Effects of Strategic Alliances on Organizational Performance: Supermarkets and Their Alliances in Kenya

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Abstract
This study sought to examine the effect of strategic alliances on performances. The objectives of the study were: to establish the effects of technological, production and marketing strategic alliances on the performance of supermarkets and their alliances in Kenya. The study employed a correlational research design. The sample of the study entailed a study of all the five big supermarkets (Nakumatt, Ukwala, Naivas, Tuskys and Uchumi) and 95 of their strategic alliances. Data for this study was collected from the head offices of the firms by use of a questionnaire. The data was analyzed using a multiple regression model in order to test the effect of the independent variables relating to strategic alliances and the dependent variable performance. Independent one-way ANOVA test and independent t-test (one tailed) were used to determine the level of significance. Data was presented using figures, and tables. The empirical results of the study indicated that there was a strong, negative correlation between technological strategic alliances and performance. However, there was no statistical significant relationship between technological strategic alliances and performances among supermarkets and their alliances in Nairobi CBD. Correlation results indicated that there was a weak, negative effect between production strategic alliances and performance, for the supermarkets while for supermarket alliances there was a large, positive effect between the two variables. There was a strong, positive effect between marketing strategic alliances and performance for the supermarkets while for supermarket alliances there was a medium, positive correlation between marketing strategic alliances and performance. However, 2 tailed tests indicated that there was a statistically insignificant relationship between the variables. The results from the multiple regression analysis indicated that strategic alliances had a strong relationship with supermarket performance which suggests that strategic alliance contributes positively towards supermarkets performance. On the other hand supermarket alliances regression analysis showed a weak relationship between strategic alliances and performance suggesting that other factors account for the performance in these alliances. The ANOVA test indicated that the relationship between strategic alliances and performance was not statistically significant for the supermarket alliances but significant for the supermarkets. The t-test analysis indicates that the relationship between strategic alliances and performance was statistically significant among the supermarkets and their alliances suggesting that strategic alliances positively increase performance.

Keywords: strategic alliances, supermarkets, supermarket alliances, performance

1. Introduction
The Kenya Economic Survey 2012 shows that the retail and wholesale sector grew by 19 per cent in the past five years, becoming the second largest driver of economic growth after the transport and communication sector. The large volume of the sector, with more than Kshs. 300 billions turnover for both formal and informal retail (“Four global retail chains eye Kenya,” 2012) makes competition in the sector intense and strategic alliances a solution to improve supermarkets performance.

The long term goal of firms in competitive markets is improving or defending their competitive position and gaining advantages over competitors (Barney, 2002). Competitive advantage grows out of the value a firm is able to create for its buyers that exceeds the firm's cost of creating it. Value is what buyers are willing to pay, and superior value stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset a higher price (Porter, 1985). Therefore, organizations seeking alliances always look for partners who will help them create value for customers at lower costs. Supermarkets as product outlets are not different from other organizations facing competition and seeking alliances.

The Kenyan retail sector consists of 80 per cent non-formal outlets such as kiosks and small corner outlets and 20 percent formal outlets that consist of formalized stores like supermarkets, hypermarkets and convenience stores (“Four global retail chains eye Kenya,” 2012). Kenya’s supermarkets have increased from 206 supermarkets in 2002 to 494 supermarkets in 2008 (Riungu, et al. 2013). She further observes that drivers of supermarkets growth include change of lifestyles, urbanization, policies that attract foreign direct investment by most of developing countries and growing economy with an average growth rate of over 5% between 2004 and 2007 and market liberalization.

Kenya’s formal retail sector is dominated by six major supermarkets and numerous other smaller retail chains spread across the country. They include Nakumatt, Tuskys, Uchumi, Naivas, Ukwala, and Chandarana (“Four global retail chains eye Kenya,” 2012). The paper reported that Wal-Mart (through its South African
Subsidiary, Massmart) and other South African retail chains like Game Stores and the Edcon group that has Jet and Edgars and other smaller low end retailers had plans to open shop in Kenya by 2014. This is expected to further heighten competition in Kenya’s retail market. This shows that the Kenyan market is becoming more appealing to other external firms.

Supermarkets have enhanced their competitive capacity to offer greater advantages to their customers as they improve their margins. The competitive moves adopted by supermarkets span within production, distribution and handling of the customers. This implies that a supermarket, as the point of contact between a product and consumers, should be able to have a hand in the production, packaging, distribution, and after sales service. The interrelations between a supermarket and its suppliers and stakeholders are of a strategic nature acting as a go-between producers and customers. To lower their item acquisition cost supermarkets have tended to partner with producers and importers in the supply chain (Lewis, 2007). Despite the alliances, Kenyan supermarkets have struggled to grow their profit margins, with a 2012 research by Kestrel Securities showing that in the full year 2011, Uchumi had a profit margin of 3.6 per cent, Tuskys 1.3 while both Nakumatt and Naivas had a profit margin of 0.8 per cent each. Hence this study seeks to find out the effects of strategic alliances on the performance of supermarkets in Kenya.

2. Strategic Alliances in the Retail Sector

Wisnieski (2001) observed that the resource dependency literature suggests that alliances often represent one of three forms. The first alliance is a horizontal alliance between organizations that compete for the same resources, such as customers or suppliers and usually represent exchanges in one direction. In this arrangement, the organizations exchange or pool their resources toward some goal, such as research consortia or trade unions. The second is a vertical alliance which is an alliance between a firm and those organizations supplying inputs or using its outputs, such as suppliers, buyers, financial institutions, or the labor pool. Vertical alliances also usually represent exchanges in one direction. The third type of alliance is reciprocal, where firms exchange both inputs and outputs and the exchanges flow in both directions. In reciprocal alliances, firms exchange ideas, people and equipment, share lab space and pass designs back and forth such as in joint R&D projects.

In an increasing number of businesses, alliances between firms are transforming the nature of competition and strategy. Scot and Davis (2007) viewed alliances as agreements between or among firms to pursue joint objectives through coordination of activities and sharing of resources. It may be a formal structure or a loose arrangement of companies accustomed to working together (Starkey et al., 2000). From the aforesaid, therefore, retailers faced with competition assess their ability to cope with it and in their realization of deficiencies seek to strengthen their weaknesses by assessing other firms’ resources. The self assessment by supermarkets informs the choice of partners in terms of how the partner helps a firm to face the competition or achieve a goal.

Competition in the Kenyan retail sector is expected to increase further. Foreign players are taking keen interest in the country’s growing population and positive economic outlook. With the planned entries of South African retailers Massmart, Game, Jet and Edgars the competition will rise. The United Kingdom’s (UK) retail giants, Marks & Spencer and Clarks, have also expressed desire to set shop in Kenya before the end of 2013 (Gibendi, 2013).

Marks & Spencer (M&S) has 766 stores in the UK and 420 stores in over 50 countries in Europe, the Middle East and Asia. M&S Food buys over Sh13.8 billion worth of goods per year from Kenya including flowers, tea and coffee which represents 10 per cent of the Sh138b worth of annual trade between the UK and Kenya. Clarks, a British footwear company develops and sells a wide range of footwear. It has already opened its first store in East Africa at the Thika Road Mall. The company intends to open a second store at the Nakumatt Westgate Mall. This shows that UK retailers are using alliances with local retailers to gain entrance (Gibendi, 2013) into the Kenyan market.

2.1 Types of Strategic Alliances

Serna (2007) found out that when analyzing the types of strategic alliances that have been created and implemented by different companies, academics tend to classify them based on different criteria. On the one hand, there are those academics that classify the type of strategic alliances based on the areas of collaboration. In a study by Coopers and Lybrand (1997), they identified the following types of alliances, and found their clients were engaged in them as follows: Joint marketing/promotion (54%); Joint selling/distribution (42%); Production (26%); Design collaboration (23%); Technology licensing (22%); Research and development contracts (19%). For example Technology Associates and Alliances (TAA) (1999), a strategic alliances consulting company, lists the following types of alliances: Marketing and sales alliances, Product and manufacturing alliances, Technology and know-how alliances (Elmuti & Kathawala, 2001). Serna (2007) also indicated that, on the other hand, there is a group of academics that classifies the type of strategic alliances depending on the level of integration in the collaboration process. In this group, one finds the work of Gomes-Casseres (2003) who stated that alliances may
be structured as complex equity joint ventures or they may be looser arrangements for cooperating. Johnson et al. (2003) presented that there are a variety of types of strategic alliances; formalized inter-organizational relationships at one extreme and loose arrangement of cooperation characterized by informal networking between organizations with no shareholder or ownership involved on the other extreme.

Different strategies have been employed by supermarkets to gain entry into new markets. For example, South African-based Shoprite Holdings Ltd and Pick ’n Pay Stores Ltd have employed franchising in order to cut costs. Mergers and acquisitions were used by Walmart when it acquired a 51% stake in South African Massmart, to gain a foothold into the South African market in 2010. Joint ventures are considered when investors want to exert control over their chain and give local partners more say in the business. For example South African-based Woolworths Holdings Ltd decided in 2010 to overhaul its global strategy and moved away from franchising, instead opting for the joint venture model (Bra, 2012). In Kenya Woolworths has formed a joint venture with Deacons while in Mauritius it is registered as Woolworths Holdings Mauritius Limited (WHML) in Mauritius market (Mugwe, 2013).

2.2 Reasons for Entering into Strategic Alliances

The advantages of an alliance, as compared with a single firm, depend on the need for integration among parts of the value chain and the need for scale and specialization in each of the parts (Chesbrough and Teece, 1996; Gomes-Casseres, 1996). With this in mind firms enter into alliances based on their needs at that time or future considerations. The motives for joining an alliance determine the choice of partners hence the type of alliance to enter.

Button et al. (1998) suggested a number of possible reasons for alliance formation – cost savings, market penetration and retention, financial injection, infrastructure constraints, circumventing institutional constraints and market stability. More specifically, they identified four advantages of alliances with specific reference to the aviation industry: Access to new markets by tapping into a partner’s underutilized route rights or slots; Traffic feed into established gateways to increase load factors and to improve yield; Defense of current markets through seat capacity management of the shared operations; and Costs of economies of scale through resource pooling across operational areas or cost centers, such as sales and marketing, station and ground facilities and purchasing.

Yuk (2013) observed that mergers and acquisitions have been the obvious route for recession-ravaged Western companies looking to capture shares in the high-growth economies of Brazil, Russia, India, and China, as well as newer economies throughout Asia, the Middle East, and Africa. The recent trend has increasingly been for Western companies to turn to joint ventures and strategic alliances for the purposes of entering hard-to-penetrate emerging markets and developing non-organic growth.

Euromonitor International (2011) observed that Korean firms used strategic alliances to broaden business areas and look for new sales drivers to combat saturation, along with saving time and costs. Supermarkets in their choice of suppliers of vegetables favor farmers with access to infrastructure and those with their own means of transport. Initially, supermarkets in Kenya purchased fresh vegetables in traditional wholesale markets, which can still be observed today. However, supermarkets have diversified their procurement to include contracted farmers and traders, in order to ensure price stability and consistency in quality and supply (Elizaphan et al., 2010). These contracted farmers and traders constitute the strategic alliances which have better chances of honoring their contracts at all times and providing the supermarkets supplies throughout the year.

In May 2010, Kenya Horticulture Development Program (KHDP) assisted a group of smallholders to become the first flower growers ever to receive Rainforest Alliance certification. This certification led to Kenyan flowers being accepted and sold by Asda supermarket in the UK, which is owned by Wal-Mart and is part of the world’s largest supermarket chain (Kenya Horticultural Development Program, 2010). The setting of requirements to be met by suppliers of supermarkets has made the farmers to increase their standards of farming to enhance the chances of their produce being accepted.

The Kenyan supermarket sector is changing. Massmart of South Africa is said to be negotiating a deal with Naivas supermarket for a 51% takeover bid (Herbling, 2013). Kenya's largest retailer, Nakumatt was reported to be in discussions with an international strategic investor to sell a 25 per cent stake. Ukwala, the country's fifth largest retailer, is said to be up for sale too, or at least some of its outlets. Deacons, the Kenyan clothes retailer is also said to be scouting for strategic investors as it moves to cut dependence on franchises (Thiong’o, 2013). The alliances by these firms are seeking entry into new markets hence increasing competition. Notably these foreign supermarkets seek to partner with local retailers so as to use their knowledge of the local environment. This is consistent with the knowledge accessing theory of SAs.

The modern procurement system characterizing the high value markets normally bypasses the brokers and other middlemen thereby reducing transaction costs and minimizing the deterioration of product quality. The supermarkets seem to have crafted direct relationships with farmers to procure the products. This bypassing of brokers and the large amounts of produce especially farm produce has made small scale producers to merge to
raise the standards of the produce to meet supermarket demands (Nyoro & Ngugi, 2007). Farmers on their own coalesce to acquire resources and gain bigger and steadier markets in the supermarkets. This is consistent with RBV theory of strategic alliances.

2.3 Conditions for a Successful Alliance
A number of factors determine the success level of strategic alliances. Issues of structure, power sharing, control and trust play an important role in the success of alliances. Ellis (1996) advises strategic alliance managers to create an environment of trust, maintaining broad strategic vision and feel genuine empathy for others, even those who are still competitors in other areas. Moss (1994) and Rijamampiana et al, (2005) view alliance success depending on the communication, implementation of the contracted alliance and financial and strategic analysis. Therefore strategic alliance ability to produce the desired performance depends largely of the structure created, how the relationship is managed and how the cultures of parent organizations influence the integration of the firms.

2.4 Organizational Performance
According to Falk and Julander (1983) in Hernant (2009) store performance is a consequence of environmental factors and the extent to which the store is patronized by consumers, which in turn is a consequence of how well store attributes like; location, open hours, merchandise, store layout, service, advertising, correspond to consumers’ evaluative criteria for their store choice behavior. Further, the retailer’s decision on store attributes, are influenced by underlying factors, such as local competition and local demand characteristics. This implies that supermarket branches have some discretion in the strategies they adopt to fight competition in their location. Kumar and Karande (2000) observe the usefulness to study all types of store performance measures because these measures of store performance are mutually exclusive. They gave an example of stores with high dollar sales that might not ensure a high productivity-based performance that is sales per square foot or a high profitability-based performance like gross margins. This means that different store performance measures when utilized give a holistic picture of how supermarkets or their branches perform.

Dunne and Lusch (1999) suggested a model of integrating the effects from various proposed antecedents on market based performance, productivity and financial performance. They classified store performance in terms of economic results into three broad categories: market-based performance, which captures how well a store succeeds in the competition for shoppers in the local market where it operates (measured by variables like sales volume and market share), productivity performance, (like sales per square meter floor area, sales per labor hour), and financial performance, which captures revenues, costs, profits, and profitability of the store.

Hernant (2009) operationalized store performance by adopting a comprehensive description of the performance of each supermarket, comprising three measures of market based performance (Sales volume, Number of shoppers per week and Average transaction per shopper), three measures of productivity (Sales per inventory investment, Sales per square meter floor area, Sales per labor hour) and six measures of financial performance (Gross profit performance, Operating cost performance, Operating profit Performance, Profitability performance).

Organizational economic performance has been measured using a three-item scale: return on assets (ROA), sales growth and increase in market share. Available literature shows the use of these indicators to measure changes in knowledge, competencies and learning of organizations. Shrader (2001) and Stuart (2000), among others, have adopted sales growth; Goerzen and Beamish (2005), ROA; and Dussauge, Garrette & Mitchell (2004), increase in market share. The average of the three indicators which are the observable variables serves to measure economic performance. When conducting a study that involves stores and non store firms then it’s vital to adopt a common measurer for both set of firms.

Yamakawa et al. (2011) studied exploration versus exploitation in alliance portfolio looking at Performance implications of organizational, strategic, and environmental fit. They used Firm performance as dependent variable using return on assets (ROA) obtained from the year-end report in Standard and Poor’s COMPSTAT (SPC) to capture the magnitude of firms’ economic performance. They found out that firms forming more exploitation alliances (as opposed to exploration alliances) tend to have higher performance in the near term. This suggests that exploitation alliances may bring more direct and immediate benefits to the parent firm when compared with exploration alliances, which supports March’s (1991) original contention that returns to exploitation are “positive, proximate, and predictable.

2.5 Strategic Alliances and Organizational Performance
There is evidence suggesting organizations forming alliances will experience enhanced organizational performance Nielsen (2007), Lee (2007) and Gorzen (2007). A broad stream of research claims that cooperation is an interesting organizational model, regardless of the conditions of the industry and the environment. Perry et
performance. Tebrani (2003) concludes that using strategic alliances improves performance regardless of the type of competitive strategy used, the country of origin, or the industry in which the alliances are established. The conviction surrounding this line of thought was so prevalent for so long that empirical analysis of the relationship between strategic alliances and performance received little attention (Stuart, 2000).

Camison et al. (2011) conducted a study on the effect of participation in technological strategic alliances on business performance by considering the knowledge-based distinctive competencies as a mediating variable using a sample of Spanish firms. Results from their findings prove that the relationship between research and development (R&D), innovation strategic alliances, and performance is mediated by the generation of knowledge-based distinctive competencies; and that the contribution of the participation in alliances to the growth of the firm’s knowledge stock depends on its creation of innovation competencies. This implies that R&D managers should enhance the development of this kind of competencies in order to achieve superior performance.

Technological strategic alliances as a variable gathers the total number of strategic alliances that a firm has developed in R&D, innovation and staff training in new technologies over a period of time. This variable is operationalized by summing the various agreements the firm has developed. Since the impact of alliances on firm performance should be assessed after they have ended, (Camison et al., 2011) only measured the alliances that had been completed at the time of the survey.

Jabar et al. (2011) examined the Malaysian manufacturing relationship between organizations’ resource availability and absorptive capacity as well as type of alliances with organizational performance. The result indicated that collaborations and partnerships is factor of consideration to enhance capabilities and performance. This means that firms planning to improve their performance need to consider alliances with other firms especially those in manufacturing sector.

More companies today are partnering with other members of the supply chain as alliances to improve the performance of the customer value-delivery network. Christopher et al. (2002) gives the example of Toyota Company which he says knows the importance of building close relationships with it suppliers. In fact, it even includes the phrase "achieve supplier satisfaction" in its mission statement. Suppliers' satisfaction means that they can rely on suppliers to help it to improve its own quality, reduce cost, and develop new products quickly.

Another form of Partnership and strategic alliances are the "suppliers" and "alliance" markets they both need to be viewed as a partnership –they can make to the establishment of a successful relationship marketing strategy. In the mid-1980s, the Austin Rover car manufacturing company had well over 1000 suppliers with whom it had arm's-length, often adversarial, relationships. Ten years later a transformed company now called the Rover group, had fewer than 500 preferred suppliers with whom it had the closest possible relationships (Peck et al. 2000).

Ibrahim (2011) identified a successful Strategic alliance in Starbucks and Kraft where Starbucks coffee was to be distributed through Kraft only. In the end both companies benefited. Starbucks gained quick entry into 25,000 supermarkets in the USA, supported by the marketing muscle of 3,500 Kraft salespeople and Kraft topped off its coffee line with the best-known premium brand and gained quick entry into the fast-growing premium coffee segment. This alliance clearly leads to market penetration, brand recognition and profitability for both partners hence the development of competitive advantage. This success story appears to prove the knowledge and RBV theories working for both parties.

Hewlett-Packard (HP) and Disney have a long-standing alliance, dating back to 1938, when Disney purchased eight oscillators to use in the sound design of Fantasia from HP founders Bill Hewlett and Dave Packard. When Disney wanted to develop a virtual attraction called Mission: SPACE, Disney Imagineers (people who devise and implements new concepts) and HP engineers relied on HP's IT architecture, servers and workstations to create Disney's most technologically advanced attraction (Czaja, 2013). This partnership has helped Disney gain the technology it required from HP hence enhancing its competitive advantage.

Dockers and American Pacific Enterprises (APE) on the other hand had an alliance where APE was to sell towels and bed accessories with Dockers name on it. The benefits to Dockers were very little save for their branded towels, but APE needed a strong brand image. This unbalanced alliance led to a big disaster for Dockers eventually as their brand image was severely damaged due to this awkward partnering with unrelated products. These imbalances led to the strategic alliance, ultimately collapsing (Ibrahim, 2011). From the forgoing, the alliance between Dockers and APE led to a competitive disadvantage for Dockers’ position rather than competitive advantage which they sought.

Arndt (2009) observed that Cisco had had two failed alliances with Motorola and Ericsson. The partners had turned into competitors because of acquisitions. Acquisitions had turned allies into adversaries. With insider knowledge of each other they sought to use the information they had against each other. This was detrimental to the alliance but appears consistent with the external control of organizations theory. The theory sees organizations seeking to control their rivals.
In 2001 South African brewing giant, SAB Miller ceded the production of its key beer brands to Nairobi-based East African Breweries Limited (EABL) – its main challenger in the Kenya beer market following a bruising battle in which consumer hostility was spewed at Castle Lager. EABL later stopped the production of Castle Lager, effectively killing the presence of South Africa’s beer in Kenya (Kenyan market a hard egg to crack,” 2010). Castle Lager is reportedly working to replace EABL as Kenya national football team sponsors hence seeking to revive its presence in Kenya by 2014 (Mabuka, 2013). This appears to rhyme with the external control theory of firms to fight off competition in a company’s territory.

(Kenyan market a hard egg to crack,” 2010) observed that Media24 a South African firm trading by the name East Africa Magazines Limited (EAM), started joint operations with Nation Media Group (NMG) in 2005 to publish popular southern African titles the Drum, True Love and Move in Nairobi. The coexistence lasted only four years as NMG, East Africa’s largest media company, pulled out of the deal, taking with it some of the journalists and salespeople. This left Media24 vulnerable.

2.6 Conceptual Framework
In the conceptualization of the effects of strategic alliances of performance of supermarkets the forging of strategic alliances is deemed to affect the performance of organizations. Strategic alliances are operationalized in terms of marketing, production and technological alliances which when forged by supermarkets affects supermarket performance indicated by the firms return on asset (ROA), sales growth and market share. The knowledge that a firm can improve their performance in a number of ways makes firm management seek to acquire those ways. Therefore the motivation to enter into strategic alliances is guided by a firm’s internal and external perception of its chances to improve its performance.

**Figure 1: Conceptual Framework**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Alliance</td>
<td>Organizational Performance</td>
</tr>
<tr>
<td>Technological alliances</td>
<td>Return on assets (ROA)</td>
</tr>
<tr>
<td>Production alliances</td>
<td>Sales growth rate</td>
</tr>
<tr>
<td>Marketing alliances</td>
<td>Market share</td>
</tr>
</tbody>
</table>

- SA Management
- Organizational culture
- Organizational structure

Moderating variable
Source: Matata Muthoka (2013)

3. RESEARCH METHODOLOGY
3.1 Research Design
Correlational research design was adopted in this study. This is because correlational research is concerned with studying a problem in order to explain the relationship between variables. Creswel (2008) notes that, correlational research involves collecting data at one time as the focus is not based on future or past performance of participants. When analyzing the findings, researchers analyze participants as a single group rather than creating subcategories of participants. The study was a sample survey. This was vital for the study as it assisted in guarding against errors.

3.2 The Location of the study
Owing to the fact that strategic alliances are structured at the corporate level the research concentrated on the headquarters of the firm’s selected operating Kenya with head offices in Nairobi.

3.3 Target Population
The nature of many supermarkets in Kenya is that they have many branches and have their headquarters in Nairobi. The population of the study constituted all supermarkets in Kenya but due to lack of resources and time,
the study only focused on the big five supermarkets by sales and number of branches in Kenya. The supermarkets are Nakumatt, Uchumi, Tuskys, Naivas and Ukwala supermarket chains (Global Agriculture Information Network -GAIN Report, 2008). The other target population was of the supermarket strategic partners of the five selected supermarkets. The supermarket top managers and the alliance partner top managers of selected supermarkets and firms were respondents to this survey.

3.4 Sampling Procedures and sample size
The target population of this study is supermarkets and their strategic alliances. Multistage sampling was used in this study. First, purposive sampling was used to select the 5 leading supermarkets, using secondary data from GAIN report (2008) to identify the five leading supermarkets in Nairobi. The top managers of each selected supermarket and firms in alliance with supermarkets were the respondents. Financial statements were also requested to assess the financial performance of the supermarkets and firms.

3.4.1 Calculation of sample size of supermarket alliances
The strategic partners to supermarkets will be selected from lists provided by the supermarkets. 100 respondents were identified 20 from each of the selected supermarket. Simple random sampling was be used to attain a sample of twenty alliances to supermarkets. The desired sample size was determined as per formulation by Fisher et al (1973) in Riungu et al (2013). Since there is no estimate available of the proportion in the target population assumed to have the characteristics of interest, 50% was used. In this study the target proportion of the population was assumed to have the characteristics of interest supermarket alliances who are agreed partners.

To determine a sample size from the population, the formula below was used:

\[ n = \frac{(Z)^2 \times p \times q}{(d)^2} \]

Where:
- \( n \) = the desired sample size.
- \( Z \) = The standard normal deviate at the required confidence level.
- \( p \) = The proportion in the target population estimated to have characteristics being measured.
- \( q \) = 1 - \( p \)
- \( d \) = The level of statistical significance set (precision).

Since the proportion of the population is not known \( p = 0.5 \), \( q = (1-0.5) \) the \( Z \) statistics = 1.96 and a desired accuracy level at the 9.8%. This results to a sample of 100 respondents.

3.5 Research Instruments
The research instrument that was used was the questionnaire and the financial statements of the alliance partners. A structured questionnaire was used to collect the data from the managers of the supermarkets and their partners. The questionnaire had four parts. Part A was made up mostly of close-ended questions. The questions sought factual information such as gender, period the respondent had worked in the firm and their level of education. This information helped validate the information from the respondents. Section B had items on technological strategic alliances, section C production strategic alliances, section D marketing strategic alliances and lastly section E Performance measures. A 4 level Likert scale will be used to solicit respondents’ information.

3.6 Reliability of the Instrument
According to Pallant (2011) when using the Cronbach’s Alpha coefficient value to test reliability, a value above 0.7 is considered acceptable; however, a value above 0.8 is preferable. In this study, the Cronbach alpha coefficient was .72.

Table 1: Reliability Statistics

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.720</td>
<td>.771</td>
<td>18</td>
</tr>
</tbody>
</table>

4. Findings
4.1 Technological Strategic Alliances and Performance

Table 2: Correlations between Technological Strategic Alliances and Performance

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Strategic Alliance</th>
<th>Supermarket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Pearson Correlation</td>
<td>.099</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.338</td>
<td>.118</td>
</tr>
<tr>
<td>N</td>
<td>95</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Research data (2014).
The Pearson correlation coefficient (−.782) for the supermarkets indicates a negative correlation between Technological strategic alliances and performance while that of supermarket alliances (0.099) indicates a weak, positive correlation between technological strategic alliances and performance. This is as indicated in table 2 above. The relationship between technological strategic alliances (as measured by the funding, innovation and training) and supermarket performance (as measured by the ROA, market share and annual sales increase) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong, negative correlation between the two variables, $r = -0.782$, $n = 5$, $p < .0005$, for the supermarkets while for supermarket alliances there was a weak, positive correlation between the two variables, $r = 0.099$, $n=95$, $p<.0005$ with high levels of technology use being associated with more of manufacturing and distribution than the sale to customers hence lower performance of supermarkets.

4.2 Production Strategic Alliances and Performance

Table 3: Correlation between Production Strategic Alliances and Performance

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supermarket alliances</td>
</tr>
<tr>
<td>Production</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

Source: Research data (2014).

As indicated by the Pearson correlation coefficient (−.410) for the supermarkets indicates a negative correlation between production strategic alliances and performance while that of supermarket alliances (0.560) indicates a large, positive correlation between production strategic alliances and performance. The relationship between production strategic alliances (as measured by design, jobs, quality, standards, purchasing and capital) and supermarket performance (as measured by the ROA, market share and annual sales increase) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a weak, negative correlation between the two variables, $r = -0.41$, $n = 5$, $p < .0005$, for the supermarkets while for supermarket alliances there was a large, positive correlation between the two variables, $r = 0.560$, $n=95$, $p<.0005$ with high levels of production use of alliances being associated with more of manufacturing and distribution than the sale to customers hence lower performance of supermarkets.

4.3 Marketing Strategic Alliances and Performance

Table 4: Correlation between Marketing Strategic Alliances and Performance

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supermarket alliances</td>
</tr>
<tr>
<td>Marketing</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

As shown in table 4 above, the Pearson correlation coefficient (.506) for the supermarkets indicates a positive correlation between marketing strategic alliances and performance while that of supermarket alliances (0.390) indicates a medium, positive correlation between marketing strategic alliances and performance. The relationship between marketing strategic alliances (as measured by distribution, sales, and promotion) and supermarket performance (as measured by the ROA, market share and annual sales increase) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong, positive correlation between the two variables, $r = .506$, $n = 5$, $p < .0005$, for the supermarkets while for supermarket alliances there was a medium, positive correlation between the two variables, $r = 0.390$, $n=95$, $p=.0005$ with high levels of marketing alliances being associated with higher performances for both supermarkets and their alliances.

4.4 The effect of strategic alliances on performance of supermarkets and their alliances in the Nairobi Central Business District (CBD)

4.4.1 Correlation Analysis and Test of Significance for Supermarkets

According to table 5 below, the relationship between marketing strategic alliances and performance was positive. In addition, the relationship between the two variables was strong as evidenced by the high Pearson’s value of
0.506. Furthermore, the two tailed significant value was 0.569 and this shows that there was no significant relationship between marketing strategic alliance and supermarket performance. This is because the significance value was higher than 0.05. These findings suggest that the presence of a higher number of strategic alliances can substantially increase a firm’s performance. The Pearson’s value of the relationship between Technology and performance was negative 0.782. This indicates that there exists a strong negative relationship between the two variables. However, the significant value of 0.118 signifies that the relationship between the two variables was not statistically significant.

Table 5: Correlation Analysis and Test of Significance for the Supermarkets

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Marketing</th>
<th>Technology</th>
<th>Production</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.315</td>
<td>-0.159</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.606</td>
<td>.798</td>
<td>.569</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Technology</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.889*</td>
<td>-0.782</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.044</td>
<td>.118</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.410</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.492</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

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

Source: Research data (2014).

Similarly table 5 above indicates a negative correlation between production and performance. Moreover, the relationship between the two variables was weak as indicated by the low Pearson’s value of 0.410. Furthermore the two tailed significant values of 0.492 shows that there was no significant relationship between production strategic alliances and performances. This is because the significance value was higher than 0.05. These findings suggest that the presence of a higher number of production strategic alliances can substantially decrease a firm’s performance since supermarkets would lose focus of their core functions selling.

4.4.2 Correlation Analysis and Test of Significance for Supermarket Alliances

Table 6: Correlation Analysis and Test of Significance for the Supermarkets Alliances

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Marketing</th>
<th>Technology</th>
<th>Production</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.239*</td>
<td>.071</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.020</td>
<td>.494</td>
<td>.706</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Technology</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.081</td>
<td>.099</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.433</td>
<td>.338</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>95</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.076</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.463</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>95</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
</tbody>
</table>

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

Source: Research data (2014).

Table 6 above shows that the correlation coefficient value between marketing strategic alliances and performance was 0.390. This indicates that the relationship between the two variables was positive. However, the low correlation value points out that the relationship was weak. The two tailed significant value was 0.706 which means that the two variables had statistically insignificant relationship. This implies that increasing the number of marketing strategic alliances does not affect a company’s level of performance. The correlation coefficient value on the relationship between technology and performance was 0.099. This signifies that there exists a positive but a weak relationship between the two variables. Besides, the two tailed significant value was 0.338. This implies that the relationship between Technology strategic alliances and performance was statistically insignificant.
According to table 6 above, production strategic alliance and performance were found to have a negative relationship. In addition, the correlation coefficient value of 0.076 means that the relationship between the two variables was weak. Moreover, the medium two tailed significant value (0.463) implies that there was no statistical significant relationship between the two variables.

4.4.3 Regression analysis

**Table 7: Regression Analysis for Supermarket Alliances**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.132*</td>
<td>.017</td>
<td>-.015</td>
<td>.73079</td>
<td>.017</td>
<td>.539</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Marketing, Production, Technology
b. Dependent Variable: Performance

Source: Research data (2014).

According to table 7 above, the correlation coefficient(R) value was 0.017. This means that there is a weak relationship between strategic alliances and performance (r>0.25). However, table 7 also indicates that strategic alliances explain only 1.7% of the differences in strategic alliance as shown by the coefficient of determination value (R2) of 0.017. Moreover, the significance value of 0.657 implies that strategic alliance cannot be used to reliably predict changes in performance of supermarkets. This is because the F value is greater than the alpha p value of 0.05. The Durbin-Watson measure of autocorrelation in this analysis was 2.395. This signifies that there was no autocorrelation among the independent variables due to the fact that it was within the acceptable levels of 1.5 to 2.5.

**Table 8: Regression Analysis for Supermarkets**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000*</td>
<td>1.000</td>
<td>1.000</td>
<td>.00145</td>
<td>1.000</td>
<td>950</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Marketing, Production, Technology
b. Dependent Variable: Performance

Source: Research data (2014).

According to table 8 above, the correlation coefficient(R) value was 1. This means that there is a strong relationship between strategic alliance and supermarket performance (r=1). However, table 8 indicates that strategic alliance explains only 100% of the differences in performance as shown by the coefficient of determination value (R2) of 1. Moreover, the significance value of 0.002 implies that strategic alliances can be used to reliably predict changes in performance of supermarkets. This is because the F value is less than the alpha p value of 0.05. The Durbin-Watson measure of autocorrelation in this analysis was 2.069. This signifies that there was no autocorrelation among the independent variables due to the fact that it was within the acceptable levels of 1.5 to 2.5.

**Table 9: Anova Analysis for Supermarkets**

<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>Regression</td>
<td>.577</td>
<td>3</td>
<td>.192</td>
<td>.950</td>
<td>.002*</td>
</tr>
<tr>
<td>Residual</td>
<td>.000</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.577</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance
b. Predictors: (Constant), Marketing, Production, Technology

Source: Research data (2014).

According to table 9 above, the overall significance of the model was 0.002 with an F value of 0.95. The level of significance was less than 0.05 and this means that there is statistical significant relationship between strategic alliances and supermarket performance. Therefore this concludes that there is a positive effect between strategic alliances and supermarkets performance.
Table 10: Anova Analysis for Supermarket Alliances

<table>
<thead>
<tr>
<th>ANOVA</th>
<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></td>
<td>Regression</td>
<td>863</td>
<td>3</td>
<td>.288</td>
<td>539</td>
<td>.657</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>48.599</td>
<td>91</td>
<td>.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>49.462</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance
b. Predictors: (Constant), Marketing, Production, Technology
Source: Research data (2014).

According to table 10 above, the overall significance of the model was 0.657 with an F value of 0.539. The level of significance was higher than 0.05 and this means that there is no statistical significant relationship between strategic alliances and supermarket alliances performance. Therefore this study concludes that there is no relationship between strategic alliance and supermarket alliances performance and hence strategic alliances do not have an effect on supermarket alliances.

Table 11: Regression Coefficients for supermarket alliances

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
<td>1.807</td>
<td>.429</td>
<td></td>
<td>4.215</td>
<td>.000</td>
<td>.955</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>.103</td>
<td>.109</td>
<td>.101</td>
<td>.945</td>
<td>.347</td>
<td>-1.13</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td>-.112</td>
<td>.136</td>
<td>-.086</td>
<td>-.823</td>
<td>.413</td>
<td>-1.383</td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td>.030</td>
<td>.151</td>
<td>.021</td>
<td>.197</td>
<td>.844</td>
<td>-2.71</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance
Source: Research data (2014).

According to table 11 above, the significance of strategic alliances in explaining changes in performance among the firms that collaborate with the supermarkets that took part in the study was 0.000. This indicates that strategic alliance is statistically significant in relation to firm performance (p<0.05). The t value of 4.215 is above the acceptable level of 3 and this further signifies that the relationship between strategic alliances and performance was statistically significant. The significance level of Technology was 0.945 which is more than the acceptable level of 0.05. This implies that there was a statistical significant relationship between Technology and the levels of performance.

Table 11 indicates that the relationships between production and marketing with performance were not statistically significant due to the high levels of significance. Moreover, their t values were less than 3 thereby implying that they could not be used to explain changes in performance. This means that the number of production and marketing strategic alliances does not affect the levels of performance among the supermarket alliances.

Table 12: Regression Coefficients for Supermarket

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
<td>.855</td>
<td>.009</td>
<td></td>
<td>90.265</td>
<td>.007</td>
<td>.735</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>-.1305</td>
<td>.003</td>
<td>-.2047</td>
<td>-.454.027</td>
<td>.001</td>
<td>-1.342</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td>1.645</td>
<td>.005</td>
<td>1.396</td>
<td>322.171</td>
<td>.002</td>
<td>1.580</td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td>-.077</td>
<td>.002</td>
<td>-.077</td>
<td>-.36.689</td>
<td>.017</td>
<td>-1.103</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance
Source: Research data (2014).

According to table 12, the significance of strategic alliances in explaining changes in performance
among the supermarkets that took part in the study was 0.007. This indicates that strategic alliance are statistically significant in relation to supermarket performance \( (p<0.05) \). The \( t \) value of 90.265 is above the acceptable level of 3 and this further signifies that the relationship between strategic alliances and performance was statistically significant. The significance level of Technology was 0.001 which is less than 0.05. This implies that there was a statistical significant relationship between Technology and the levels of performance.

Table 12 indicates that the relationships between production and marketing with performance were statistically significant due to the low levels of significance. Moreover, their \( t \) values were more than 3 thereby implying that they could be used to explain changes in performance. This means that the number of production and marketing strategic alliances affects the levels of performance among the supermarket alliances. Table 12 shows that none of the Variance of inflation factor (VIF) was around or equal to 5. This signifies that there was no multi-collinearity between the independent variables. This is further evidenced by the fact that the tolerance values were more than 0.2.

### 5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1: Summary of the Results

This study was aimed at assessing the effect of strategic alliances on organizational performance among the supermarkets and their alliances in the Nairobi CBD Kenya. The specific objectives of this study were to determine the effect of technological strategic alliances on the performance of supermarkets in Kenya, to establish the effect of production strategic alliances on the performance of supermarkets in Kenya, to find out the effect of marketing strategic alliances on the performance of supermarkets in Kenya and to determine the combined effect of technological, production and marketing strategic alliances on the performance of supermarkets in Kenya. Data was analyzed using descriptive statistics, chi-squares and Pearson moment correlation.

About 80% of the supermarket respondents had worked in their firms between 6-15 years. The majority of supermarket respondents at senior management level have knowledge of their firm’s corporate strategies like strategic alliances. 100% of supermarket and 84% of supermarket strategic alliances respondents had at a bachelor’s degree education. This means that the supermarket respondents were elite and more informed. These respondents have the ability to understand strategic alliances contracting.

There was a strong, negative correlation between technological strategic alliances and performance, \( r = -0.782, n = 5, p < .0005 \), for the supermarkets while for supermarket alliances there was a weak, positive correlation between the two variables, \( r = 0.099, n=95, p<.0005 \) with low levels of technology use being associated with supermarkets. There was a weak, negative correlation between production strategic alliances and performance, \( r = -0.41, n = 5, p < .0005 \), for the supermarkets while for supermarket alliances there was a large, positive correlation between the two variables, \( r = 0.560, n=95, p<.0005 \) with high levels of production use of alliances being associated with more of manufacturing and distribution than the sale to customers hence lower performance of supermarkets. There was a strong, positive correlation between marketing strategic alliances and performance, \( r = .506, n = 5, p < .0005 \), for the supermarkets while for supermarket alliances there was a medium, positive correlation between the two variables, \( r = 0.390, n=95, p<.0005 \) with high levels of marketing alliances being associated with higher performances for both supermarkets and their alliances.

#### 5.2: Conclusions

The aim of the study was to evaluate the relationship between corporate governance and working capital management efficiency of firms listed at the NSE. The empirical results of the study indicated that there was a strong, negative correlation between technological strategic alliances and performance. However, there was no statistical significant relationship between technological strategic alliances and performances among supermarkets and their alliances in Nairobi CBD. This suggests that the technological strategic alliances have no significant impact on the levels of performance of a firm. This conclusion corroborates with the observations that mere integration of a firm in a technological strategic alliance does not produce a positive effect on its performance (Camison et al. 2007)

Furthermore, correlation results indicated that there was a weak, negative effect between production strategic alliances and performance, for the supermarkets while for supermarket alliances there was a large, positive effect between the two variables. This suggests that an increase in the number of production strategic alliances causes supermarkets to lose focus from their core business leading to low performance while for the supermarket alliances participating more in production strategic alliances opens for improving production capacity hence causing higher performances. There was a strong, positive effect between marketing strategic alliances and performance for the supermarkets which suggests that supermarkets engagement in marketing strategic alliances increases performance while for supermarket alliances there was a medium, positive correlation between marketing strategic alliances and performance suggesting that strategic alliances tend to partially increase performance of supermarket alliances. However, 2 tailed tests indicated that there was a


statistically insignificant relationship between the variables.

The results from the multiple regression analysis indicated that strategic alliances had a strong relationship with supermarket performance which suggests that strategic alliance contributes positively towards supermarkets performance. On the other hand supermarket alliances regression analysis showed a weak relationship between strategic alliances and performance suggesting that other factors account for the performance in these alliances.

Moreover, the ANOVA test indicated that the relationship between strategic alliances and performance was not statistically significant for the supermarket alliances but significant for the supermarkets. Therefore, this study concludes that there is no strategic alliances and performance among the supermarket alliances but there is an effect among the supermarkets.

The t- test analysis indicates that the relationship between strategic alliances and performance was statistically significant among the supermarkets and their alliances suggesting that strategic alliances positively increase performance.

5.3 Recommendations
The following recommendations have been made from the study.

i. Future studies should be conducted to determine the impact strategic alliances on performance using larger samples and longer time periods. Furthermore, future studies should include sector specific firms.

ii. Firms need to network together to market their produce. These will give them more links to supermarkets and opportunities for accessing the markets.

References


Coopers & Lybrand (1997). Strategic Alliances; Coopers & Lybrand Barometer


Perry, M., Sengupta. S., & Krapfel, R. (2004), Effectiveness of horizontal strategic alliances in technologically uncertain environments, are trust and commitment enough? *Journal of Business Administration and Management*


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