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The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com

Vol. 7, Iss. 2, pp 189 – 204 April 29, 2020. www.strategicjournals.com, ©Strategic Journals

INFLUENCE OF NETWORK STRUCTURE ON FINANCIAL PERFORMANCE OF MEDIUM SIZED ENTERPRISES KENYA

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Accepted: April 23, 2020

ABSTRACT

The purpose of this study was to examine the influence of network structure on financial performance of medium sized enterprises in Kenya. A descriptive survey design was adopted. The target population was drawn from 51 medium sized enterprises in Kenya which participated in the KPMG top 100 mid-sized ranking for the period 2011 to 2015. Multi stage, systematic and purposive sampling was used to select a sample of 255 which had the data needed in the study. Primary data was collected using questionnaires which were pretested for reliability and validity to determine it suitability for use in the study. Statistical Package for Social Sciences (SPSS) was used in the analysis of data to generate frequency distribution of the responses and descriptive statistics. It was found that network structure was positively and significantly related to financial performance. The finding lends support to the social network theory, indicating that the more networks the entrepreneur is linked to the more it will affect financial performance. The study findings were that alliances, partnerships, collaborations, or networking assisted the entrepreneur with an access to other individuals' links. Thus, there will be an extended web of associations that will ultimately lead to identification of new prospects and a broader network of customers and clients. This was evidenced by the responses from the respondents who participated in the study. The findings encourage managers to engage in active networking with different actors within and outside of existing networks and especially with those who are relevant to the business in which the manager and a firm operate. The results strongly support the necessity for managers to create active co-operational relationships. The study concluded that an individual can be constrained in a network if they have too few contacts; has contacts closely connected with one another; or shares information indirectly via a central contact. It can thus be settled that businesses with larger advantage-generating or advantage-improving capacities could gain more from solid network structure, while those with inferior abilities are better off if they form coalition with enterprises from distant network groups, and hence forming a network structure endowed with comprehensive entrepreneurial networks. The study recommended that medium enterprises should become entrenched in various forms of network structure since through this they can track varied competitive approach. It is also recommended that medium sized enterprises in Kenya invest in networking activities, close interconnections and suitable resource partners that would ensure that they maintain a key network behavior which is aligned to the industry leaders.

Key Words: *Network Structure, Financial Performance, Medium Sized Enterprises, Entrepreneurial Networks*

CITATION: Kirimi, D. G. (2020). Influence of network structure on financial performance of medium sized enterprises Kenya. *The Strategic Journal of Business & Change Management*, 7(2), 189 – 204.

INTRODUCTION

Medium sized enterprises are faced with major challenges of constantly improving their performance by reducing costs, enhancing quality and differentiating their products and services. The market environment in the Kenya has been extremely turbulent during the past decade, and to maintain continuous success in the face of global competition, firms must identify and analyze environmental characteristics and develop strategies to meet changing market needs. These enterprises need to respond to greater global imperatives and challenges to compete effectively in local and global markets (Waiganjo, Mukulu & Kahiri, 2012).This may be achieved through network structure.

Network structure refers to the pattern of relationships that are created from network contacts and where differential network positions have a crucial effect on the resource flow affecting entrepreneurial endeavors (Hoang & Antoncic, 2003). It is all of a venture's relationships and the content of those ties (the strength and trust within each tie). A network organizational structure is more complicated and complex than any other structure because it consists of multiple organizations that work together to produce goods or provide services (Granovetter, 2004). In a network, flows between objects and actors and exchanges, which might contain an advice, information, friendship, career or emotional support, motivation, and cooperation, can lead to very important ties (Kadushin, 2004).Of all the phenomena that have engrossed the business world in recent years, few match the impact of networks. In the ongoing evolution of the dominant organizational paradigm and mode of competition along the continuum of single, autonomous firms to dyadic alliances to networks to virtual companies, the current period is marked by a rapidly growing prevalence of the network form of organization (Santos, 2009).

Prior studies have shown that network relations can be a source for achieving a higher degree of Entrepreneurial Orientation and performance. Many new and good ideas are created in networks of heterogeneous firms (Gaudici, 2013), which increase firms' entrepreneurial opportunities. Through diverse relationships, a firm can obtain valuable and specialized knowledge, competencies and resources complementing or compensating their own limited in-house resources and competencies (Li, Lai &Chen , 2011). The advantages from networking can in turn enable firms to be more innovative, risk- taking and proactive, and thus portray an entrepreneurial orientation. For instance, Wiklund (2005) found that inter-firm networking positively influences entrepreneurial orientation.

In today's competitive landscape, firms cannot rely on internally controlled resources alone to pursue advantage-creating and advantage enhancing strategies (Gaudici, 2013). They must collaborate with other firms to gain access to information, skills, expertise, assets, and technologies and thus leverage their internal resources. A firm's ability to persistently outperform rivals depends also on the advantageous access to external information and resources uniquely held by other market participants (Krueger, 2007). The increased competitive pressure and the unprecedented pace of technological change in most industries today (Davis, 2007) have made collaboration with other firms a necessary condition for sustained success in the marketplace. This increased collaborative activity, strategically initiated by firms in their efforts to outcompete rivals; leads to formation of a network of inter firm relationships in the form of strategic alliances, joint ventures, and long-term agreements. Each firm in the alliance network maintains a distinct portfolio of alliances and has a distinct pattern of alliance ties with other network members, which in turn provide different potential for gaining access to network resources (Stam, 2010). Applying social network theories,

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

researchers have shown empirically that several network positions for instance brokerage position, ego network density, centrality and configurations such as diversity of ties, proportion of strong or weak ties provide firms with advantageous access to network resources, which in turn is positively related to firms‘ performance (Zaheer & Bell, 2005).A firm's financial performance is a measure of how well a firm uses its assets from its core operations and generates revenues over a given period of time. This measure is thus compared to some given industrial average standard of similar firms in the same industry (Wood & Sangster, 2005). Brealey, Myers and Marcus (2009) indicate that financial performance can be measured in terms of profitability, liquidity, solvency, financial efficiency and repayment capacity.

Medium sized enterprises play an important economic role in many countries. While small businesses struggled to pay the lease or turn a profit, and large corporations laid off thousands of workers to satisfy shareholders, medium-size companies scooped up top talent and got creative (Caldwell,2013).Financial performance is crucial in medium enterprises because all activities of the enterprises require finances. For instance in Kenya these enterprises are key in the vision 2030.Kenya Vision 2030 is new long-term development blueprint for the country. The aim of Kenya Vision 2030 is, the globally competitive and prosperous country with a high quality of life by 2030. It aims at transforming Kenya into newly-industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment. In other words the vision aspires to meet the MDGs for Kenyans. The Vision is anchored on three key pillars: Economic; Social; and Political Governance. The medium sized enterprises are key in the implementation of flagship projects that will help achieve the vision 2030 (RoK, 2012).

With the focus now on mid-sized companies, they should then be positioned to successfully exploit the increasing opportunities offered by external markets, as Kenya moves towards embracing an ever-expanding common market. The dedicated business development support of partners, as well as the timely implementation of responsive government policies plays a key role in this regard. This will provide further vindication for the role of mid-sized growth companies as pillars in Kenya's economy. Therefore the more reason this area requires more research to promote its growth (RoK,2012).According to the Economic Survey (RoK, 2012), the SME sector contributed 79.8% of new jobs created in that year in Kenya. Consequently, the Kenya's development plans and the big four Agenda put special emphasis on the contribution of medium sized enterprises in the helping achieve the outcomes.

Statement of the Problem

Medium-sized enterprises play an important role in the world economy; they contribute substantially to income, output and employment and by number, they dominate the world business stage (Ayyagari, Demirguc, & Maksimovic, 2011). According to the Kenya's Vision 2030, these enterprises are viewed as key drivers to economic and social development in Kenya and represent a large number of businesses, generating enormous wealth and employment (RoK, 2011). They are widely considered to be vital to a country's competitiveness (Kiraka,2013). Kenya aims to increase Growth Domestic Product (GDP) growth rate to average of 10% over its vision 2030 horizon. Achieving the 10% growth will require a dedicated campaign to alleviate the existing constraints of future growth and in a particular to use Kenyan resources more efficiently (RoK, 2011). Delivering Kenya's ambitious growth aspirations will require that the informal sector through medium size enterprises be supported in ways that raise productivity and distribution so that there will be increased jobs, owner's income and public revenues.

Networking occurs as a natural and inherent entrepreneurial activity. This is because, owners and managers of medium sized enterprises are in networking activity, through communicating activities such as interacting and participating in social, business and trade activities. A medium sized enterprise owner-manager personal network will be represented by people who can help the entrepreneur in arriving at decisions for the well-being of the enterprise. The cost of networking are implicitly hidden because any explicit cost or expenses are low in the immediate term, for example the cost of networking will include minor expenses such as club or trade members, cost of dinner trade functions or the cost of entrance to exhibitions.

However, networking increases the ability to leverage the internal resources and hence financial performance. Understanding the influence of network structure is a critical success factor to entrepreneurs and medium enterprises today. More so, entrepreneurial networking suggests that structural holes, network structure, network ties, network centrality and network size are the sources of entrepreneurial relationships that influence financial performance of enterprises (Setyawati, Shariff & Saud 2011).Studies conducted on networks and performance looked at different dimensions. Thrikawala (2010) carried out a research to shed light on the structure of social inter firm and supporting networks of SMEs in Sri Lanka and the impact of networking for their success

According to Setyawati *et al*. (2011) in their study on effects of learning, networking and innovation adoption on successful entrepreneurs in Central Java, Indonesia, showed that learning and networking have a significant effect on innovation adoption. Consequently, innovation adoption significantly affects the success of the entrepreneurs. Stam (2010) conducted a study on industry event participation and network brokerage among entrepreneurial ventures. Peprah (2010), on the other hand, assessed the extent to which the number of networks affects start-up capital and access to quantum of credit in Ghana. Obura, Abeko and Obere (2010) studied the role and impact of networks on small businesses performance and sustainability in Kenya.

Since medium sized enterprises play an important role in Kenya it is important that financial performance should be improved to ensure their growth and sustainability. One of the ways to improve their financial performance is by use of network structure. There are not many studies which have been conducted to determine the influence of network structure on the financial performance of medium sized enterprises. This study seeks to fill that knowledge gap.

Purpose of the Paper

To investigate whether network structure has an influence on the financial performance of medium sized enterprises in Kenya.

LITERATURE REVIEW

Social Network Theory

The social network theory (SNT) that emerged in the late 19th century attempts to find something that might connect people in their group or communities (Barnes & Milgram, 1967). The (SNT) in entrepreneurship started in the 1980s (Birley, 1985). SNT views social relationships in terms of nodes and ties. Nodes are the individual actors within the networks, and ties are the relationships between the actors. There can be many kinds of ties between the nodes. In its most simple form, a social network is a map of all of the relevant ties between the nodes being studied. The network can also be used to determine the social capital of individual actors. These concepts are often displayed in a social network diagram, where nodes are the points and ties are the lines. The power of social network theory stems from its difference from traditional sociological studies, which assume that it is the attributes of individual actors whether they are friendly or unfriendly, smart or dumb that matters. Social

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

network theory produces an alternate view, where the attributes of individuals are less important than their relationships and ties with other actors within the network. This approach has turned out to be useful for explaining many real-world phenomena, but leaves less room for individual agency, the ability for individuals to influence their success, so much of it rests within the structure of their network (Koch, 1998).

Due to the complexity of any social network, using the theory to understand actors and the relationships between them is crucial to the work of social scientists, theorists, politicians, and even marketers. These researchers often try to glean a better understanding of the inner workings of a network so they can further their cause or simply sell a product. The theory, though, does have some inherent strengths and weaknesses. Strengths: The theory offers an explanation for how random people are connected. It's useful in the study of large groups and understanding how their members relate to others in the group. It provides insight into viral phenomena, such as viral content, the spread of diseases like Ebola, weaknesses: It's difficult to scientifically replicate and interpreting relationships/ties can be subjective.

This theory is relevant in the study as it helps to illuminate the process by which entrepreneurs in networking groups can increase the amount of referrals they receive, and thereby increase firm performance. The study helped to understand how connections and relationships among medium sized enterprises in Kenya develop a social structure which can determine the financial performance of enterprises and impact on sustainability in the long run. This prompted the objective of the study.

Network Structure

The pattern of associations that are formed from the network contacts and from which differential network locations have a significant influence on resource flow influencing entrepreneurial activities is referred to as network structure (Hoang & Antoncic, 2003). It is basically the overall relationships of a venture and the value of the ties thereof (the trust and strength of each tie). The network organizational structure is intricate and more complicated than other structures as it has many organizations which co-work to provide services and produce goods. (Granovetter, 2004). A network structure ought to mirror the suitable culture that the business may be trying to impart in their workstation; this is important in a network structure since companies are responsible for their partners' business ethics in their supply chain (Smelser & Baltes, 2001). A network structure's basic function is to support and complement the business policy employed to realize the organizational goals and objectives. The organization's network structures are highly efficient and flexible due to the use and selection of the most reliable partners available who can offer specific needs.

The essence of network structure in acquiring entrepreneurial competitive advantages positively appeals and attracts the attention of mainly two research streams. One of the streams, according to Granovetter (2004), claims that social structure is a unified entrenched network comprising either strong or weak ties, where the weak ties, are ways of making the venture highly competitive among other things. The other stream, as stated by Burt (1992) argues that it is just a matter of enhancing the structural holes in which the holes are essential for information benefits, and therefore highly favorable in obtaining competitive advantages. For any network structure, networking should be done with the right individuals. A businesses' success chiefly stems from professional and skilled relationships (Koch, 1998). He further maintains that a success demands connections and networking, and therefore there exists a trade-off between quantity and quality in business relations and submits that the largest value is found in a minor percentage of individuals in the respective personal network. Notably, the correct networking is not only with people possessing expertise but also incorporates business associates who match the entrepreneur's personality. With a desirable mutual understanding, then the best business relations are established (Edwards, 2007). It is significant to find the right business associates in building and maintaining viable relationships (Ford and Koch, 1998). These interactions and the correct business contacts are highly valuable and ought to be targeted with the appropriate attention for their sustenance (Koch, 1998). The people who are able to supply services for the company should be considered while forming networking, and where entrepreneurs have something to offer in return (Edwards *et al.*, 2007). Fundamental friends help due to the strong relationship (Koch, 1998) that comprise shared enjoyment of one another's shared experience, company, trust, respect, and reciprocity. Sturdy relationships must be established on all of these aspects.

Resources and help can be provided to a company by a network of essential contacts (Wallace, 2006). Alliances, partnerships, collaborations, and networking will offer the entrepreneur with their access to other individual's contacts (Edwards *et al.,* 2007). The result will be an extended web of contacts that will ultimately bring about recognition of fresh prospects and a wider network of customers and clients. Entrepreneurship is an active process and demands relationships and links for both institutions and individuals (Smilor & Gill, 1986). As a matter of fact, an entrepreneur endowed with a diverse, complex, and strong relationship networks is highly likely to gain access to numerous opportunities, with higher chances of solving problems quickly, and greater chances of success (Smilor & Gill, 1986). Ventures should also introduce some non-redundant contacts within the network, so as to capitalize on connections with diverse individuals apart from the network which offers more benefits due to their additional and rather diverse contacts. Consequently, more assorted sources of resources, competencies, and information important for the efficiency of the venture are ensured. Moreover, ventures ought to identify connections as docks of access to highly diverse and distinct people clusters which are valuable for a venture. At this point, the venture or the player maintains the fundamental contacts who eventually reach others (secondary contacts) from other clusters for the extension to incorporate fresh clusters, and thus making a venture's own network. Then, such a venture is free to concentrate on its primary contacts giving them more time for doing the right things effectively. Information screen established by numerous groups of contacts is wider, offering desirable reassurance of the actors being conversant with impending disasters and opportunities (Burt, 1992).

Organizations or institutions can be evaluated by their constant social relationships whereby the networks can be claimed to be of significance in acquiring information (Granovetter, 2004). Granovetter (2004) discussed the forte of feeble ties; meaning that links to resources, information, and knowledge are important to the ventures' prospects and to their assimilation into the societies comprising loose interpersonal ties. Furthermore, the strength of ties is described as a blend of the emotional intensity, amount of time, intimacy and shared services between the sections in a network. Subsequently, a network entailing feeble ties has links to information clusters, while the connections in the same cluster just comprising strong ties. These bridges offering information paybacks, such as networks with non-redundant ties outside a cluster have a higher likelihood of becoming weak than being strengthened. Therefore, resources, information, and knowledge acquired through frail ties can influence huge crowds of people over vast social expanse (Granovetter, 2004).

The influence of the network structure of a firm according to the form of associates, resources owned by the associates, the ties strength, the level of trust between the partner and the firm ought to enjoy a huge influence on the venture's market performance. The greater diversity existing in a network, the larger the benefits that should follow the venture's entrepreneurial performance and opportunities. Nonetheless, collaborations are usually difficult to establish and realize. It is not easy for a business to find appropriate partners to collaborate with, while the dealings can be challenging to accomplish because of the mutual decision-making, necessity for influence, conflicting goals, and an associates' conceivable opportunistic conduct (Teng, 2007).

A social network is a standard way in which a set of actors or nodes are joined by a different set of ties, social relationships, ties, or a particular form of ties (Brass, 1992). "Network" as a term is normally employed for the structural ties amongst the players in a social structure (Teng ,2007). Such players could be nation states, industries, organizations, individual persons, or even roles. The existing ties may be founded on economic exchange, authority, kinship, friendship, affection, conversation, or whatever can determine the establishment of a relationship. In a network, flows between exchanges, actors, and objects in a network, which might have information, emotional or career support, an advice, cooperation, and motivation can facilitate the formation of essential ties (Granovetter, 2004).

METHODOLOGY

This study adopted a descriptive survey design to collect data on structural holes and financial performance of medium-sized firms in Kenya. The survey was cross-sectional and therefore collected data from a number of different respondents at a single point in time. The population was the medium sized enterprises in Kenya. In this case the target population was all medium sized enterprises that appeared on the list of Top 100 between 2011-2015 from which the specific enterprises was selected and samples drawn from them. The selected firms were those that had appeared on the list for three or more times within the period under study. There were 51 enterprises that appeared more than three times. A design sample, according to Kothari (2014), is architecture or rather, the strategy utilized to select study respondents or actors. Sampling for the study was done to reduce accessibility and costs of the population studied, and ensure quick data collection. Sample size was achieved by the use of a multi-stage. In selecting the study's analysis unit, purposive sampling method was utilized. This method was used to select respondents from employees in the management level that is from the human resource, marketing and business development sections. The selected respondents from Human resource, marketing and business development department were more involved in entrepreneurial networking in their enterprises. Purposive sampling method was used to select the unit of analysis to be used in the study. Notably the sampling process was non-scientific and therefore no need for using the formula. Primary data collected was coded and analyzed using SPSS version 20.0. The data collected from medium sized enterprises employees was subjected to quantitative analysis and key summaries were made.

RESULTS

Descriptive Analysis

On Table 1 the factor loadings for sub-constructs of the network structure were shown. The overall statements drew coefficients of over 0.4, and therefore all of them were preserved for analysis. A factor loading greater than or equal to 0.4 is regarded sufficient (Rahn, 2010); Zandi, 2006). Black (2002) also affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 1: Factor Loading for Network Structure

Statement	Component
Close interconnections within the network facilitates business operations	0.815
Our firm believes in having suitable resource partners	0.807
Our firm has a corporate network with other firms in the same industry	0.843
Our employees interact freely with colleagues in other firms	0.838
Networking activities are well organized in the firm	0.792
We get stocks from members of our network in case of a shortage	0.565
Our enterprise has links with many other firms in the surrounding	0.738
We refer customers to others in case we don't offer product or service they are seeking	0.641

Extraction Method: Principal Component Analysis.

Benefits of Network Structures

The study sought to find out how the enterprises benefited from these networks. 66.8% of all respondents, accessed information, while 3.4% indicated access to market and 11.2 % indicated access to goods on credit. The results that enterprises benefit from partners in the network structure were in agreement with Mungania, Gakure and Karanja (2017) who conducted a study on networks and growth of the dairy sector and concluded that networks can assist entrepreneurs by exposing them to new viable opportunities, acquire knowledge, through experience, learn and gain from synergistic influence of collective resources.

The study findings are in line with Thrikawala (2010), who studied the strategic networks' influence on the performance of medium-sized enterprises in Sri Lanka. The study revealed that when the SMEs are classifying their investment opportunities, they closely connect with their friends and families. In the launching stage, medium-sized enterprise owners obtain initial capital, influence, and encouragement through their accrued social networks. However, in Sri Lanka, there was a weak association with the inter-firm and supportive networks. On the other hand, there existed a robust effect of network relations for the triumph of medium-sized enterprises in Sri Lanka. The findings imply that social networks are beneficial to firms and help in creating a healthy environment for business which has a direct influence on performance. Lee *et al* (2001) observed that external contacts play a very significant role in procuring the complementary assets as well as identifying entrepreneurial prospects. This was in consistent with the study findings. This implied that partners in the network structure accumulate a lot of benefits to the enterprises for instance access to information, links to customers and provision of goods on credit.

The study objective involved the investigation of whether network structure has an influence on financial performance of the Kenyan based SMEs. The results of study revealed that 62.4% of the respondents agreed that close interconnections within the network facilitates business operations, 67.3% agreed that their firms believed in having suitable resource partners and 64.3% agreed that their firm had a corporate network with other firms in the same industry. Fifty eight percent of the respondents agreed that their employees interact freely with colleagues in other firms, while 54.1% agreed that networking activities are well organized in the firm and 42% agreed that they get stocks from members of their network in case of a shortage. Finally, 66.8% of the respondents agreed that their enterprise had links with many other firms in the surrounding and 73.6% agreed that they refer customers to others in case they don't offer product or service they are seeking. This was represented by Table 2.

Table 2: Network Structure Descriptive Statistics

Statement	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	Mean
Close interconnections within the network facilitates business operations	1.0%	1.5%	35.1%	54.1%	8.3%	3.67
Our firm believes in having suitable resource partners	0.0%	2.4%	30.2%	61.0%	6.3%	3.71
Our firm has a corporate network with other firms in the same industry	0.5%	1.5%	33.7%	58.0%	6.3%	3.68
Our employees interact freely with colleagues in other firms	0.5%	2.4%	39.0%	50.2%	7.8%	3.62
Networking activities are well organized in the firm	2.0%	2.9%	41.0%	50.7%	3.4%	3.51
We get stocks from members of our network in case of a shortage	10.7%	22.4%	24.9%	37.1%	4.9%	3.03
Our enterprise has links with many other firms in the surrounding	0.5%	2.9%	29.8%	59.0%	7.8%	3.71
We refer customers to others in case we don't offer product or service they are seeking	2.0%	1.0%	23.4%	58.5%	15.1%	3.84
Average	2.2%	4.6%	32.1%	53.6%	7.5%	3.60

Results of close interconnections within the network facilitating business operations were inconsistent to those of Korir (2012) who carried out a study to launch the connection between performance and network structure of the event management ventures (EMVs), adopting an explanatory design. The study findings revealed that network structure influences the performance of a venture. The conclusion of the study is that network structure influences venture performance. A businesses' success mostly stems from professional (Koch, 1998). He further claims that an individual may not succeed solely, therefore there exists a trade-off between quantity and quality in business relations and claims that the peak value exists in a small percentage of individuals within the personal network. People are not only right if they possess proficiency but also if there is a match in the entrepreneurship personality. There is evidence implying that network relations with intermediaries like trade and professional associations, customers, and suppliers are vital elements influencing innovation productivity and performance (Pittaway *et al.,* 2004). This implied that effective networking is a significant aspect in all network structures and the right people are part of it. The results that positively agreed that their firms believed in having suitable resource partners are in line with Edwards *et al* (2007) who found out that the best business relations involve a good shared understanding. Ford and Koch (1998) argued that it is essential to ascertain the correct business associates in building and maintenance of viable relations which are the right business partners as they are of high value and ought to be targeted and maintained. This suggests that medium sized enterprises believe in having the right and suitable partners.

With 64.3% supporting that their firm had a corporate network with other firms in the same industry is in agreement with Edwards *et al (*2007) who argued that networking ought to be conducted with the individuals who are able to support company services and in the case where entrepreneur done with those people who can provide service for the company and where the entrepreneur has something to offer in return. Fundamental associates assist due to the robust bond (Koch, 1998) that comprise shared enjoyment of one another's company, trust, reciprocity, shared experience, and respect.

The results showing 58% of the respondents agreed that their employees interact freely with colleagues in other firms, concur with previous studies. Teece, 2007 and Gaudici 2013 state that financiers frequently sense new openings and acquire significant resources, information, and ideas from their personal networks. Whereas entrepreneurs' networking behavior has often been characterized as non-intentional in nature (Sarasvathy and Venkataraman, 2011), scholars have recently highlighted how entrepreneurs sense new opportunities while strategically building their strategic networks (Gaudici, 2013). This designate that employees in medium sized enterprises in Kenya interact freely with other colleagues in other firms.

Fifty four point one % agreed that networking activities are well organized in the firm and 42% agreed that they get stocks from members of their network in case of a shortage. A network of significant contacts is able to offer resources and help to the firm contacts can provide help and resources to the company (Kiriinya & Kirimi, 2016); (Mungania, Gakure & Karanja, 2017; and (Fatima, Ali & Arif 2012). Alliances, partnerships, collaborations, or networking will assist the entrepreneur with an access to other individuals' links (Edwards, Edwards & Benzel 2007). Thus, there will be an extended web of associations that will ultimately lead to identification of new prospects and a broader network of customers and clients. This denotes that medium sized enterprises provide help and resources to each other.

Finally, 66.8% of the respondents agreed that their enterprise had links with many other firms in the surrounding and 73.6% agreed that they refer customers to others in case they don't offer product or service they are seeking. This is in agreement with Dess (2007) who illustrates that association with other organizations remains the most advantageous substitute for the acquisition of resources, as the arrangement is flexible allowing the sharing of risks and costs. Small firms and new ventures can realize elevated performances via the joining forces with the fellow competitors so as to join market services and products, share development costs, and for joint procurement and knowledge sharing (Pittaway, et al, 2004). Research has consequently depicted that network relationships can act as viable sources of attaining higher degree of performance and EO (Stam 2010). According to Parida, Westerbery, Ylinenpaa, & Roininen, (2010) new ventures are frequently determined to institute a foothold in the industry and since they have emerged into the market, the networks may prove quite valuable for gaining access to various market segments and legitimacy building. The mean score for the responses to this subdivision was found to be 3.60 which indicated that many respondents were in tandem with the statements concerning the influence of network structure on the financial performance of SMEs in Kenya.

The main concern of structural social capital is the ties or physical linkages between the persons or groups. Granovetter (2004) refers to this as structural embeddedness and the results are in agreement with it. The other concern, founded on study that claims it is a matter of augmenting structural holes, whereby the holes are significant to the benefits of information and therefore, more auspicious in achieving competitive advantages (Burt, 1992).

Results are in line with Thomas (2012) conducted a study on the network structure and performance of the team: taking into consideration the English Premier League and results revealed that networks branded by high concentration (monitoring for contact openings) in addition to low centralism are undeniably connected with desirable team performance. The study findings imply that increased network intensity contributes to the improved team performance while rise in network centralism leads to reduced team performance.

Regression Analysis

Relationship between Network Structure and Financial Performance

Regression analysis was done in order to empirically find out if structural holes were an essential factor of financial performance of the Kenyan-based medium sized enterprises. The regression results as shown on Table 3 signify that the regression's fit alignment for the regression of the network structure alongside the financial performance was satisfactory. The 0.634 squared value of R signified that 63.4 % of total variations in the financial performance are expounded by the variations in network structure. These results were in line with Thomas (2012) who conducted a study on the network structure and performance of the team: taking into consideration the English Premier League and results revealed that networks branded by high concentration (monitoring for contact openings) in addition to low centralism are undeniably connected with desirable team performance. The study findings imply that increased network intensity contributes to the improved team performance while rise in network centralism leads to reduced team performance.

Table 3 : Model Summary for Network Structure

Indicator	Coefficient
R	0.796
R Square	0.634
Adjusted R Square	0.632
Std. Error of the Estimate	0.3696

Further, F-test was established, testing the null hypothesis and it was found that network structure has significant influence on financial performance of medium sized enterprises in Kenya. Determination of the existence of regression relationship between network structure and financial performance was done via analysis of variance (ANOVA) see Table 4. The ANOVA test indicated that the essence of F-statistic 0.000 was below 0.05 which implied that null hypothesis had been rejected and thus concluded that there is an important connection between network structure as well as the financial performance of SMEs. The findings implied that network structures were statistically significant towards clarifying more about the financial performance of medium sized enterprises in Kenya.

Table 4: ANOVA for Network Structure

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	48.055	1	48.055	351.784	0.000
Residual	27.73	203	0.137		
Total	75.785	204			

The intercept (α) and the regression coefficients (β), and the importance of the total model's coefficients were verified via t-test testing the null hypothesis of the coefficient as zero, therefore testing significance of the regression correlation between financial performance and network density. The null hypothesis indicate that, β (beta) = 0, (implying a lacking relationship between these variables). Findings regarding the beta coefficient of the resultant model as in Table 5 indicates that α = 0.915, a constant, is significantly dissimilar from 0, because p- value = 0.000 is below 0.05. The coefficient β = 0.898 is significantly distinct from 0 with a p-value=0.000 and is evidently below 0.05.

This suggests that the null hypothesis β_1=0 has been rejected while the alternate hypothesis $\beta_1 \neq 0$ has been held suggesting that the model of, Y= 0.915+0.898 (network structure) + e, is observed as significantly appropriate. The model Firms financial performance= α + β (network structure) is consistent as implied by the above test. The results show that network density contribute importantly to the model because gradient and the constant's the p-value are below 0.05. These outcomes suggest that a sole positive unit alteration in structural holes efficiency contribution to a transformation in financial performance at the 89.8% rate. Therefore, it ratifies that there is a positive linear relationship between financial performance and network density. The following is the fitted equation:

$Y= 0.915 + 0.898X_3 + e$

Table 5: Coefficients of Network Structure

Variable	Beta	Std. Error	t	Sig.
Constant	0.915	0.175	5.237	0.000
Network Structure	0.898	0.048	18.756	0.000

The study findings were in consistent with those of Mukherjee (2014) who conducted a study on "How does network structure moderate the influence of network externalities on new product growth?" Preliminary evidence suggests that the frightening influence prompted by network externalities turn out to be sturdier with grouping, although it has a negative correlation with network's average degree and network size.

CONCLUSION AND RECOMMENDATIONS

The findings of the study indicated that network structures influenced financial performance of medium sized enterprises in Kenya. This was demonstrated by the respondents' responses that were in agreement that close interconnections within the network facilitated business operations, their firms believed in having suitable resource partners and their firms had a corporate network with other firms in the same industry. Additionally the study findings indicated that their employees interacted freely with colleagues in other firms, networking activities were well organized in the firms, the enterprises had links with many other firms in the surrounding and he firms refer customers to others in case they don't offer product or service they are seeking. Correlation and regression analysis results demonstrated that there existed a significant and positive relationship between network structures and financial performance. The outcomes suggest that a single positive unit alteration in network structures efficacy led to a modification in financial performance at 89.8% rate.

From the study was concluded that enterprises become entrenched in various forms of network structure since they pursue varied competitive approaches. As businesses elevated the notch of advantage-generating propensity, they inclined to often take in new associates into their coalition network and therefore constantly generated new networks. Notwithstanding the dynamic and frequent development of the entire alliance network, companies inhabit steady positions within their network structure since they track recurring forms of strategic behavior. It can thus be settled that businesses with larger advantage-generating or advantage-improving capacities could gain more from solid network structure, while those with inferior abilities are better off if they form coalition with enterprises from distant network groups, and hence forming a network structure endowed with comprehensive entrepreneurial networks.

The study recommended that medium enterprises should become entrenched in various forms of network structure since through this they can track varied competitive approached. However, managers of medium sized enterprises should appreciate that that some enterprises gain from dense network structure, while those from distant network. Therefore, managers must learn to identify the network structure that is appropriate for them since enterprises with inferior capacities are superior when they form coalitions with enterprises groups, and therefore form a network structure enriched with comprehensive network structure.

It is also recommended that medium sized enterprises in Kenya invest in activities that will ensure that they maintain a key network behavior which is aligned to the industry leaders, and it ensures they are more trustworthy and visible to prospective resource suppliers from outside their business, such as venture capitalists, customers, and suppliers interested in the entrepreneurial undertakings presented by the businesses. Moreover, network structure contributes to positive results, such as enhanced reputation, information access, social support, and opportunities to influence others. Therefore, resources should be allocated to ensure firms are centrally positioned in the industry network structure.

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