STRATEGIC ALLIANCE PORTFOLIO AND COMPETITIVENESS OF CEMENT MANUFACTURING FIRMS IN KENYA

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ABSTRACT

Strategic alliances have recently become a common vehicle for organizational knowledge sharing and learning processes across boundaries within a country or beyond national boundaries in order to obtain valuable resources that a firm might be lacking. Towards establishment of the role of organizational alliances, the study sought to determine the effect of strategic alliance portfolio on the competitiveness of Cement manufacturing companies in Kenya. The study specific objectives was to establish the impact of alliance partner size, strength of partner ties, alliance portfolio structure and alliance knowledge sharing on the competitiveness of cement manufacturers in Kenya. The study is of value to both management practitioners, scholars and policy holders in the country since in the present day competitive business environment, it has been found that effective strategic alliance have a positive effect on the firm competitiveness. The scope of the study was limited to the six cement manufacturers in Kenya. The relevant theories to the study was the Resource Based View theory, Resource Dependency Theory and Porter's theory of competitive advantage. The empirical studies covering the four independent variables were also discussed by evaluating what other researchers have accumulated on the variables. What is evident from the study is that the results on the effect of strategic alliance portfolio is mixed and most of the studies have been undertaken in advanced countries with limited in Kenya, Towards the realization of the research objectives, the study employed an explanatory research design while the population of the study was the six cement manufacturing firms in Kenya. The population of the study was all the senior and middle level managers in the respective cement firms. In total, the target population was 873 staff members occupying the middle and top management position in the cement firms. The researcher employed stratified and simple random sampling in selecting the respondents, with a total of 88 target respondents. The study used primary data collected using structured questionnaire that contained both open and closed ended questions. To improve on the research instrument reliability, a pilot test was undertaken to increase the instrument validity. Similarly, the researcher adopted probing technique on the respondents as well as making an effort to distribute the questionnaires to the most knowledgeable respondents in the organization. The collected data was analyzed by use of descriptive measures such as mean and standard deviation while the analyzed data was presented by table and graphs. To determine the relationship between the dependent and the independent variables, a simple regression analysis was established. The study revealed that cement manufacturing firms prefer that efficient configuration of the alliance is more important than the number of alliance partners thus choice of high quality partners is more critical than the physical number of partners in an alliance. Firm competitiveness was found to have been positively and significantly affected by strategic alliance portfolio practices. The researcher recommends that the cement manufacturing firms should adopt the strategic alliance portfolio because it has positive benefits such as providing superior customer service, easy access of information and knowledge transfer.

Key Words: *strategic alliance portfolio, firms, Kenya competitiveness, cement manufacturing*

INTRODUCTION

The level of global competition has been increasing on daily basis and therefore as a way of improving productivity and market share business organizations enters into strategic alliances. The need to enter into business alliances has further been increased by a constantly growing demand that calls into the need for the firms to utilize each other's core competence and specialization in the diverse markets, related technology or a combination of the two (Das & Tengnn , 2010). Similarly, strategic alliances have gained popularity in organizational knowledge sharing and learning process across the boundaries of organizations within a country or beyond national boundaries and indeed, the prime goal of organizations to entering into alliances is to acquire valued resources, of which specific knowledge is the major target. This is because a formation of a strategic alliance can begin from a single alliance between two firms and leading to multi-firm alliance comprising of more than two companies to gain associated benefits from different dimensions of its corresponding business activities and to emphasize objectively on potential and current markets opportunities.

A portfolio of strategic alliance firms has different internal characteristics that influenced the competitiveness. Different characteristics of the portfolio partners are known to have beneficial effect on the portfolio partners. The size of the portfolio members will bring innovation competencies and synergy generation between the members (Ahuja, 2014). The strength of the alliance partners is also another characteristic of strategic alliance partners. The strength of alliances partners is evidenced by the level of trust existing between partners to the extent that they will be willing to share their knowledge acquired in their operations experience. As Artzgh and Brush (2010) highlight, a strong connection is expected to result in better coordination, communication and capture value for the partners. The structure of the portfolio is another characteristic that is expected to influence the competitiveness of a firm. From a horizontal structure that defines the portfolio relationship, it enables the portfolio partners to develop a common language, problem identification and problem-solving capability.

Ahuja (2014) highlights that from a strategic alliance portfolio, a company can gain competitive edge, share expensive facilities like research works and access potential skills and resources, and though at the same time has potential risks. Oxley and Sampson (2014) points out that in the telecommunication field, strategic alliances in advanced countries such as USA and China not only bring opportunities but also risks. They highlight instances where for example an alliance between Microsoft and Apple led to Apple acquiring technical knowledge from Microsoft and sharing the same with its competitor the critical knowledge of its application.

Norman (2012) in a contrary opinion suggested that trust between alliance partners, in the case of technological firms in Britain, facilitates not only acquisition of knowledge but also minimizes chances of knowledge loss among the partners. Similarly, Kauser and Shaw

(2012) suggest that in Asia, Fuji Xerox of Japan is an alliance of two firms which are Xerox and Fuji photo Film Company whereby Xerox establishes the strategies and business policies while Fuji Xerox on the other hand helped in research and development of Xerox which has resulted in increased knowledge sharing with minimal risk of leakage of proprietary knowledge. This represents a case of alliances providing the benefit of reduced dependency on supplier and enables firms to be self-sufficient.

Milne and Watkins –Mathys, (2013) posit that in South African small hotel establishment, informal and formal networks are significant for adoption of ICT framework among alliance partners. This is because these groupings constitute crucial information sources, social, business support and technology to the portfolio partners as well as financial and owner manager support. In Turkey, Tosun, Okumus & Fayell (2010) found that hotels enter into alliances to enhance their prospector/focus and defender/cost leadership strategies to increase their competitiveness. This suggests that various horizons can be established on account of an operative strategic alliance that include competition for local market position since by entering into the global markets, organizations force foreign competing firms at home to shift their economic resources away from continuous investment which safeguards the local market. In Kenya Ndemo (2012) opine that alliances between Kenyan small and medium enterprises help in increasing channels of distribution by obtaining new distribution means, especially by foreign traders. In addition, through strategic alliances, SMEs are able to enter into new markets and to lure many prospective customers thus increase their market share.

STATEMENT OF THE PROBLEM

The cement industry in Kenya has continued to experience growth in both the volume of sales and number of players over the last ten years. The cement consumption rate has been increasing by 22% per annum on average over the last ten years while the production has been increasing by 19.5% (KNBS, 2017). However, the same report notes that importation of cement from advanced countries such as India and China, and Comesa member countries such as Egypt, with less production cost has been increasing annually for the last decade at a rate of 6% pa and this has led to increased competitive level in the local cement industry. In addition, with the setting up of new and modern cement manufacturing plants in Tanzania, a member of East Africa Community, by Africa's largest Cement manufacturer, Dangote group, it is expected that the competitive pressure to the local firms will increase. This calls upon cement manufacturing firms to come up with appropriate competitive strategies to cushion them against the market pressures. One of the strategies that the cement firms can pursue is formation of either vertical or horizontal or both alliance portfolio with companies above and downstream of their production line. As a result, this research will seek to find out the impact of strategic alliance portfolio on the competitiveness of cement manufacturing firms in Kenya. Through review of previous studies on strategic alliances, it is evident that majority of the studies (Kale et al., 2000; Li et al., 2008; Oxley and Sampson, 2014) have examined exchange of knowledge among firms at a uni-dimensional level, without realizing the likelihood that the benefits and flow of knowledge could happen in both directions among the partners hence stands as a common dilemma that firms faces in strategic alliances. In addition, other research on alliance portfolio has examined independently the impacts and

implications of the four alliance portfolio configurations dimensions (Hoffmann, 2007; Koka and Prescott, 2008; Lavie, 2007; Rowley et al., 2000) with few studies considering more than one alliance portfolio configuration dimensions at the same time or more so, examined how alliance portfolio dimensions influence firm competitiveness. Consequently, these two gaps in the extant studies that lack the ability to combine more than one effect of the strategic alliance on organizational performance and the lack of studies that analyses the degree of influence of alliance portfolio on competitiveness of firm forms the reason for undertaking the current research.

GENERAL OBJECTIVE

The research will seek to find out the impact of strategic alliance portfolio on competitiveness of Cement manufacturing firms in Kenya.

SPECIFIC OBJECTIVES

1. To determine the effect of the size of the alliance partners on the competitiveness of cement manufacturing companies in Kenya
2. To establish the effect of strength of partner ties on the competitiveness of cement manufacturing companies in Kenya
3. To determine the effect of alliance portfolio structure on the competitiveness of cement manufacturing firms in Kenya
4. To establish the effect of the alliance knowledge sharing on the competitiveness of cement manufacturing companies in Kenya.

THEORETICAL FRAMEWORK

The discussions relating to the impact of strategic alliance on firm competitiveness can be anchored from three theories namely; the Resource based Theory, the resource dependence theory and Porter's theory of competitive advantage. These theories will also explain the reasons why organizations will employ different strands of alliance in their business operations.

Resource Based View

The Resource-Based View (RBV) is a technique for attaining organizational competitive advantage that came into action in the 1980s and 1990s after original concept developed by Wernerfelt (1984).Barney (1991) suggests that a firm essentially is a pool of capabilities and resources that will influence its strategy and performance. Therefore, there will be no competitive advantage realized in the market as a result of production of similar goods and services due to availability of similar pool of resources for production of goods and provision of services in the industry. Consequently, RBV postulates that firms with successful business operations will find their prospective future competitiveness through effective harnessing of their unique and distinctive capabilities, which may frequently be intangible or implicit in nature. Further, Peteraf and Bergen (2003) further note that the firms 'fundamental sources and drivers to superior performance and competitive advantage are primarily related to the qualities of their capabilities and resources which are costly-to-copy and valuable. Thus, it

implies that strategic resources are distributed across firms heterogeneously and that if different firms pool their resources together, they will be able to create a synergy in their operations.

Duysters and Lokshin (2011) similarly assert that if organizations wish to keep up with a distinctive product or service (competitive advantage) they will be forced to wad gaps in capabilities and resources in a manner that is cost-effective. This theory is applicable in the current study because resources related to alliance competences explain heterogeneities of performance across firms and across alliances with alliance activities because such capabilities significantly affect the underlying mechanisms that will exist in a partnership. Therefore, to achieve a high performance comparative to other players in the sector, the Cement manufacturing firms in Kenya might need resources that vary from firm to firm, of which at least some might lack and therefore alliance formation might be a valuable tools to gain access to these resources from alliance partners and because these resources can be managed by different partners, a varied group of alliance relationships might be required (Ireland, Hitt, & Vaidyanath, 2012).

In addition, Cement manufacturers' alliance partners can generate massive opportunities for growth and success and also obtaining the business in market place simultaneously, as a result of an additional capacity enhancement and competitive edge. Therefore, as the RBV suggest, the competitive advantage of a firm will be generated from the internal resources that each alliance partner brings into the portfolio. Thus RBV is considered relevant in the current study because of the synergy brought about by the partners to the alliance is an important asset. Alliances also gives the benefit of reduced supplier dependency and make firms to be potentially self-sufficient. The size of an alliance is expected to increase alliance competitive advantage since with an heterogeneous capabilities present in an alliance, it is expected to result in improved synergy among the alliance partners characteristics which will result in improved performance among the partners.

Resource Dependency Theory

Resource Dependency Theory (RDT) was progressed by Pfeffer and Salancik (1978) and postulates that survival strategy of an organization depends majorly on the maintenance and acquisition of significant resources that are drivers to organizational success. Business units in the current environment gradually carry out business activities within an atmosphere of uncertainty of resources and hence rely comprehensively on partners in their alliance to provide resources essential to achieve appropriate results. Therefore, RDT opines that managers can develop their organizational likelihoods of existence by vigorously attempting to stabilize the conflicting drives of upholding autonomy while maintaining steady alliance relations, predominantly with partners possessing necessary and valuable resources. The prerequisite of having adequate resources among competing firms may be conjoint leading to interdependence instead of either independence or dependence of individual firms.

Hillman (2005) note that though the RDT focused initially in corporate strategy as acquisitions and mergers and dovetailing boards, it has featured prominently in amplifying a diversity of strategic management of organizations together with alliances. For example,

RDT suggest the co-opting members of board from external companies in management of most significant resources that is embedded in a firm might be a good strategy, though as Duysters and Lokshin (2011) opine, this strategy may not at all times be realistic or implementable since companies would somewhat not have some kinds of partners, such as key suppliers, epitomized on their respective board of managements for panic of revealing sensitive organizational information that can be applied against them strategically. Resource Dependence Theory is relevant in the present study because it explains a firms' propensity to form alliances in comparison to other formation of alliances for example outright mergers and vertical integration (Varma et al., 2015). Resources brought about to the group by alliance partners such as suppliers, customers, financiers, and sometimes even competitors to the Cement manufacturers in Kenya is a resource that is resident in the alliance. Hence this creates some level of inter-dependence among the firms. Hence, the study is relevant in the current study because of the resultant benefit to the cement alliance partners due to the dependence among the firms.

Xia (2011) propose that alliance partnerships are most effective the minute a parallel dependence level is available among the partners since imbalanced dependence in an alliance relationship can affect negatively organizational results because organizations that are highly dependent can be influenced by their partner and hence will have minimum management of activities of their partner's. Hence, the resource dependence theory advice to managers can be summed up by the words of Davis and Cobb (2010, pg. 24): "Choose the least constraining device to govern relations with your exchange partners that will allow you to minimize uncertainty and dependence and maximize your autonomy."

Porters Theory of Competitive Advantage

Porter's (1980) context advocates that the performance of a firm in the market and entire industry is determined by the physiognomies of the industry that a firm competes (Porter, 1981). According to Porter, there are five drives that figures and re-align the structure of all sectors of economy and by extension, the drives sets up the policies that will govern competition and the basis of productivity within a sector (Porter, 2008). The five forces that were considered to shape the competitive landscape of a firm include threats that competitive rivalry poses to a firm, substitute products, powerful suppliers, prospective new entrants and powerful buyers. The mutual strength of these factors defines the eventual potential of profit that will be realized in the sector.

The competitive level that a firm operates in influences its ability to realize maximum profits. As the competition escalates, the attention of various stakeholders converges within the survival goal (Grant, 2005). Therefore, Porter highlight that the five forces model not only helps one to look beyond his direct competitors but rather helps to define the industry in which competition takes place. In addition, Porter opines that having identified the factors that define its competitive position, the framework state the techniques that will lead a firm into achieving greater organizational performance. These strategies include focus, differentiation and cost leadership. Cost leadership signifies an alternative strategy that aims at outperforming opponents through effectiveness instead of service or product quality (Porter, 1990). This strategy emphasizes on offering customers a competitively reduced cost

without forgoing service and quality. This technique is demonstrated by managerial mechanism of cost minimization and expenditures in the facets of a firm's or organizational set up (Hudson, 2002). Distinguished strategy of a firm is an effort to build a perceived or real product or service difference with the aim of creating an industry-wide customer base that understands and perceives the provider's service or product as quality and meets their specifications (Porter, 1990). The expectations of focus strategy are that it anticipates a firm to constrict its marketing technique by either engaging the geographic region, segment of the product line or buyer group. Therefore, the strategy enables companies to focus on a specific geographic markets, product line segments or group of customers (Lumpkin & Dess, 1996).

Deeds and Hill, (2006) however note that various individuals understands only the five forces framework and its use in an extremely trivial manner. Consequently, there is a likelihood of resulting in an inaccurate, unhelpful and incomplete analysis. At most awful point, it can result into poor decision making, misanalysis, and disastrous outcomes of an organization. Additionally, Porter (2008) expresses the absence of quantitative methods used in distinctive implementation of the five forces structure and the decentralisation of the analysis into a sequence of qualitative lists. These assessment types of industrial conditions are often relatively subjective and make for poor alternatives for the consistency prescribed and outlined originally by Porter.

EMPIRICAL REVIEW

Size of Alliance Partners and Firm Competitiveness

The size of alliance partners is operationalized as a count variable estimated as the number of alliances a principal firm is involved in at a given time (Ahuja, 2000). Scholars in this sphere have established different kinds of relationships on the effect that alliance portfolio size has on the firms' level of competitiveness. Some authors are of the view that the more the total number of partners found in an alliance, the better; while others posits that bigger is not essentially better. Among the research works that support high performance from high number of partners. The studies that support this position are centered on entrepreneurial biotechnology companies and technology success, for example rates of output realized as a result of enhanced innovation (Shan, Walker, & Kogut, 2004) or development of a new product (Deeds & Hill, 2006).

Shan et al. (2004) pose it that the number of start-ups of cooperative alliance with larger companies has been established to possess a positive linear impact on the output its innovative capacity, a point that Deeds and Hill (2006) recorded a curvilinear association between the number of alliances a firm is engaged in, an entrepreneurial biotechnology and the rate of development of new product. Though a linear relationship signifies that at any point a firm adds an alliance to their set of alliance portfolio they earn the equal amount of benefits, the second study recommends findings which are contrary that suggests that diminishing returns are realize at the point a firm adds an alliance into their existing alliance portfolio once a particular size of alliance portfolio has been surpassed. Nevertheless, the ability to generalize the study findings of these studies could be limited since the studies focused mainly on firms that entails on entrepreneurial biotechnology. This explains the

reason why Gulati (2009) affirm that in order to have the clear picture of the extent at which the size of alliance portfolio affects organizational performance, other alignment factors for example breadth of an alliance portfolio, quality of alliance partner and efficiency, need to be deliberated and may really be more significant than size in illuminating the benefits that a firm acquire from their alliance portfolios.

Anand and Khanna (2007) is of the view that involvement of alliance partners with more members in their operational relationship under an harmonized portfolio technique can create value further than that of single alliances, mainly innovation and the overall firm performance. This is because enhanced organizational performance is reinforced when inter-firm alliances happen within varied alliance portfolios. As the number of alliance partners instigates increase in number, firms will start experiencing enhanced performance as a result of the advantage of having access to complementary repository of knowledge. If the available knowledge is combined in a meaningful way with existing knowledge in a firm, Jiang et al., (2010) point out that a firm can establish new effective adeptness, restructure their processes and products, and improve the quality of products. They however, note that the increased performance will eventually reduce as the acquired knowledge via the alliance portfolios becomes increasingly varied that it is cumbersome for alliance partners to combine and communicate their capabilities and knowledge.

Hoffman (2005) note that alliance partners managers use the different firms in a portfolio to access relevant and timely knowledge past what their organizations can acquire single-handedly. This is because alliances enable sharing of resources between companies by creating channels of communication that facilitates introduction of active interactions between firms involved in a partnership to share knowledge and other best practices, to cooperate on combined challenges, and to enhance mutual capabilities. In addition, firms will enhance their levels of adaptability and competiveness as well as realize new opportunities as a result of benefits acquired from alliance partners (McGill & Santoro, 2009).

Strength of Partner Ties and Firm Competitiveness

Chung, Singh and Lee (2010) assert that alliance partners of similar status creates close relationship that can improve trust, enhance sharing of knowledge and lead to improved relationship between performance and alliance portfolio. Large firms with high standard of operation have the tendency of being selective in choosing the king of partners to include in their alliance portfolio since their reputation, performance and status may adversely suffer from relationships with dishonest partners. Hence, Westphal and Zajac (2007) note that firms with higher level of status tend to form alliance with firms that are perceived to have high status, and this can be attributing to the fact that firms that are similar assume that knowledge acquired from similar firms is accurate and relevant. This will therefore lead to more exchanges of more fine-grained knowledge among the firms of similar status and this implies that information from companies with a inferior status position is often less valued and reliable by the firms with higher status.

Artz and Brush (2010) discovered that alliance partners' performance get on improving as their relationship improved since the more their relationship depend, the more they trust each

other hence creating room for more opportunities and sharing of resources however, retaliation may occur as a result of detected opportunistic behavior among the partners. Similarly, Schreiner et al. (2011) highlight that once an alliance is established; the resultant post-formation capabilities, namely; coordination, communication and bonding create and capture value from the partnership. The resultant coordination capabilities are manifested by the firm's capacity to manage efficiently the division of task accountability, operational processes and interdependence between partnering alliance. Thus, alliances portfolio leads to enhanced level of communication, both formal and informal; and improved sharing of valuable information with the partner allies. Another attribute that results from strong alliance partner ties is increased bonding between partners. Besides coordination, communication, and bonding, Kale and Singh (2007) highlight that there is increased learning among the partners which is manifested through articulation, sharing, internalizing and codifying knowledge concerning management of an alliance.

Gulati and Higgins (2008) opine that from the young and entrepreneurial firm's perspective, vast sources of benefits for instance enjoying spill over impact from the reputation of partners or getting access to valuable and quality resources can be realized as a result of having strong relationship with larger and recognized alliance partners. Nonetheless, although numerous studies have elaborated the question of whether partners in alliance portfolio play a precarious role towards the IPOs' success of entrepreneurial organizations, discoveries still remain to a certain degree, unconvincing as supported by Stuart et al. (2009) who establish that young organizations with organizational equity investors and protuberant alliance partners accomplished their IPO quicker and registered superior valuations from the IPO. In contrast, Gulati and Higgins (2008) resolved that alliance portfolios did not put a lot of concern to entrepreneurial companies in biotechnology sector at the time of firms' IPOs and that strategic alliance of young firms in biotechnology sector with engrained pharmaceutical organizations did not matter to the success of IPO, particularly under the condition of cold market for the offerings of new equity.

Alliance Portfolio Structure and Firm Competitiveness

The alliance partners' structural characteristics is grounded on a firm the network position in that Ahuja (2000) notes that alliance partners having the same knowledge base enjoy greater success in their innovation, performance and learning dimensions. Further, homogeneity of alliance partner may minimize conflict, facilitate assimilation and sharing of knowledge, and improve trust among the partners. The strength of relationship in performance and alliance portfolios of firms depends on the strength of the existing relationship in the alliance portfolio and the exploitation of investments required by the non-alliance partners. To the contrary Capaldo (2012) find that find that strong structural ties can influence positively innovative capabilities of a focal firm if they are trust-oriented knowledge intensive, and supported through the increase of social content among relationship-based investments, alliance partners and the extending of shared knowledge.

Capaldo (2012) assert that by leveraging the framework of their networks that are resource-accessing, organizations will realize extensive benefits as a result of their own innovation capacity as compared to partners' innovativeness particularly if firms come up with

techniques that will identify and fill the gap left in their system of operation. This context will be realized if firms do leverage their alliance portfolios' structure in order to improve performance and also to alleviate the costs resulting from the association with powerful and resource-rich alliance partners. Likewise, Darr and Kurtzberg (2014) research work on individual alliances has delivered support for this point of view by discovering that as similarities among partners increase, partners are more prospective to facilitate knowledge sharing and to enhance their innovation capacity. However, a different view is held by other scholars who find that similar partners may not be able or may have low chances of taking advantage of newly established opportunities and to create innovative concepts and new competences since sharing identical resources and knowledge may be limiting.

Uzzi and Gillespie (2008) assert that the nature of connections held by a principal firm in an alliance defines the extent to which the high quality exchange, corresponding knowledge base is distributed. High degree of firm embeddedness leads to close and in-depth interactions among the alliance portfolio partners. Consequently, it enables them to develop a common language, problem identification and problem-solving capability. Consequently, the firms will be able to tackle problems that are not easy to understand and give solution because of the reduced information asymmetry problems among the partners. Suggest that with a deeply embedded alliance, reputation benefits accrue which are frequently perceived as desirable partners that can facilitate access to prospective partnership opportunities and to innovative knowledge with other companies. Therefore, entrenched firms have reputational and knowledge-related benefits that enhances the chances they will always have access to additional knowledge by going into forthcoming alliances (Cowan, Jonard & Zimmerman, 2009).

Sampson (2012), by studying a sample of telecommunications sector consisting of primarily of European and U.S. firms, establishes an inverted U-shaped association between technological diversity of alliance and organizational performance. As a result of increased diversity, organizational performance increased imminently to certain levels of diversity in which there was decline of performance. Therefore, alliances with temperately varied technological knowledge contributed more too firm innovation compared to alliances branded as having comparatively low or high diversity levels. The study resolved that whereas amplified technological diversity among firms joining the partnership triangle enhanced organizational performance to a point, as diversity continue to increase, the firms' ability to integrate knowledge began to deteriorate and performance suffered.

Kim and Higgins (2010) however note that, with increased diversity among partner firms, it becomes difficult to realize increased synergy as a result of difficulties in coordination and communication. Consequently, firms tend to also look for partners with similar characteristics on some dimensions, since these similarities inspire social attachment, enhance trust and facilitate sharing of desired knowledge. Therefore, alliances are most effective when respective partners have some matching capabilities and resources that are analogous enough to expedite the social affection essential for efficient coordination.

Alliance Knowledge Sharing and Firm Competitiveness

Wassman (2010) point out that the very nature of an alliance portfolio can be taken as an experience repository held by the partners besides an avenue for knowledge acquisition. Alliance portfolio characterizes accumulated experience of different firms, a virtue which is an important issue to the extent that Anand and Khanna (2010) suggest that when there is a new addition of an alliance into an alliance portfolio, there is need to consider the preceding alliance experience of the firm joining the alliance, the relevance of that previous alliance experience to the existing alliance partners, and the extent of innovation of the newly added alliance. This is because firms within an alliance with very similar experience may discover it challenging to gain value from their experience each and every time they have to cope with new partners that have a diverse knowledge experience and therefore becoming a challenge to cope.

Lavie and Rosenkopf (2006) assert that since different firms develop their base of experience by adopting diverse learning styles, companies that consider alliance portfolios as an opportunity for learning might face a problem to stabilize these different styles of learning in their portfolios. The common types of learning styles, according to Rothaemerl (2011) are exploration and exploitation, though the study was unable to establish, how companies design their alliance portfolios to harmonize their exploitation and exploration activities. However, in a latest study, Kale and Singh (2013) find that indeed firms are able to balance exploitation and exploration over time across what they term as alliance portfolio domains, namely; functional domain where alliance leverages existing or produces new knowledge, attribute domain and a operational domain.

Zaheer and Bell (2015) show that the absorptive capacity of a firm influences a firms performance differential that arise from an alliance portfolio configuration characteristics, namely alliance structure adopted on whether it is vertical or horizontal and also the flow of knowledge between alliance portfolios' partners. This implies that the absorptive capacity of an alliance partners defines not only the extent of experience they accrue and what and how they learn but also the advantages they develop from their respective alliance portfolios. Furthermore, the absorptive capacity of a firm is influenced greatly by an alliance portfolio and consequently its capability to utilize knowledge acquired from its partners in the alliance.

RESEARCH METHODOLOGY

Research Design

The study adopted an explanatory research design because of the need to connect ideas to understand cause and effect between the variables. The design was considered suitable because the main concern was to discover the feasible relationship and explain how the variables under the study support matters under investigation.

Target Population

The target population denotes the whole group of individuals; things or events of concern that the researcher intends to examine (Orodho, 2009). The unit of analysis was the six cement manufacturing firms operating in Kenya. The population of the study comprised of 873

employees in the company that are in the top management, middle level management, and supervisory staff in the respective Cement manufacturing firms head office.

Sampling Technique and Sample Size

Multi-stage sampling techniques were applied in selection of respondents for the study. First, a census of all the six cement manufacturing firms was undertaken after which the existing three grading structures for staff in the organization are treated as strata upon which the respondents were selected. Stratification was used because the population is heterogeneous hence the need to cater for characteristics of each stratum. Secondly, a sample of 10% was drawn from every stratum using simple random sampling technique. In line with Kothari (2008), a sample that is deemed representative is one that is however 10% of the entire population, hence the study's sample size was 88 respondents.

Data Collection Instruments

The study applied primary data gathered using an interview guide and a structured questionnaire. The questionnaire contained both open and closed ended questions. The close ended questions aided in capturing the outcomes that can be enumerated during analysis. The open-ended questions facilitated eliciting of responses that can be analyzed qualitatively and capture factors relevant to the study but cannot be set by structured questions. The questionnaire was made up of three sections. Part A sought to capture the respondents' and cement firm's demographic information while Part B sought to establish strategic alliance portfolio practices being adopted by the firms'. Part C sought to determine the influence of the strategic alliance portfolio on the cement firms' level of competitiveness.

Data Collection Procedures

The questionnaire was administered through the "drop and pick" later strategy and target the employees in the three cadres of staff as indicated in the sampling table. Upon identifying the target respondents through the simple random sampling procedure, the researcher requested them to fill in the questionnaire and the same to be collected three days thereafter. The respondents gave their responses in a five point Likert scale.

Data Analysis and Presentation

Analysis of data included reducing the collected data to a size that is convenient, creating summaries, seeking for patterns, and using statistical techniques to produce information that the researcher used to answer the research questions and present reliable and consistent outcomes in manner that is convincing and understandable. With the open-ended questions, the study employed content analysis to analyze the data collected. Descriptive statistics was applied in analysis of closed ended questions. In addition, measures of central tendency (mean, median and mode) was employed in order to find out how the data incline in agreement with each other while measures of dispersion/variability (variance and standard deviation) was conducted to establish the degree to which the data diverse from a central point. Presentation of data was done using percentages and frequency tables. To establish the relationship, regression analysis was conducted. In addition, in each strategic alliance portfolio, a general mean was established and accorded with the overall competitiveness

mean. From the relationship generated, the model was produced to determine the relationship. The regression equation assumed the following form;

$$Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \alpha$$

Where: Y is firm competitiveness level; β_i (i = 0 – 4) is the regression coefficient; X_1 to X4 is number of alliance partners, partner ties, portfolio structure and alliance knowledge; and α represents unexplained variables not explained by the model.

RESEARCH RESULTS

The study established that majority of the respondents were from Bamburi cement manufacturing company, EAPCC and Savannah cement in that order. Most of the cement manufacturing companies, as revealed by the study, have more than five hundred employees with majority of these employees aged more than 30 years. Furthermore, most of the respondents had worked in the respective companies for more than seven years implying that they have experience with the firm particularly concerning strategic alliance portfolio practices. With regard to the level of management, the study revealed that majority of the respondents occupied the top level of management and that majority of the respondents had attained university undergraduate degree as their highest education qualification level. This therefore implied that the respondents were knowledgeable with the study subject.

The study, with the aim of finding out the main objective that drove the company into joining alliance, revealed that cement manufacturing companies joined strategic alliance in order to acquire competitive advantages in comparison to other cement firms in the international market. In addition, the study revealed that the firms found that strategic alliance practices could maximize profits for the cement firm through sharing of markets and that strategic alliance provide superior customer value through creation of synergy thus providing superior customer services.

Based on the size of alliance partners, the study revealed that cement manufacturing firms prefer that efficient configuration of the alliance is more important than the number of alliance partners thus choice of high quality partners is more critical than the physical number of partners in an alliance. Furthermore, the study revealed that an alliance portfolio partners with fewer direct ties but more indirect ties with non-alliance partners is more cost effective.

As referenced from the study findings, the study established that with regard to the strength of partner ties, cement manufacturing companies have experienced enhanced sharing of valuable information through the entrenched partner ties hence creating synergy among the alliance partners facilitating knowledge transfer. In the same line of alliance portfolio practice, the study findings have revealed that strength of partner ties has improved level of trust among the partners thus increasing the economies of scale and scope among the partners.

Portfolio structure is an important practice in strategic alliance. As a result of investigative outcome of the present study, the findings revealed that horizontal structure facilitate knowledge sharing and assimilation and that focal firm level of innovativeness is affected by homogenous structure of a portfolio partners in that leveraging of the resource capability of

partners increases the focal firm innovative capacity. Therefore, the problem identification and solving capability is enhanced by structural homogeneity of partners.

Knowledge sharing among the cement manufacturing firms have been enhanced as a result of strategic alliance. As evidenced from the study findings, the study revealed that the strategic alliance partners acts as a repository of strategic knowledge to be shared among the partners. This was supplemented by the fact that accumulation of knowledge is enhanced through having heterogeneous partners in operations since homogenous experience among the partners leads to sub-optimality of operations. The results of the study investigations also revealed that established knowledge flow in an alliance determines the generated benefits from the alliance.

Firm competitiveness was found to have been positively and significantly affected by strategic alliance portfolio practices. As a result of strategic alliance, the study established that cement companies has been able to improve its innovation process with the other partners in the industry hence the level of technological advancement has been improved over the last five years as a result of the collaboration between the cement firm and its players. Furthermore, the study established that the cement firms has been able to diversify their market and therefore reducing the power of suppliers as well as improving the level of customer service.

INFERENTIAL STATISTICS

The relationship between strategic alliance and organization's competitiveness was established by use of linear regression analysis. The researcher utilized statistical package for social sciences (SPSS V 20.0) to input and run the study measurements. Coefficient of determination explains the extent to which variations in the predictor variables explain changes in the outcome variable or the percentage of disparity in the outcome variable (firm competitiveness) that is explained by all the four predictor variables (size of alliance partners, strength of partner ties, portfolio structure and knowledge sharing).

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.606[a]	.367	.322	.818

a. Predictors: (Constant), size of alliance partners, strength of partner ties, portfolio structure, knowledge sharing

b. Dependent Variable: Firm competitiveness

The study utilized coefficient of determination to gauge the extent to which the independent variables influence the dependent variable. The adjusted $R^{2,}$ also referred to as multiple determinations coefficient, is the percentage of the change in the outcome variable clarified jointly or uniquely by the predictor variables. The model had coefficient of determination (R^2) of 0.367 and which imply that 36.7% of the firm cement firm competitiveness is explained by the success of its strategic alliance portfolio practices adopted by the cement firms. Similarly, the model summary implies that the firm's competitiveness is explained by other variables not explained by the independent variables to the extent of 63.3%. This

implies that the cement manufacturing firms should explore the other factors that affect their firm competitiveness.

The analysis of variance (ANOVA) shows reliability of the overall model explaining the effect of strategic alliance on firm competitiveness. From the results presented in Table 2 the model was statistically significant in explaining changes in the level of firm competitiveness among the cement manufacturing firms.

Table 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.731	4	5.433	8.117	.000[a]
	Residual	37.482	56	.669		
	Total	59.213	60			

a. Predictors: (Constant), size of alliance partners, strength of partner ties, portfolio structure, knowledge sharing

b. Dependent Variable: Firm competitiveness

The analysis of variance statistics in the table from the data processed shows a significance level of 0.00 which imply that the resultant multiple-regression can be relied in drawing a conclusion based on the parameter of the population as the significance value (p-value) is less than 5%, an indication that the model is statistically significant. Coefficients of correlation of the relationship between strategic alliance portfolio practices and firm competitiveness of cement manufacturing firms in Kenya results are presented in Table 3.

Table 3: Coefficients of Correlation

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	**t**	**Sig.**
1	(Constant)	.984	.643		1.532	.131
	Size of alliance partners	.270	.097	.320	2.791	.007
	Strength of partner ties	-.076	.121	-.069	-.626	.534
	Portfolio structure	.221	.113	.229	1.953	.006
	Knowledge sharing	.312	.116	.300	2.675	.001

a. Dependent Variable: Firm competitiveness

From the analysis, it is evident that the size of the partner ties, portfolio structure and knowledge sharing dimensions of strategic alliance portfolio are found to significantly affect the competitiveness of cement manufacturing firms in Kenya. Hence the resultant regression model linking the effect of strategic alliance portfolio with the competitiveness of the firms can be represented as follows;

$$Y=.984 + .270\ X_1 + .221\ X_3 + .312\ X_4$$

From the above regression equation, it can be deduced that when the size of alliance partners firms increase by one unit, the level of firm competitiveness increase by 0.270 and if the nature of the portfolio structure increase by one unit, the level of firm competitiveness

increase by 0.221 units. Similarly, an increase by one unit of the knowledge sharing capacity of the portfolio partners will increase the cement firm's competitiveness by 0.312 units. Hence knowledge sharing is the most significant strategic alliance dimension influencing firm competitiveness. The level of competitiveness of the cement firms increase by 0.270, 0.221 Similarly, a unit increase in portfolio structure and knowledge sharing would lead to an overall improvement in cement manufacturing firms by .221 and .312 respectively. At 5% level of significance and 95% level of confidence, the overall strategic alliance portfolio practices had the greatest effect on the firm competitiveness of cement manufacturing firms in Kenya. All the variables strength of partnership and portfolio structure are significant at 5%.

CONCLUSION

Based on the research findings and theoretical discovery of other researchers, it can be concluded that cement manufacturing firms in Kenya should strive to adopt strategic alliance practices in order to improve firm competitiveness. In addition, it should do further investigations on the paybacks of strategic alliance practices in enhancing sustainable firm competitiveness. Therefore, effective strategic alliance practices are significant for improving firm competitiveness and better production efficiency of the firm. The study found that knowledge sharing in cement firms have contributed to the ability of companies to seize emerging opportunities in the industry and it also determines the generated benefits from the alliance. Therefore, the cement manufacturing companies should adhere to the knowledge sharing practices in order to attract sustainable competitiveness. Furthermore, the study revealed that choice of high quality partners is more critical than the physical number of partners in an alliance. This means that cement manufacturing firms need to check the quality of alliance partners as far as size of alliance partners practice is concerned. Similarly, homogeneous portfolio structure is essential because homogeneity of partners reduces conflict.

RECOMMENDATIONS

The researcher recommends that the cement manufacturing firms should adopt the strategic alliance portfolio because it has positive benefits including providing superior customer service, easy access of information and knowledge transfer. The researcher further recommends that the management of cement manufacturing firms should introduce knowledge sharing practices so as to explore and exploit the opportunities enhanced in the alliance. The findings of the present study reveal significant role of strategic alliance portfolio on firm competitiveness in that, it has a positive result and the need to adopt it so as to improve cement manufacturing firms' competitiveness.

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