-based view. *Business Strategy and the Environment*, *24*(8), 765-779.
[45] Hung, S. Y., Durcikova, A., Lai, H. N., & Lin, W. M. (2011). The influence of intrinsic and extrinsic motivation on individuals' knowledge sharing behavior. International Journal of Human–Computer Studies, 69, 415–427.
[46] Hung, S. Y., Lai, H. M., & Chang, W. W. (2011). Knowledge-sharing motivations affecting R&D employees' acceptance of electronic knowledge repository. Behaviour and Information Technology, 30, 213–230.
[47] Inkpen, A. C., & Tsang, E. W. (2005). Social capital, networks, and knowledge transfer. *Academy of management review*, *30*(1), 146-165.
[48] Islam, Z., Hasan, I., Ahmed, S., & Ahmed, S. (2011). Organizational culture and knowledge sharing: Empirical evidence from service organizations.
[49] Jafari, A., & Payani, N. (2013). A systematic approach for knowledge auditing. *African Journal of Business Management*, *7*(32), 3159.
[50] Jell, F. (2012). Theoretical foundations. In Patent Filing Strategies and Patent Management. 4-14. Gabler Verlag.
[51] Joarder, M. A. M., Hossain, A. K. M., & Hakim, M. M. (2010). Post-MFA performance of Bangladesh apparel sector. *International Review of Business Research Papers*, *6*(4), 134-144.
[52] Kanat, S., & Atilgan, T. (2014). Effects of Knowledge Management on Supply Chain Management in the Clothing Sector: Turkish Case. *Fibres & Textiles in Eastern Europe, 22, 1(103), 9-13.*
[53] Kindiki, M. M. (2011). International regime governance and apparel labour upgrading in export processing zones in urban Kenya. *African Review of Economics and Finance*, *3*(1), 26-40.
[54] Kirsimarja, B., & Aino, K. (2015). Knowledge-based view of the firm–Theoretical notions and implications for management.
[55] Kmieciak, R., & Michna, A. (2018). Knowledge management orientation, innovativeness, and competitive intensity: evidence from Polish SMEs. *Knowledge Management Research & Practice*, *16*(4), 559-572.
[56] Kortelainen, S. A., & Karkkainen, H. (2011). Dynamic model in understanding dynamics of competitiveness: System dynamics approach in mobile handset vendor business. In *Proceeding of Strategic Management Society SMS Annual International Conference* (pp. 383-97).
[57] Kožená, M., & Chládek, T. (2012). Company competitiveness measurement depending on its size and field of activities. *Procedia-Social and Behavioral Sciences*, *58*, 1085-1090.
[58] Leal-Rodríguez, A. L., Roldán, J. L., Leal, A. G., & Ortega-Gutiérrez, J. (2013). Knowledge management, relational learning, and the effectiveness of innovation outcomes. *The Service Industries Journal*, *33*(13-14), 1294-1311.
[59] Li, D. Y., & Liu, J. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. *Journal of Business Research*, *67*(1), 2793-2799.
[60] Liedong, T. A., & Rajwani, T. (2017). The impact of managerial political ties on corporate governance and debt financing: Evidence from Ghana. *Long Range Planning*, *51*(5), 666-679.
[61] López-Nicolás, C., & Meroño-Cerdán, Á. L. (2011). Strategic knowledge management, innovation and performance. *International journal of information management*, *31*(6), 502-509.
[62] López-Nicolás, C., & Meroño-Cerdán, Á. L. (2011). Strategic knowledge management, innovation and performance. *International journal of information management*, *31*(6), 502-509.

[63] MacCarthy, B. L., & Jayarathne, P. G. S. A. (2010). Fast fashion: achieving global quick response (GQR) in the internationally dispersed clothing industry. In *Innovative Quick Response Programs in Logistics and Supply Chain Management* (pp. 37-60). Springer Berlin Heidelberg.

[64] Maina, M. W. (2013). An assessment of the effects of the importation of second hand clothes on the growth of textile industry in Kenya. *International Journal of Social Sciences and Entrepreneurship*, *1*(3), 543-556.

[65] Marouf, L. (2016). The role of knowledge sharing culture in business performance. *VINE Journal of Information and Knowledge Management Systems*, *46*(2), 154-174.

[66] Martín-de Castro, G., Lopez-Saez, P., & Delgado-Verde, M. (2011). Towards a knowledge-based view of firm innovation. Theory and empirical research. *Journal of Knowledge Management*, *15*(6), 871-874.

[67] McIvor, R. (2013). Understanding the manufacturing location decision: the case for the transaction cost and capability perspectives. *Journal of Supply Chain Management*, *49*(2), 23-26.

[68] Mills, A. M., & Smith, T. A. (2011). Knowledge management and organizational performance: a decomposed view. *Journal of knowledge management*, *15*(1), 156-171.

[69] Molnar, Z., Nguyen, H. H., Homolka, L., & Macdonald, R. J. (2011). Knowledge Management as a solution for the shortage of competent employees in SMEs at the developing country (Case study: Vietnam). *Journal of Systems Integration*, *2*, 38–46.

[70] Moreno, V., Pinheiro, J. R. M., & Joia, L. A. (2012). Resource-based view, knowledge-based view and the performance of software development companies: a study of Brazilian SMEs. *Journal of Global Information Management (JGIM)*, *20*(4), 27-53.

[71] Mulangu, F. (2015). Preferential trade agreements, employment and productivity: evaluating the impacts of AGOA and its apparel provisions on African firms. *Ghanaian Journal of Economics*, *3*(1), 4-27.

[72] Natsuda, K., Goto, K., & Thoburn, J. (2010). Challenges to the Cambodian garment industry in the global garment value chain. *The European Journal of Development Research*, *22*(4), 469-493.

[73] Nazlina, Z. (2016). *The relationship between entrepreneurial orientation, human resource management practices, organizational innovation and managerial ties to SME performance* (Doctoral dissertation, Universiti Utara Malaysia).

[74] Ndalira, D. W., Ngugi, J. K., & Chepkulei, B. (2013). Effect of the type of innovation on the growth of small and medium enterprises in Kenya: A case of garment enterprises in Jericho, Nairobi. *European Journal of Management Sciences and Economics Vol*, *1*(2).

[75] Nerdrum, L., & Erikson, T. (2001). Intellectual capital: a human capital perspective. *Journal of intellectual capital*.

[76] Nguyen, T. V., Phan, A. T., & Nguyen, M. T. (2016). Knowledge Creation, Innovation and Financial Performance of Firms: Evidence from Vietnam. *International Journal of Business and Management*, *11*(6), 95.

[77] Onyango, C., & Ikiara, M. (2011). Reflections on Kenya's Experience Under AGOA: Opportunities and Challenges. *Improving AGOA: Toward a New Framework for US-Africa Commercial Engagement*.

[78] Owino, E. O., Cosmas, K. C., & Jagongo, A. (2012). Institutionalization of knowledge management in manufacturing enterprises in Kenya: A case of selected enterprises.

[79] Porter, M. E. (2011). *Competitive advantage of nations: creating and sustaining superior performance*. simon and schuster.

[80] Quintane, E., Casselman, R., Reiche, B., & Nylund, P. A. (2011). Innovation as a knowledge-based outcome. *Journal of Knowledge Management*, *15*(6), 928-947.

[81] Rael, C. M., & Beatrice, E. I. (2012). The Kenyan textile industry in a liberalized economy: an analysis of performance and challenges. *Journal of Emerging Trends in Economics and Management Sciences*, *3*(1), 111.

[82] Ragsdell, G., Probets, S., Ahmed, G., & Murray, I. (2013, September). Knowledge audit: findings from a case study in the energy sector. In *European Conference on Knowledge Management* (p. 584). Academic Conferences International Limited.

[83] Rahman, N. A., & Ramli, A. (2014). Entrepreneurship management, competitive advantage and firm performances in the craft industry: concepts and framework. *Procedia-Social and Behavioral Sciences*, *145*, 129-137.

[84] Reus, T. H. (2012). A knowledge-based view of mergers and acquisitions revisited: Absorptive capacity and combinative capability. In *Advances in mergers and acquisitions* (pp. 69-88). Emerald Group Publishing Limited.

[85] Rolfe, R. J., & Woodward, D. P. (2005). African apparel exports, AGOA, and the trade preference illusion. *Global Economy Journal*, *5*(3).

[86] Sajadirad, S. (2018). Knowledge Orchestration within a Distributed Operations Network (Doctoral dissertation, Aalborg Universitetsforlag).

[87] Santos-Vijande, M. L., López-Sánchez, J. Á., & Trespalacios, J. A. (2012). How organizational learning affects a firm's flexibility, competitive strategy, and performance. *Journal of Business Research*, *65*(8), 1079-1089.

[88] Schiuma, G., Andreeva, T., & Kianto, A. (2012). Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance. *Journal of knowledge management*, *16*(4), 617-636.

[89] Seba, I., Rowley, J., & Lambert, S. (2012). Factors affecting attitudes and intentions towards knowledge sharing in the Dubai Police Force. International Journal of information Management, 32, 372–380.

[90] Sheng, S., Zhou, K. Z., & Li, J. J. (2011). The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing*, *75*(1), 1-15.

[91] Sigalas, C., & Pekka-Economou, V. (2013). Revisiting the concept of competitive advantage: problems and fallacies arising from its conceptualization. *Journal of Strategy and Management*, *6*(1), 61-80.

[92] Singh, B., & Rao, M. K. (2016). Examining the effects of intellectual capital on dynamic capabilities in emerging economy context: knowledge management processes as a mediator. *Emerging Economy Studies*, *2*(1), 110-128.
[93] Solidarity Centre. (2016). Global garment and textile industries: workers, rights and working conditions. *https://www.solidaritycenter.org*
[94] Srećković, M., & Windsperger, J. (2011). Organization of knowledge transfer in clusters: a knowledge-based view. In *New Developments in the Theory of Networks* (pp. 299-315). Physica, Heidelberg.
[95] Sunardi, O., & Tjakraatmadja, J. H. (2013, July). Enablers to knowledge management implementation in Indonesian medium-sized manufacturing enterprises: a preliminary study. In *Proceedings of the 13th International Conference of Decision Sciences Institute and the 16th Annual Conference of Asia-Pacific Decision Sciences Institute (IDSI-APDSI). Taipei. Taiwan*.
[96] Tee, C. W., Oon, K. H., Kuek, T. Y., & Chua, B. H. (2012). Investigating the relationship among knowledge management, human resources management practices and innovation: A conceptual study of Malaysia SMEs. In *Knowledge management international conference (KMICe)2012*, Johor Bahru, Malaysia, 4–6 July 2012.
[97] Thakur, V., & Sinha, S. (2013). Knowledge Management in an Indian Perspective. *The SIJ Transactions on Industrial, Financial & Business Management (IFBM), ISSN*, 7-12.
[98] Viswanadham, N. (2012). Analysis of manufacturing enterprises: An approach to leveraging value delivery processes for competitive advantage (Vol. 12). Springer Science & Business Media.
[99] Von Krogh, G., Nonaka, I., & Rechsteiner, L. (2012). Leadership in organizational knowledge creation: A review and framework. *Journal of Management Studies*, *49*(1), 240-277.
[100] Wang, W. C., Lin, C. H., & Chu, Y. C. (2011). Types of competitive advantage and analysis. *International Journal of Business and Management*, *6*(5), 100.
[101] Witherspoon, C. L., Bergner, J., Cockrell, C., & Stone, D. N. (2013). Antecedents of organizational knowledge sharing: a meta-analysis and critique. *Journal of Knowledge Management*, *17*(2), 250-277.
[102] World Bank Group & Global Development Solutions. (2015). Kenya Apparel and Textile Industry: Diagnosis, Strategy and Action Plan.
[103] Zheng, S., Zhang, W., & Du, J. (2011). Knowledge-based dynamic capabilities and innovation in networked environments. *Journal of Knowledge Management*, *15*(6), 1035-1051.
[104] Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference?. *The Leadership Quarterly*, *24*(1), 94-105.

Appendices

Table 4.1: Descriptive Analysis for Knowledge Management

KM Indicators		Statements	N	Minimum	Maximum	Mean	SD
Extent of knowledge audits	1	Assessing the status of organization's knowledge to determine missing knowledge	72	1	4	1.86	0.775
	2	Assessing the most effective methods for imparting knowledge in the workforce	72	1	4	2.11	0.761
	3	Assessing how effectively knew knowledge is applied in organizational activities	72	1	4	2.61	0.815
Degree of knowledge sharing culture	4	Promoting a climate of trust to encourage knowledge disclosure	72	1	4	2.12	0.897
	5	Encouraging social interactions among employees	72	1	4	2.51	0.979
	6	Resolving internal conflicts which hinders knowledge sharing	72	1	4	2.62	0.912
Extent to which knowledge sharing behavior is rewarded	7	Inventing rewards which are tied to knowledge sharing	72	1	4	1.64	0.815
	8	Ensuring that rewards for knowledge sharing are valued by employees	72	1	4	1.73	0.830
	9	Reviewing rewards for knowledge sharing to determine if their intended objective is being achieved	72	1	3	1.6	0.640

Key: Ranked on a scale as; Never (1.0-1.7), Rarely (1.8-2.5), Sometimes (2.6-3.3), Frequently (3.4 - 4.1) and Always (4.2-5.0).

Table 4.2: Summary of Descriptive Results for Knowledge Management Indicator

Indicator	N	Minimum	Maximum	Mean	Std. Deviation
Extent of knowledge audits	72	1	4	2.19	0.784
Extent of knowledge sharing culture	72	1	4	2.41	0.929
Extent to which knowledge sharing behavior was rewarded	72	1	4	1.64	0.762
			Total	**6.24**	**2.475**
			Average	**2.08**	**0.825**

Key: Ranked on a scale as; Never (1.0-1.7), Rarely (1.8-2.5), Sometimes (2.6-3.3), Frequently (3.4 - 4.1) and Always (4.2-5.0)

Table 4.3: Descriptive Results for Competitive Advantage

	%					Mean	SD
Statements	**DG**	**DS**	**NC**	**IS**	**IG**		
Sales turnover	19.4	51.4	25.0	2.8	1.4	2.15	.816
Market Share	20.8	56.9	16.7	5.6		2.07	.775
Profit	25.0	58.3	11.1	4.2	1.4	1.99	.813
Total						**6.21**	**2.404**
Average						**2.07**	**0.801**

n=72

Key: DG = has decreased greatly, DS=has decreased slightly, NC=has not changed, IS=has increased slightly, IG=has increased greatly

Scale for mean (M) scores: 1.0-1.7=has decreased greatly, 1.8-2.5= has decreased slightly, 2.6-3.3= has not changed, 3.4 - 4.1= has increased slightly and 4.2-5.0= has increased greatly

Table 4.4: Model Summary for Knowledge Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415	.172	.161	0.96357

a. Predictors: (Constant), Knowledge Management

Table 4.5: ANOVA for Knowledge Management

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.189	1	66.189	14.584	.000
	Residual	317.686	70	4.538		
	Total	383.875	71			
a. Dependent Variable: Competitive Advantage						
b. Predictors: (Constant), Knowledge Management						

Table 4.6: Coefficients for Knowledge Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.899	1.413		.636	.527
	KM	.283	.074	.415	3.819	.000
a. Dependent Variable: Competitive Advantage						