INFLUENCE OF ENTREPRENEURIAL NETWORKS ON FINANCIAL PERFORMANCE OF MEDIUM SIZED ENTERPRISES IN KENYA

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Influence of Entrepreneurial Networks on Financial Performance of Medium Sized Enterprises in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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This thesis has been submitted for examination with our approval as the University supervisors

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DEDICATION

I dedicate this thesis to my family and friends for their encouragement, advice and support that they have accorded me during my studies.

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LIST OF ABBREVIATIONS AND ACRYONMS

ANOVA	Analysis of Variance
EO	Entrepreneurial Orientation
GDP	Gross Domestic Product
HPO	High Performing Organization
MSEs	Medium Sized Enterprises
NOP	Net Operating Profitability
PMS	Performance Measurement System
RBV	Resource Based View
RO	Return on Assets
ROE	Return on Equity
ROIC	return on invested capital
ROTA	Return on Total Assets
ROK	Republic of Kenya
SMEs	Small and Medium Enterprises
SNSs	Social Networking Sites
SNT	Social Network Theory
SPSS	Statistical Package for Social Sciences

DEFINITION OF KEY TERMS

Entrepreneurs: These are individuals who create value through recognition of business opportunity the management of risk-taking appropriate to the opportunity and through the communicative and management skills to mobilize human, financial and material resources necessary to bring a project into fruition (Peneder, 2009)

Entrepreneurial networks: These are systematized relations between consumers, traders, and other businesspersons, as well as, external specialists, agents, or prospective associates offering varied resources to commence or enhance business projects (Donckels & Lambrecht, 1997).

Financial performance: An independent degree of how efficient an organization can employ properties from its principal business mode to create incomes and is used as a common measure of a company's total economic well-being over a specified duration. (Wood & Sangster, 2005).

Medium sized enterprises: Organizations that are in the startup or growth phase of development and have 50-99 employees (ROK, 2012).

Network: The overall number of persons linked by a particular form of dealings that is built by studying the ties among every individual in the whole population, despite the manner of its organization into action-sets and role-sets (Aldrich & Zimmer 1986).

Network Centrality : Is the organization’s position in the complete design of ties encompassing a network, indicating the company’s structural closeness to all the firms within the same network. (Kratzer & Lettl, 2009).

Network density:	This denotes the degree of closeness between allied individuals within a network (Burt, 2004).
Network size:	The overall sum of contacts that one chats with a minimum of a single text and must be managed within the network and all its subcomponents (Zuckerman, 2006).
Network structure:	The configuration of relationships that are generated from the network associates and, in which disparity network loci have a vital influence onto the resources stream influencing commercial endeavors (Hoang & Antoncic, 2003).
Network ties:	The data-holding links between individuals that usually come in three assortments of weak, strong, or absent (Granovetter, 2004).
Structural holes:	The lack of a connection between two associates who are both connected to the main actor (Burt, 2004).

ABSTRACT

Medium-sized enterprises contribute significantly towards development but are operating in a changing environment, which requires continuous improvement to increase the financial performance of these enterprises. The said enterprises face challenges in globalized economies and only innovative sustainable strategies can save them from this competitive environment. Moreover, despite the need of medium sized enterprises to become competitive, little has been deliberately done to exploit this strategy. Existing literature on networking and financial performance looked at different dimensions, context and produced mixed results. The study sought to examine the influence of entrepreneurial networks on financial performance of medium sized enterprises within Kenya. Drawing from social network theory and structural holes, the research was based on five precise objectives founded on the influence of structural holes, network density, network structure, network ties, and network centrality on the financial performance of the medium-sized enterprises in Kenya. A descriptive survey method was used. The target population was drawn from medium-sized enterprises in Kenya, which participated in the top 100 mid-sized ranking done by KPMG for the period from 2011 to 2015. Purposive sampling and multi stage were applied in selecting a sample of 255, which had the data needed in the study. Questionnaires were used to collect primary data had been pretested for validity and reliability therefore determining suitability in the research. Data was analyzed using SPSS and a summary statistics such as mean scores, variance, standard deviation and inferential statistics that are correlation and regression were used to present the data. The results clearly showed that there was a positive and significant influence between entrepreneurial networks and financial among medium-sized enterprises in Kenya. The study findings indicated that the overall performance was positively affected by the various entrepreneurial networks adopted by medium-sized enterprises such as well laid and efficient structural holes, network structures, network density, network ties and network centrality. Therefore, firms which strategically utilized influencers to span structural holes generated brand equity more competently. The study findings showed that medium sized enterprises performance variations across businesses may be expounded, at least partly, by the scope to which establishments relish favorable admission to capabilities and external resources established by various market players. The study revealed that a person can be hindered in a network if they have very limited contacts; has associates closely linked with each another; or parts with information indirectly through a main contact. From the findings it was clear that having a varied personal network is related to significant health advantages. The study also demonstrated that the more crucial the businessperson is in the network, the deeper it will influence financial performance of the firm. From the study it can be concluded that enterprises become entrenched in various forms of network structure since they pursued varied competitive approaches and this influenced their financial performance. Furthermore, it can be concluded that the enterprises that engaged with networks that are efficiency-driven, linkages to financiers and used personal networks to access valuable resources for the company had improved financial performance. The study recommends that management of medium enterprises in Kenya should encourage managers to participate in dynamic networking with various players outside and

within the prevailing networks and particularly with the ones who are pertinent to the firm in which an enterprise and the manager run since it leads to high performance. Due to the influence of network ties on business development, business leaders should encourage a working environment that enables managers to pursue new networks that promote business performance. Policy recommendation is that medium sized enterprises in conjunction with the government develop programs for building connections among entrepreneurs from the same sector and linking them to a broader business community.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Medium-sized firms undergo major challenges of frequently refining their performance by enhancing quality, product and service differentiation, and price reduction mechanisms. The Kenyan market environment has been tremendously stormy for the past few years, and to uphold constant success and compete well globally, companies must recognize and examine environmental physiognomies and cultivate policies to meet shifting market requirements. These enterprises should respond to superior global challenges and imperatives to contend successfully locally and the global markets (Waiganjo, Mukulu & Kahiri, 2012).

There has been a substantial growth in literature volume on the entrepreneurial networks in the last decade. The interest can be attributed to both the entrepreneurial orientation, where businesses associate swiftly forming network structures, as well as the policy side, in which regimes have instigated various policies to boost economic growth via support for small enterprises and self-employment. The vigorous positioning of entrepreneurial establishments in the business field matches with creating operative business relations with suppliers and customers, with large firms and government organizations, or with lead clients and professional bodies. Therefore, upcoming firms become rooted in a complex set of business dealings, linking local, domestic and international associates, financial institutions, government agencies, or professional and consumer relations. Donckels and Lambrecht (1997) define entrepreneurial networks as systematized relations between consumers, traders, and other businesspersons, as well as, external specialists, agents, or prospective associates offering varied resources to commence or enhance business.

The gap existing between two individuals is defined as a structural hole. People sharing a social network form groups of networks such as business associates and acquaintances. Bridging relations between two distinct groups has added benefits

from the brokering of information sharing (Burt, 2000). With increased knowledge of trends and sturdier internal teamwork, companies' performance is usually superior to that of their competitors. The proportion of the existing ties, relative to those conceivable amongst actors within a neighborhood is the network density. Simply, it is the measure of the number of ego's networks that are allies themselves, influencing the ego's group size. Signifying the probable strength of the normative stresses toward conventionality (Marsden, 1987), network density is usually perceived as a pointer of the degree to which people associate with their neighbors (Brown, 1990). Network density has been established to be associated to various outcomes, such as learners' academic performance (Gonzalez, 2007), and personal feelings of happiness (Fischer, 1982; & Moody, 2004), each demonstrating the impression of network cessation as a vital basis of communal investment (Coleman, 1988). It is known that investors in developing economies nurture individual networks to countervail hesitation allied with erratic government ruling, rising competitive power, and fast industrial growth (Luo, 2003).

Network centrality is the organization's position in the complete design of ties encompassing a network, indicating the company's structural closeness to all the firms within the same network. A high network centrality shows that entrepreneurs can access various alternative suppliers of prized capitals (Kilduff & Tsai, 2003). Such advantaged access is predominantly valuable to extremely entrepreneurial businesses because entrepreneurial angle constitutes a capital-intensive tactical posture that encompasses much doubt (Shepherd & Wiklund, 2005). Network structure is the pattern of dealings, which are formed from network associates whereby disparity network positions play an important role on the supply flow influencing entrepreneurial activities (Antoncic & Hoang, 2003). It represents all the venture's interactions as well as what forms the ties (the trust and strength in every tie). A network managerial structure is usually more complex and complicated compared to other structures as it is comprises many establishments that co-work to offer services or manufacture goods (Granovetter, 2004). The flows between actors and objects and exchanges within a network, which might have information, advice, friendship, motivation, cooperation, and career or emotional support, can bring about very significant relations (Kadushin, 2004).A network ties is the bond that exists

among the individuals in a network ,it could be referred to as strong, weak or neutral. Further, the relationship may be classified into three broad groups, namely hierarchical relations, market relations or social dealings, (Adler & Kwon, 2002).

Of the various phenomena which have engrossed the commercial environment in the recent past, hardly any matches the influence of networks. With the current advancement of the prevailing organizational prototype and competition mode along the range of particular, independent businesses to dyadic coalitions, to networks, to simulated firms, the presenter a is identified by a speedily growing incidence of the network organizational forms (Santos, 2009). Previous research have proved that network relationships can be attributed to achievement of elevated notches of performance Entrepreneurial Orientation (EO). Numerous good and emergent ideas are formed in the networks of diverse organizations (Gaudici, 2013) that augment businesses' entrepreneurial prospects. Through diverse associations, an enterprise can acquire valuable and specialized competencies, resources, and knowledge to compensate or complement their own inadequate in-house competencies or resources (Li ,Lai &Chen , 2011). The networking benefits can sequentially empower firms to be more proactive, risk-taking, and innovative, and therefore depict an entrepreneurial orientation. Wiklund (2005), for instance found that inter-business networking certainly influences entrepreneurship's orientation.

In the current competitive setting, partnerships cannot depend only on internally regulated resources in pursuing advantage-enhancing and advantage-creating approaches (Gaudici, 2013). They have to cooperate with fellow firms to acquire admission to skills, information, assets, technologies, and expertise, and therefore control their internal resources. Diverse premeditated tendencies generate different opportunities, needs, and motivations for alliance with various market players such as customers, competitors, suppliers, and distributors. Hence, given symmetries in companies' strategic performance can contribute to recognizable and distinctive networking behavioral patterns, which consequentially leads to foreseeable network structural types (Robinson & Stubberud, 2009). An enterprise's capacity is determined out do rivals rest also on the advantageous access to exterior resources and information exceptionally known by other market contestants (Krueger, 2007).

The amplified competitive pressure in addition to the unparalleled speed of technological revolution in most industries presently (Davis, 2007) has collaborated with other enterprises, a crucial condition for constant success and competitiveness in the market. The increased concerted activity deliberately initiated by companies in their exertions to overcome rivals; forms a network of inter-business relations in form of strategic long-term agreements, collaborations, and joint ventures. Every enterprise within the alliance network upholds a distinctive assortment of coalitions and has a different pattern of coalition ties with various network members, consequentially availing diverse likelihood of acquiring and accessing the network resources (Stam, 2010). Implementing social network theories, scholars have found empirically that numerous network situations such as centrality, ego network density, brokerage position, and configurations including proportion of weak or strong ties and diversity of ties, offer firms with expedient access to these network resources, which is positively associated to corporations' success (Zaheer & Bell, 2005).

1.1.1 Entrepreneurial Networks among Medium sized firms in developed countries

The ability of a firm to manage its network linkages is an important source for achieving sustainable business performance (Eisingerich & Bell, 2008). Moreover, majority of existing studies have focused on the positive impacts of networking on firms' performance (Mort & Weerawardena, 2006). The process of decision-making and collaboration with external parties resulting in access to new resources can minimise financial risks that directly influence the financial outcomes of the firm (Wang, 2015). A number of studies have found the ability to network to have a positive impact on firms' financial performance (Lechner & Gudmundsson, 2016; Semrau & Sigmund, 2012). Likewise, earlier researchers have also provided statistical evidence for the positive relationship between entrepreneurs' networking ability and firms' financial performance (Thrikawala, 2011; Chen, 2007). Conversely, it was also posited that a weak relationship with other parties negatively influence the performance of firms (Kenny, 2009).

Chimucheka (2013) investigated the relationship between small business performance and the use of networks in the start-up and growth stage of the life cycle. A qualitative approach was adopted in exploring the effect of networks on small business performance. A case study of one firm in the Netherlands and an in-depth interview was conducted to complement a thorough literature review on entrepreneurial networks, small business performance and business life cycle. The study found a relationship between performance and entrepreneurial networks in both the start-up stage and the growth stage of the firm. Networks are important to small businesses for information and opportunity seeking, accessing resources and gaining legitimacy. Small business performance improves as a firm moves from start-up to growth stage of the life cycle.

Jaffar (2019) did an investigation on the relationship between entrepreneurial business networks and sustainable performance of small firms. The entrepreneurial business network is a multifaceted business network of business firms, working together to achieve business objectives. Business relationships and firm aggregations are the main categories of entrepreneurial business networks, which help small and medium-sized enterprises to become more dynamic, innovative and competitive. The entrepreneurial business network is a networking, which provides a platform to build business relationships, identify, develop or act upon economic opportunities, share information and seek potential business partners for ventures. However, few studies have sought to understand the association of entrepreneurial business network and firms' sustainable performance in the context of Pakistan. The findings indicated that the entrepreneurial business network had a significant positive relationship with dynamic capabilities, which in turn presented a positive relation to a sustainable performance of small firms. By developing sustainable entrepreneurial business network, small firms can achieve sustainable performance by implementing dynamic capabilities in a competitive environment. The results affirmed that highly entrepreneurial firms showed a tendency to create a business network for achieving sustainable performance. The results also revealed that firms using business networks and dynamic capabilities efficiently; achieved their sustainable performance.

1.1.2 Entrepreneurial Networks among Medium sized firms in developing countries

In entrepreneurship area, Chell (2013) narrated a “process-relational” style, which comprises the combined elements of the structural engagement with others and the acknowledgement of the “socially embedded nature of entrepreneurial activity”. In addition, interpersonal and inter-firm relationships in entrepreneurial networks offer a platform through which players exchange a gigantic variety of information and resources carried by other players and this exchange relationship move towards superior performance. Such networks provide platform for small firms to boost innovation by using interactions among firms. Such networks have great importance during the formation, expansion and growth of the businesses (Ferguson, 2016).

In the same manner, entrepreneurial networks are an indispensable component in the social process of entrepreneurship (Anderson, 2010). These networks function as linking tool to the others; they offer an embedding mechanism and they constructed the social platform for entrepreneurship. Similarly, networks are supposed to be strategic alliances which are socially created for running the operations of the business but also most significantly for establishing change, initiating advancement and making the successful firm future. In continuation, networking enables the entrepreneurs to take resources that are held by others and to enhance firm performance (Huang, 2012; Slotte-Kock & Coviello, 2010).

In view of significance of entrepreneurial networks, it is believed that enterprise networks are essential for the firm performance (Jiang, 2018). Network practices are involved in growing small firm on specific patterns of activity (Hughes, 2017). It is considered that the prospective benefits resulting from entrepreneurial networks include well information, exchange relationship and extra credibility. Similarly, entrepreneurial networks also permit entrepreneurs to exchange several resources and access to the opportunities that boost the firm performance (Minai, 2012). After vast discussion of networking, it has recommended that entrepreneurs not only line up the internal as well as the external environment, but also that networks take the environment into being (Anderson, 2010).

Furthermore, reviews of literatures demonstrated that various studies confirmed significant positive statistical relationship among networks and small firm performance (Huang, 2012; Greve & Salaff, 2003; Wilson & Appiah-Kubi, 2002; Jenssen, 2001; Chell & Baines, 2000). Some other studies show a positive relation among networks and firm performance (Antoncic 2007). Further Huang, *et al*. (2012) also highlighted that there is a positive impact of networks on firm performance. It is quite evident from the study of Minai (2012) that entrepreneurial networks are deemed important for making progress in dynamic business environment.

1.1.3 Entrepreneurial Networks among Medium sized firms in Kenya

The importance of networks and networking for small and medium sized enterprises (SMEs) has been noted by a number of authors, with networking contributing to the business performance of SMEs. According to Stam, Arzlanian and Elfring (2014) the resources bundled up in an entrepreneur’ s network play an important role in the performance of that organization. Networking if well utilized will improve the financial performance and increase in market share of an organization through identification of new business opportunities, ensure skills transfer and gain good ratings in the sector. Networking plays a key role in providing information thereby reducing the level of uncertainty surrounding the operation of firms (Sungur, 2015).

Korir and Maru (2012) examined the effects of network structure on performance of minor event management ventures in Kenya. The findings of the study show that networking structure does not affect the performance of event management ventures in Kenya. Kariuki (2015) examined the perceived role of business networking on the performance of women owned enterprises in Kenya using a case study of Kenya Association of Women Business Owners. The findings show that business networking played a key role in the performance of women owned enterprises in Kenya.

Maina (2016) did a study in Kenya main objective was to investigate the influence of network relationships on the performance of Kenyan Small and Medium Enterprises. Specifically, the study analyzed the effect of platforms, contents and governance. It

is evident from the study that network platforms positively and significantly influenced firm performance. It is through the platforms that ties are established which results to embeddeness of firms in networks of external relationships with other organizations (Gulati, 2000). The study focused on the importance of networking on SMEs. However, it only narrowed down to manufacturing sector creating the need for other sectorial studies, thus this study.

Obura, Abeko and Obere (2010) studied the influence and role of networks on SMEs viability and performance in Kenya. The variables of concern were social, supporting and interfirm networks while performance was measured through sales, profit and expansion. A sample of 400 was selected from Nairobi, Eldoret, Kakamega and Kisumu by use of multistage sampling. From the results it was apparent that via entrepreneurial networking, entrepreneurs can collect information, search for consumers and dealers and acquire the required resources. However, the study only focused on three counties and specific variables.

Maina (2016) studied network dimensions and firm performance among manufacturing SMEs in Kenya. Variables analyzed were network range and intensity. The design used was descriptive and questionnaires were used to obtain data whereby 132 of them were filled, and the main theory that guided the study was social capital theory. It was evident that network range and intensity had a substantial and positive relationship on business performance. The study provided a gap which this study sought to fill which was the other variables and medium sized enterprises.

Mungania, Gakure and Karanja (2017) studied networking as corporate bond on development of dairy SMEs within the Mt. Kenya and its environs using descriptive research design, a sample of 309, combining secondary and primary data. The variables on focus included network involvement, contributions, and dimensions. The results showed that networking was common among SMEs in the Dairy sector and market information sharing was the common dimension. However, the study only concentrated with the Dairy SMEs within Mt Kenya region.

1.1.4 Financial Performance

An enterprise's financial performance is the degree of how successfully a firm employs its resources from its fundamental procedures and ultimately generating revenues within a specified time period. The measure is therefore equated with some particular industrial typical standard of other analogous businesses in the same trade (Wood & Sangster, 2005). Financial performance is measurable according to solvency, liquidity, profitability, repayment capability and, financial efficiency (Brealey, Myers, & Marcus, 2009). Profitability is actually the measure of turnover made by a firm via the application of productive resources. Liquidity determines the firm's capacity to meet its responsibilities in case they fall payable; solvency measures the company's capability to meet all its financial commitments when each of its assets have been sold. Thus, an enterprises financial performance is measurable by using its net operating income, its net income, its cash flows or even its assets performance. Financial performance is a vital element of financial management in firms that incorporate the science and art of running financial resources of organizations. The area demands experience, skills, and knowledge, and its objectives include maximizing sales, profits, seizing a given market share, diminishing internal conflicts and staff turnover, firm's survival, and wealth maximization (Jacobs, 2001). For firms to determine financial performance, they must conduct performance measurement, and this can be divided into two categories: non-financial performance measurement as well as financial performance measurement.

Financial performance measurement usually examines a business' financial ratios that are generally calculated by the accounting statistics acquired from organizational financial statements such as activity ratios, liquidity ratios, debt ratios, and profitability ratios. On the contrary, non-financial performance measurements are more subjective and may evaluate the employee satisfaction, customer service, apparent market-share growth, sales growth, and alleged change in cash flow (Haber & Reichel, 2005). Kaplan (2001) stresses that being accountable is quite vital in warranting that establishments realize the performance level that is aligned with the strategic organizational objectives. Kaplan further shows that the majority of

organizations customarily calculated performance by means of financial performance. Yet, firms have lately acknowledged that financial measurements just by themselves are insufficient for managing and measuring their performance. The financial reports determine previous performance while communicating little on lasting value addition. Financial ratios are usually characterized according to the firm's financial aspect. Current ratio is described as a financial ratio, which determines if a business has the enough resources to pay off urgent debt duties as they occur. Another measurement of financial performance can be through Solvency ratio, which measures the company's capacity to meet its long-standing fixed expenditures and to achieve long-term growth and expansion. Financial performance can also be measured by assets revenues which is simply the profitability ratio measuring the level of a company's profitability according to its aggregate assets. Leverage ratio can also be used to measure financial performance. Leverage ratio determines the degree to which a firm exploits its debt in financing its assets. (Neelaveni, 2012).

Other literatures that can be used to analyzes the profitability of companies from various economies may include pointers, as Raheman et al. (2010) and Dong and Su (2010) state, net operating profitability (NOP), Padachi, (2006) return on the invested capital (ROIC), Deloof (2003) return on the total assets (ROTA), and Narware (2010) return on assets (ROA). As for these cases, the financial indicators expressing the operating capital are the rudiments considered by analyzing profitability since they are dependent variables. At microeconomic level, profitability has been learnt subject also to indicators such as receivables turnover ratio, liquid and current ratios, and the working capital to all assets/resources (Singh & Pandey, 2008). The financial performance is crucial in medium enterprises because all activities of the enterprise require finances.

1.1.5 Medium Sized Enterprises

Small businesses are always eyed by politicians, and obviously the already established firms enjoy the lobbying weight, although for the jobs and the economy stability, the middle market is what matters (Hynes, 2012). The latter enterprises

epitomize over a third of the total American jobs and an annual revenue of over $9 trillion. About 200,000 United States enterprises are mainly middle market and they contributed $3.84 trillion to the Gross Domestic Product (GDP) in 2012 besides their massive job creation. In the same year, these businesses created 1.17 million jobs, and 42% stated that their staff increased within the same period the following year, as indicated by the Middle Market center. In 2012, the average growth in employment for the middle market firms was 2.7%, in comparison with 2.1% larger firms growth rate, according to ADP. The services industry establishments in restaurant business or healthcare, for example, showed the highest growth, totaling approximately 950,000 workforces. There was an expected growth of over 1 million in 2013. As growing companies struggled to turn a profit or pay the lease, and large firms laid off thousands of staffs. This is done to satisfy shareholders, and medium-sized establishments took top talent ultimately becoming creative (Caldwell, 2013). Financial performance is crucial in medium enterprises because all activities of the enterprises require finances.

Medium-sized enterprises play significant economic roles in most nations. In Kenya, for example, these enterprises are key in the achievement of vision 2030, which is a lasting nation's development blueprint. The main objective of the latter is for Kenya to become prosperous and enhance globally competitiveness while maintaining improved standards of living by 2030. The strategy is to transforming the country into an industrialized, augment income levels, and ensure Kenyans enjoys viable and quality living standards in a safe and unpolluted environment. Basically, the plan is for Kenyans to enjoy MDGs with the vision established on three fundamental pillars: political, social, and economic governance. Firstly, the objective of the political pillar is to realize a result-oriented, people-centered, issue-based, democratic, and accountable governing system. Secondly, the social pillar's aim is the creation of a cohesive, equitable, and just social development within a secure and clean environment. Thirdly, the economic pillar seeks to realize a 10% economic growth rate annually while maintaining the same until 2030 to create additional resources that will help address the MDGs. Through the vision, various flagships projects have been identified in almost all sectors which are to be implemented within the specified vision's period, and thus facilitating the anticipated growth which supports MDGs

implementation on a viable basis. Moreover, projects that address MDGs directly amongst important sectors like environment, health, education, water, and agriculture. The medium-sized firms are crucial in the process of implementing these flagship projects, therefore playing a key role towards reaching the vision 2030 (RoK, 2009).

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). The Economic Survey found out that the small medium enterprises (SMEs) contribution was 79.8% of the total jobs created in 2012 in Kenya (RoK, 2012). Consequently, the country's strategic development plans for the periods between 1989 and 1993, 1994 and 1996, and 1997 and 2001 stressed on the role of medium and small-sized enterprises in job creation for the nation's growing population.

1.1.6 Top 100 Mid-sized Companies

Kenya's Top 100 average-sized enterprises Study ('Top 100 Review') is Nation Media Group's and KPMG's Kenya initiative. The Study aim was to identify country's fastest growing medium-sized firms to showcase corporate excellence while highlighting a number of the most positive and inspiring entrepreneurship stories in the country. Normally, it is very significant to celebrate entrepreneurships since they have played a vital role of job and wealth creation in Kenya. The aim, hence, is to show that national heroes, heroines and emerging role models transpire from the Study. Mid-size establishments have significant role of developing the Kenyan economy, and appreciating their influence and adherence to desirable business ethics strongly echoes on the eminence of their Auditors. Top 100 offers openings to partaking businesses that avail them with inspiration and insights to

improve their firms to a higher level. Auditors, witness their customer's growth process; mid-size firms will grow in all aspects and so, is their services value to their prospective companies.

Principally, a Top 100 medium-sized business usually ranks higher than its competitors in terms of profit growth, revenue growth, liquidity/cash generation, and its shareholder-revenues. A Top 100 enterprise has thrived by increasingly expanding its market position within its industrial scope over a given period of time, and the growth usually translates into shareholder-revenues and an equitably comprehensive financial position as well. Operated by the Business Daily, which is a Nation Media Group's (NMG) publication as well as the KPMG firm, Top 100 Survey supports both small and medium-sized firms having an annual turnover of approximate range of Kshs 70 million to Kshs 1 billion. To qualify for in the Top 100 meduim-sized businesses review, a firm should do the following: submit a minimum of three-years-audited financial statements to help determine their cash flow constancy and growth pace. The award given is a means of reinforcing the comprehensive-based SME sector, playing a key role on the nation's growth and employment creation.

1.2 Statement of the Problem

Medium-sized enterprises contribute significantly in the global economy since they contribute considerably to employment, output, and income, and by number, dominate the world business stage (Ayyagari, Demirguc, & Maksimovic, 2011). According to the Kenya's Vision 2030, these enterprises are viewed as key drivers to social and economic growth, representing numerous businesses, generating enormous wealth and employment (RoK, 2011). The said enterprises are widely considered to be vital to a country's competitiveness (Kiraka,2013). Notably, these enterprises in comparison with large enterprises have inadequate access to capital and finance, obsolete technology, lower economies of scale, inadequate management skills and lack of labor training (Antonio &Gregorio 2005). Therefore, these enterprises need support and resources from external parties such as other enterprises, supporting institutions, relatives and friends which are their

entrepreneurial networks (Fatima, Ali & Arif, 2012). Therefore, entrepreneurial networks come in handy to compliment the deficiency (Maina, 2015).

Entrepreneurial networks make it easier for enterprises to access information, resources, markets, technology, and opportunities in order to deal with competitive business market and have the capacity to assist entrepreneurs reveal themselves to emerging prospects, acquire knowledge, have learning experience and gain from synergistic influence of collective resources (Mungania, Gakure & Karanja, 2017). Networking occurs as an inherent entrepreneurial activity because proprietors of medium enterprises are in networking undertakings like participating and interacting in trade, social and business which have cost implications. Notwithstanding the costs, networking is known to increase the leverage ability of internal resources and hence financial performance of medium sized enterprises (Okatch, 2012). Moreover, despite the need of medium sized enterprises to become competitive and the proposal that entrepreneurial networking is one of the ways through which this can be achieved, little has been deliberately done to exploit this strategy (RoK, 2007-2011).

Although there exists numerous research that indirectly or directly measured entrepreneurial networking and performance of enterprises they have reached different conclusions which demanded for deeper research. It infers that the studies done in other particular areas do not warrant for conclusion regarding the picture of the other regions of the world, particularly at the country level. The study hereby varied from previous studies on entrepreneurial networking. To begin with, previous research emphasized on small firms while current focused on medium sized enterprises. Second, majority of studies on EN focused on developed countries for example Bryson (United Kingdom), Zhang 2012 (USA), Thirikawala 2012 (SriLanka); to Setyawati 2011(Indonesia); Arman and Dowla 2011(Sweden).

Thirdly, the combination of variables studied are different from previous studies, Peprah (2010), explored the role networking and success of women enterprises; Mungania, Gakure and Karanja (2017) focused on network involvement, contributions, and dimensions; Maina (2016) studied network range and intensity, while the study variables for this study were structural holes, network density

network structure, network ties and network centrality. Fourth, the approach besides differs in the unit of analysis, Maina (2016) focused on SMEs in the manufacturing sector, Mungania, Gakure and Karanja (2017), Peprah (2010) focused on women entrepreneurs while the current focused on medium sized enterprises.

Finally, the methodology employed for the exploration was disparate from the previous studies. For instance, Thrikawala (2010) used exploratory, while the current study used descriptive research design. Therefore, this study contributed by filling the gaps of past research by studying the influence of entrepreneurial networks on financial performance of medium-sized enterprises in the Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

To examine the influence of entrepreneurial networks on financial performance of medium sized enterprises in Kenya.

1.3.2 Specific Objectives

In furtherance of the general objective this study pursued the following precise objectives:

1. To determine the influence of structural holes on financial performance of medium sized enterprises Kenya.
2. To examine the influence of network density on financial performance of medium sized enterprises in Kenya.
3. To investigate the influence of network structure on the financial performance of medium sized enterprises in Kenya.
4. To establish the influence of network ties on the financial performance of medium sized enterprises in Kenya.
5. To determine the influence of network centrality on the financial performance of medium sized enterprises in Kenya

1.4 Research Hypotheses

H_{01}: Structural holes have no significant influence on financial performance of medium sized enterprises in Kenya.

H_{02}: Network density has no significant influence on financial performance of medium sized enterprises in Kenya.

H_{03}: Network structure has no significant influence on financial performance of medium sized enterprises in Kenya.

H_{04}: Network ties have no significant influence on financial performance of medium sized enterprises in Kenya.

H_{05}: Network centrality has no significant influence on financial performance of medium sized enterprises in Kenya.

1.5 Significance of the Study

1.5.1 Scholars

The recommendations of the study can help scholars design more progressive and effective networks, which can be used by entrepreneurs, aimed at ensuring better financial performance. Academicians who are also researchers in the area of entrepreneurship can be able to access this study from the public repository domains like libraries, magazines, journals and online open access academic sites once the outcomes of the study are published. They would be capable of adding value on the gaps identified by this study. It could also contribute to the corpus of literature on medium sized enterprises and the secrets to their success.

1.5.2 Entrepreneurs

The results of the study could be beneficial to entrepreneurs, policymakers, firms' administration and staff, business community, and scholars. To the entrepreneurs, they can be enlightened on the need to convert their personal networks to business opportunities. Before an emergent entrepreneur commences his project, his social network dealings function as a prospect set. Gradually, such an investor cultivates his network relations with other firms and subsidiary agencies too. The emphasis of the

study is the fact that, to actually excel in business, businessperson should employ their individual networks in addition to the inter-administrative networks.

1.5.3 Government and Policy Makers

The government of Kenya can benefit from this study in that it can enable it to develop strategies, which can ensure stability in the economy by ensuring that there is a level playing ground amidst surging competition between different firms in Kenya in adopting entrepreneurial networks to enhance profitability. The government would be able to understand the extent to which the policies drafted would affect the firm's influence on their performance. The study can be significant to government and policy makers because they would easily understand the influence of entrepreneurial setups on the Kenyan economy and be able to recommend favorable regulations and policies to strengthen firms within Kenya.

1.5.4 Management of Medium Sized Enterprises

According to the results of this study, management and staff of the companies to be studied and others to understand and appreciate the influence of entrepreneurial networks of their organizations and seek to strengthen their performance so as increase the their organization contribution to the economy. This study can lay a baseline for companies to benchmark themselves on their competitors concerning their entrepreneurial networks.

1.5.5 Business Community

Similarly, the study would be of great significance to the business community operating their businesses in Kenya. The deeper knowledge about the influence of entrepreneurial networks on the financial performance to be established by the study would enable people to have greater understanding on the network size, density, structure, centrality, ties and structural holes, and as a result contribute towards coming up with effective strategies that effectively provide solutions to the performance of their firms. They also are likely to learn management skills that would make them well equipped in managing their businesses networks to increase

efficacy and efficiency. The findings of the research could also be used by the training institutions to formulate programs that address the specific areas from the research.

1.6 Scope of the Study

The study sought to examine the influence of entrepreneurial networks on the financial performance of medium-sized enterprises in Kenya. The choice of MSEs was to maintain a desired level of homogeneity since all selected had appeared in the top 100 SMEs and parameters used to qualify them to the listing were the same. Precisely, the research examined if structural holes, network density, network structure, network ties and network centrality influence financial performance of the medium-sized initiatives in Kenya. It was conducted in specific enterprises those that have been rated among Kenya top 100 mid-sized enterprises in five years from 2011 to 2015. The study therefore was conducted in fifty one (51) medium sized enterprises in Kenya. The study focused on department of marketing, human resource department and business development department in the medium sized firms. This is because they are alleged to have essential knowledge and skills in vital aspects of the study and gave the accurate data. The study was conducted in year 2016, thus, primary data was collected during this period. Data was collected through self-administered questionnaires.

1.7 Limitations of the Study

The first limitation experienced was that some of the respondents were unwilling to fill the questionnaire due to tight work schedule, others overlooked the significance of the study and while others did not totally return the questionnaires. The researcher booked appointments to meet the managers and distribute questionnaires, those who were so busy to fill it at the time it was issued were allowed to remain with the questionnaire to fill it at their convenient time and was picked at a preferred later date and several follow up were made to get the questionnaires back. The researcher had to explain the significance of the study and also emphasized that the information collected would be handled for the purpose of this study. For the questionnaires that

were not returned even after numerous follow up, the researcher analyzed the data without them thus the non-response rate of 20%

The second limitation was that the respondents were unwilling to give information due to fear of the unknown and in that the information collected may be used to intimidate them or print a harmful image about them or their respective companies. This was mitigated by a letter of introduction from the University and NACOSTI, which assured the respondents of the academic purpose of the study and that information collected would be treated with maximum confidentiality.

The third limitation is that the managers of the selected medium sized enterprises were not willing to disclose their profits, sales turnover or any financial information in actual figures that this study needed to obtain information on financial performance. To mitigate this limitation, the researcher opted to use indirect methods to collect data on financial performance. The respondents were asked to indicate the percentage change of profit, sales growth, return on investment market share and assets at a given period. These were the parameters used to measure financial performance of medium sized enterprises in the study. They were also requested to give their perceptions on the financial performance of the enterprises they worked with by use of specific Likert scale psychometric constructs that were provided in the questionnaire.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section reviews the hypothetical foundations that discuss and explain the link between financial performance and entrepreneurial networking. Further, the empirical review of studies that best relate to the objectives of the study are also presented and discussed. The study's conceptual framework, review of variables, research gaps, review of the existing literature, summary, and gaps are also presented.

2.2 Theoretical Framework

2.2.1 Structural Holes Theory

The structural holes theory emerged in late 1960s through Harrison White and his group whereby he formalized ideas focusing on the absence of ties between individuals (White, 1965).The theory was later advanced by Granovetter in 1973 through his article 'The strength of weak ties' which confirmed that individuals benefit more from weak ties rather than strong ties because one's weak ties can provide access to circles of information we usually are not familiar with (Granovetter, 1973). Ronald Burt was among those who those who did a serious effort to ground structuralism reasoning on a behavioral micro-foundation. He analyzed both the bonds in a social network and the areas with lack or scarceness of ties among groups of people (Burt, 1992; 2004; 2007).

A structural hole, as a disconnection existing between two individuals, backs its theory that stresses that individuals gain by acting as links among people groups that otherwise fail to interrelate. An individual whose network fills structural holes can access contacts from numerous groups, and that connection across these holes may be advantageous in terms of prompt knowledge, scope of knowledge, and chances of strategically harmonizing across these groups (Granovetter, 1973).

Burt's structural holes theory assesses organizations according to their tight networks within their societal structures, and the "holes" in which links have unsuccessfully formed. Such holes offer openings for socially entrepreneurial persons to play spanning obligations in the enterprise, merging two disparate groups or people who are currently not relating with one another. The premise is that people whose networks link such holes tend to do predominantly well jobwise, and it has been reinforced by empirical research of executives in large companies, correlating a person's achievement with this form of bridging action (Burt, 1992). At its core, then, the theory is based on the merits that accumulate to individuals who inhabit such linking positions.

Brokerage is the spanning of the existing gap to form a connection between groups or people. The competitive element of this liaison is simple, one has an affiliation with somebody from a different community while the rest of the community or group does not, and the information gained from that correlation is advantageous to the individual. Therefore, establishing relationships beyond one's normal social environment pays. The more dispersed and diverse the social network, the more the access to new and valuable concepts you have. Thus, one can negotiate information between various groups (Burt, 2006). According to Burt (2006), brokerage should be about viable ideas, and is branded by the change which occurs when dialogue changes behaviors and opinions across the structural holes. Ideas are usually infectious when shared in social group. Hence, ideas derived from outside a social group have a better chance to influence transformation in a group.

This theory is relevant to the study because, it suggests that entrepreneurs would benefit from filling the "holes" (called as structural hole spanners) between people or groups that are otherwise disconnected. The idea is that positions which act as an intermediary or a bridge between individuals of different groups tend to have access to a richer supply of information and have more control over their network relations. Therefore, this study helped to understand how creation and use of bridges among and within medium sized enterprises in Kenya accrue advantages to entrepreneurs and their enterprises and in return how it can influence the financial performance of the firm. This theory addressed the first objective on structural holes.

2.2.2 Social Capital Theory

The theoretical formulation of social capital of Bourdieu, Coleman and Putman has greatly contributed to the currency of the concept. According to Bourdieu (1986) social capital is defined as 'the aggregate of the actual potential resources which are linked to possession of a durable network of more of less institutionalized relationships of mutual acquaintance or recognition'. Social capital for Bourdieu is related to the size of network and the volume of past accumulated social capital commanded by the agent (Bourdieu, 1992). Bourdieu sees clear profit as being the main reason that actors engage in and maintain links in a network. According to Bourdieu, all forms of capital, by being organically-related to positions in social space, act in two ways simultaneously: they reproduce all forms of capital and they use these resources to embed the actor's position further. So, positions of actors are both the cause and the effect of all forms of past accumulations of capital, particularly social capital.

According to Coleman, one of the leading proponents of the theory, social capital is one of the potential resources which an actor can use alongside other resources like their skills and expertise. However, social capital is not owned by the individual, rather it arises as a resource which is available to them out of interactions with their environment (Coleman, 1990). According to Bourdieu, another leading proponent, social capital is the sum of resources, actual or virtual that accrues to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu, 1992).

For Putnam (1993) social capitals are social organizational features, such as norms, trust, and networks, which enhance action and cooperation for common gain. Coleman's acumens nonetheless become apparent in Putnam's credence that social capital is a quality which may facilitate interpersonal collaboration. Teamwork is easier in the communities that are blessed with a considerable human capital stock (Putman, 1993). According to Putnam's perspective, such characteristic can be regarded a collective feature to such a notch that it can automatically become analogous across countries, cities, and regions. Social capital, is normally context

oriented and takes various forms such as duties within a group, sanctions, trust, and norms, with fundamental conventions that the relationship between people is lasting and subjectively felt. Consequently, entrepreneurs of a given group can volunteer their services and time to the advantage of all entrepreneurs.

Social capital theory was advanced by Ronald Burt. The main criticisms of social capital theory are that it is not social, not capital and not a theory. This doesn't leave the concept with much of substance, leading some authors to describe the concepts fundamentally flawed. In addition, it has been claimed that it is impossible to measure, that problems of circularity make it a redundancy, and that the possibility for positive or negative outcomes make the context dependent. Some aspects are objective, but others are subjective. Some are cognitive, but others are pre – cognitive. Social capital can be rational, pre-rational or even non-rational. This suggests social is more of an umbrella concept than a functioning theory (Burt, 1992).

Based on this theory, the current study sought to establish if entrepreneurs come together and form social groups which create better understanding of each other and are objectively run based on trust, and durable group relations so as to impact on the financial performance of the enterprise. The study sought to establish how enterprises create value by endowing well-connected entrepreneurs with privileged access to intellectual, financial, and cultural resources, which can enhance financial performance. Therefore, the study helped to understand how social capital embedded in entrepreneurial networks among medium sized enterprises in Kenya could influence the financial performance of firm. This instigated the second objective on network density.

2.2.3 Social Network Theory

In the late 19th century, social network theory (SNT) materialized and it tries to identify something that can link individuals in their communities or groups (Barnes & Milgram, 1967). Birley (1985) notes that in entrepreneurship, the SNT began in the 1980s. SNT assesses social relations in terms of ties and nodes. Ties are the associations between players, and nodes are distinct players within a network. There

may be various forms of ties between nodes. Simply, a social network may be a map of the total relevant studied ties between nodes. Moreover, the network can also be employed to define individual players' social capital. These notions are usually presented in a social network figure, where ties are lines, while nodes are points. The power of the social network theory branches from its variation from antiquated sociological studies that assume that it is the aspects of distinct players whether they are friendly or not, dumb or smart, that matters. The theory gives a different perspective, where the individual attributes are less significant than their ties and dealings with other players sharing the network. The strategy has proved effective for explaining numerous real-world occurrences, but leaves little room for personal agency, the capability of people to influence their accomplishment; therefore, most of it rests within their structural network (Koch, 1998).

Because of the intricacy of social networks, employing the theory to comprehend players and the relations between them is vital to the toil of politicians, theorists, marketers, and social scientists. These researchers frequently try to garner a superior understanding of the inner mechanisms of networks thus; they can advance their origin or merely sell products. However, the theory has some intrinsic weaknesses and strengths. Merits: The theory gives a description of how random individuals are linked. It is beneficial in understanding how their associates relate to their member groups and in the understanding of big groups. It delivers insight about the viral phenomena like spread of ailments such as Ebola. Demerits: It is hard to scientifically duplicate, while understanding ties/relationships can be biased.

The theory was relevant to the study as it helped 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 establish how connections and relationships among medium sized enterprises in Kenya develop a social structure, which can determine the financial performance of enterprises and influence on sustainability in the long run. This prompted objective three of current study on network centrality.

2.2.4 Strength of Weak Ties Theory

Granovetter (1973), while articulating his theory, submitted that feeble ties have a higher likelihood of connecting actors to distinct social worlds and, therefore, are ideal means of exposure and access to approaches and perspectives that are both fundamentally varied from one another and new to the players as well. While ties grow sturdier, people have a better understanding of one another; consequently, the standpoints of others may turn out as redundant and common (Coleman, 1988). Since, no redundant material has been recommended as the device driving the combinatory process influencing creativity; learners have proposed that the maintenance and development of as welling number of feeble ties should correspond with elevated creativity levels Pittaway (2004). The more the novel pockets, and hence a corresponding potential access for varied information, the higher the possibility for creativity.

This theory was relevant to the current study since it established how entrepreneurial networks saturated with "weak" ties, social relationships, which are typified by infrequent interaction, short history, and limited emotional closeness, in the Kenyan context are particularly valuable to the production of creative ideas. This lead to finding out if enhanced access and exposure to socially distant pockets of information that is likely to be novel to medium sized enterprises is likely to spur the combinatory process underlying the production of creative ideas, which result to improved financial performance. This instigated the fourth and fifth objective on network structure and network ties.

2.2.5 Resource Based View Theory

Penrose (1995) established the basics of resourced-based view theory. Penrose initially avails a logical account to the firm's growth rate by illuminating the causal relations among organizational resources, performance, and production capability. Her main concern is on the innovative and efficient use of resources. Penrose appealed that bundles of the productive resources governed by enterprises could fluctuate ominously by firm, as the latter hereby are essentially heterogeneous although they their industry is the same (Barney & Clark, 2007). The Resource

Based View (RBV) assumes that an organization's competitive advantage and subsequent performance originates from the resources and capabilities it controls.

Resource-based view is among the most cited and influential theories according to the management theory history. It addresses the strategic management's fundamental research question: Why do some firms continuously outperform others? It strives to clarify the core foundations of a business's unrelenting competitiveness (Kraaijenbrink, Spender, & Groen, 2010). The RBV submits that the firm's resources are the principal factors of its performance, as they may promote a firm's viable competitive advantage (Hoffer & Schendel, 1978; Wenerfelt, 1984). According to Barney (1991), The notion of resources includes overall capabilities, assets, knowledge, firm attributes, information, organizational processes, etc. managed by a business, which helps the firm to consider and implement those strategies that enhance its effectiveness and efficiency (Barney, 1991).

The RBV of a business is one of the most broadly employed theoretical frameworks in literature of management, the emphasis being sustained competitive advantages created by firms from their inimitable set of resources and focusing either on separating a business's threats and opportunities, recounting its weaknesses and strengths or evaluating how they may be matched with chosen approaches. In nature, resources can be either tangible or intangible. The former includes location, capital, and access to the capital amongst others capitals. Intangible resources include entrepreneurial orientation, reputation, skills, entrepreneurial networks, and knowledge, amongst others. All these resources lead to research and development in the quest to have an edge that cannot be easily imitated by competitors (Penrose, 1995).

This theory was applicable in this study as it recognized what resources medium sized enterprises in Kenya require to carry out their day to day operations in their network frameworks and its influence on the financial performance. The theory informed of the general objective of the study.

2.3 Conceptual Framework

According to Borg and Gall (2007), a diagrammatic illustration of how variables relate in a study is defined as conceptual framework (Borg and Gall, 2007). Using it, the researcher can identify the suggested relationship between variables quickly and easily. Its proposition reviews behavior and offers predictions and explanations for most of the empirical annotations (Cooper & Schindler, 2008). The descriptive groupings are placed in an extensive structure of statement of dealings or overt propositions between the empirical assets to be verified for rejection or acceptance (Nachmias & Nachmias, 2008). A conceptual framework in Figure 2.1 is developed with the following variables and relationships.

Independent variables are based on entrepreneurial networks, which are viewed as influencing financial performance; the specific variables are network density, network size, network structure, structural holes and network ties, which were selected through literature. Dependent variable is financial performance, which determines how efficiently an enterprise utilizes its assets from its main tasks while creating revenues within a specified time period. The measure was therefore paralleled with some particular industrial typical standard of similar businesses within the same trade. Financial performance demands experience, skills, and knowledge, and its objectives include maximizing sales and profits, minimizing internal conflicts and staff turnover, firm's survival, capturing a given market share, and exploiting wealth (Neelaveni, 2012). It is hypothesizing that network density, network size, network structure, structural holes, and network centrality influence the financial performance.

Figure 2.1 outlines the relationship between different constructs, which are important influencers of financial performance of medium sized enterprises. The independent variables are structural holes, network density, network structure, network ties and network centrality while the dependent variable is financial performance.

Financial performance in the study was measured using these indicators: Profit, Return on Investment, Sales growth, Return on Investment, Return on Assets and market share. The data on the parameters to measure financial performance was

gathered by use of percentages change since it is a sensitive issue. Structural holes was measured by considering issues like Professional networks, Social media personality, internal policies and guidelines and its member's annual subscription fee.

Network Density was operationalized in the study by use of the following sub variables contacts attained by the firms, competencies of the members in the network and their contributions and interactions from within and without. Network structure was measured by use of statements touching on sub-variables such as network interactions, connectivity and partnership. Another variable of the study was network ties, which were made operational in the study by considering aspects like diversity, personal networks, referrals, resource mobilization through networks. Network centrality was operationalized using the following sub variables enterprise position, partnerships opportunities and access to information. Operationalization of variables assisted in establishing the influence of entrepreneurial networks, which was viewed as affecting financial performance of SMEs in Kenya. Therefore, the independent variables structural holes, network density, network structure, network ties and network centrality influence the dependent variable that is financial performance. This is depicted in Figure 2.1.

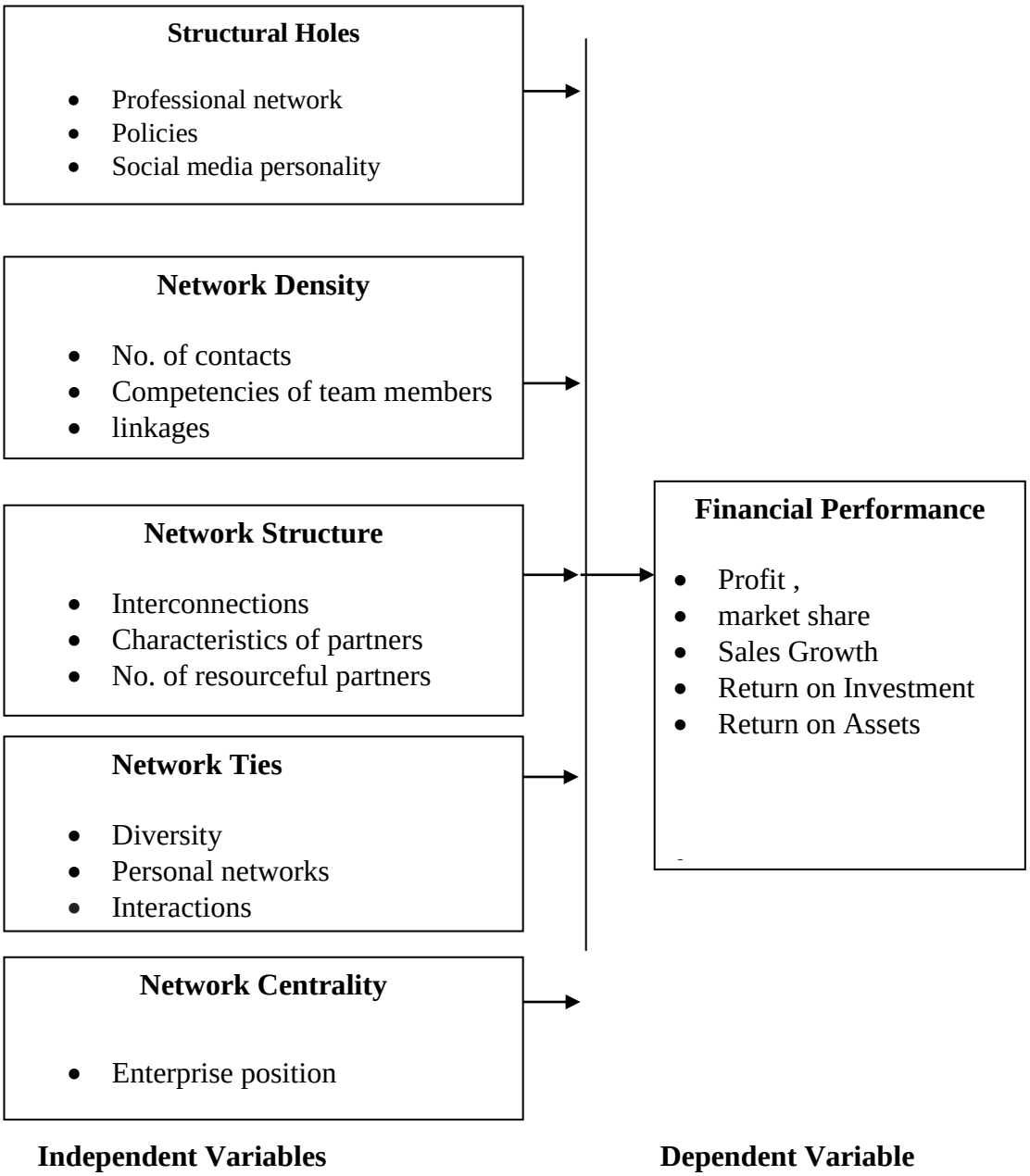

Figure 2.1: Conceptual Framework

2.4 Review of Literature on Variables.

This section discusses the relationship among the variables under study drawn from the literature review. It depicts the influence of structural holes, network density, network structure, network ties and network centrality as independent variables and financial performance as the dependent variable.

2.4.1 Structural Holes

People sharing a social network create clusters of friends like business associates and acquaintances. The gaps between clusters are the structural holes in the flow of information (Burt, 2005). They are the blank social structural spaces or rather, the gaps existing in the social world whereby current connections are inexistent between people (Kilduff & Tsai, 2003). People endowed with an elevated level of social capital link the gaps formed by such structural holes (Burt, 2005). Individuals whose network ties link the holes "are the brokers compensated for their integrative roles. Their reward is in the sense of team evaluations and more affirmative person" (Burt, 2005).

Research proves that those people who can successfully span structural holes achieve more advantages. Senior management that spans structural holes has a higher probability of being promoted earlier than the rest (Podolny & Baron, 1997). Loan officers whose networks span the structural holes were presented as prospective in closing the deals (Mizruchi & Sterns, 2001). Burt et al. (2000) notes that salary increases in a French chemical industry, had a higher likelihood of occurrence for those who span structural holes. Supervisors in a developing technology firm offered advanced performance assessments to personnel whose networks spanned otherwise detached sections of their establishments (Mehra, Kilduff, & Brass, 2001). Such people can acquire more information as they are exposed to more varied and emergent bits of information, and consequently become more efficient workers (Burt, 2005).

Numerous methods can be used to measure the linking of structural holes. Even a mere count of bridge relations appears to work; individuals having more bridges

function better (Burt, 2000). The more succinct way of measuring the structural holes brokerage is via the expanse of closure within the network, measured by constraint. The constraint may be thought as a measure of a person's incapacity to bridge structural holes (hence enjoy minimal social capital). A person may be restrained in a network if he/she has very limited contacts; shares knowledge indirectly; or has contacts closely attached to each another through a central contact.

The brokering knowledge sharing is strongly beneficial through bridging of ties between distinct groups (Burt, 2000). As social networking sites (SNSs) influence how people converse (Steinfield, Ellison, & Lampe, 2008), firms are employing the social media influence to expand their worth in the customer market while influencing procuring options (Booth & Matic, 2011; Freberg, 2011).

Firms that strategically apply Influencers to link structural holes can generate brand equity more proficiently (Zaheer & Bell, 2005). The social media sites can create discussions around a product or brand. Influencers can be labeled as Brand Ambassadors or Brand Storytellers who positively influence and shape the opinions of services and products (Booth & Matic, 2011; Freberg, 2011). Nonetheless, they can be harmful as well in case a marketing department utilizes Influencers as pawns rather than involving brand control (Subramani & Rajagopalan, 2003). A poor comment or review dispatched on social networking sites may be a good example. Booth and Matic, (2011) state that buyers can influence brands, although effective companies embrace this deduction, listen, and follow up on chats to help them adjust their services or products accordingly.

Choosing the appropriate Influencers have an influence on brand performance's commendations. Marketing campaigns involve the taking of networking structures into consideration, while the brands study the societal networks of distinct Influencers according to Li, Lai, and Chen (2011). The number of followers that an Influencer has is able to determine the time taken by a branded dispatch to spread and the message quality it transfers between individuals as well. Due to the value given to Influencer choice, a number of online software have been generated to track the numerous qualitative tiers and Brand Ambassadors' traits (Freberg, 2011). The

capability of Influencers to influence a particular audience with the least effort of just posting a social media update (Subramani & Rajagopalan, 2003) promotes the value given to the strategic Influencer choice.

Influencers exist within organizations too, and internal organizational performance has robust relations with structural holes as well. Structural holes theory may be used by organizations as a structure form, which escalates chances of connecting and eventually, enhance a business's social capital. The coordination of projects depends on several personnel communicating and working, which generally necessitates linkages from one department and another (Zaheer & Bell, 2005; Gao, Hinds, & Zhao, 2013). Burt (2000) notes that the bridging of ties between the various groups lessens the aggregate bureaucratic obstructions to communication while swelling the promptness of correspondence.

Besides the efficiency of internal communication, the external structural holes have an effect on enterprise performance as well. According to Zaheer and Bell (2005), staffs who communicate with colleagues working externally in the same industries earn a superior sense of market trends. Firms that have many employees that bring such kind of information to the internal meetings are highly equipped to react to the industrial trends (Burt, 2004). With sturdier internal alliance and amplified awareness of trends, enterprises compete effectively against their competitors.

Structural holes increase the brand and organizational value. For brands, the structural holes function as a rapid supply system that employs particular influencers to enhance brand consciousness and influence buyer attitudes. With the advancing SNSs, penetrating social networks for Influencers and structural holes will remain to be a substantial element in marketing campaigns. For firms, structural holes motivate internal partnership and the capacity to react to the industrial trends. The growth of large-firm unions as a globalization response stresses on understanding external and internal structural holes besides the general managerial theories (Oh, Chung, & Labianca, 2004).

In teams, structural holes may help avert the excessively limiting enforcement of norms, which befalls as fellow associates come under scrutiny from their shared

friends (Krackhardt, 1999). As depicted by Barker (1993), the absence of structural holes, sets of the routines not taken seriously by cohesive colleagues may petrify into stiff rules. Flexibility to new ideas and variety of views in the group are, thus, probably to be shielded by the incidence of structural holes within teams. The teams without structural holes tend to be hesitant in allowing externally derived ideas (Oh, Chung, & Labianca, 2004) as they incline on negatively viewing non-group members (Sherif, 1961). The occurrence of structural holes inside a team can enable increases in the team's capability to absorb or produce fresh problem solutions.

From a structural hole point of view, medium sized enterprises can successfully span structural holes achieve more advantages that influence financial performance positively. Structural holes may be used by organizations as a structure form, which escalates chances of connecting and eventually, enhance the social capital of the enterprise. The coordination of projects depends on several personnel communicating and working, which generally necessitates linkages from one department and another and in the long run influence financial performance.

2.4.2 Network Density

Network density demonstrates the probable strength of normative pressures to conventionality (Marsden, 1987), the network density is frequently considered a pointer of the degree upon which persons ascertain with their neighbors (Brown, 1990). Research proves it to be associated to various outcomes, comprising the individual feelings of happiness and comfort (Fischer, 1982; Bearman & Moody, 2004) and learners' academic feat (Gonzalez, 2007), each characterizing the concept of network closure as a vital basis of societal capital (Coleman, 1988).

Researchers have for long been fascinated about the heterogeneity of individual networks. Interrelating with an assorted set of alters usually involves access to greater non-redundant sets of societal resources (Campbell, 1986) without which genetic, behavioral, cultural, or material information which flows across networks is likely to be localized (McPherson, 2001). Embracing a varied personal network is allied with significant health benefits too (Pescosolido & Levy, 2002). Network heterogeneity regarding ethnicity/race has been precisely established to be positively

connected with outcomes such as cultural cognizance (Antonio, 2001), condensed in intergroup apprehension and group prejudice (Levin, 2003), and constant multi-racial interaction in future (Emerson, 2002).

It is well known that businesspersons in developing economies nurture personal networks to countervail the uncertainty resulting from rapid industrial growth, rising competitive intensity, and volatile government regulation (Luo, 2003; Xin & Pearce, 1996). In spite of this uncertainty, resources and power are usually mostly intense in the hands of a minor set of high-ranking top executives and government officials at key state-owned businesses (Peng & Luo, 2000). On the contrary, in developed economies, the source of resource reliance are highly dispersed due to the many external dynamic markets offering alternative channels for acquiring resources which are less state-governed. Given these dissimilarities, lesser businesses in developing economies may do better when their financiers form less varied personal networks by concentrating their networking exertions on swaying important government leaders and officers at government-owned firms. On the contrary, such lesser firms in the developed economies experience more uncertainty about potential cradles of resource reliance and may thus function better when businessmen form varied individual networks. In such settings, small enterprises tend to run in knowledge-exhaustive sectors which are invention-ambitious, while the small businesses in developing economies frequently function in simple industries which are competence-oriented (Bosma *et al*., 2012). Because entrepreneurs having more varied personal networks have a higher likelihood of identifying innovative prospects (Ruef, 2002), the network diversity will tend to be predominantly valuable for minor firms in developed economies.

2.4.3 Network Centrality

Brass, Galaskiewicz, Greve, and Tsai (2004) submit that enterprises having central network positions relish many benefits, which result in improved performance. Placed at the core of resource and information flows, central firms are the foremost to learn of partnership opportunities, strategies of competitors, and emergent market conditions (Powellet, 1996). High network centrality is an indication of

entrepreneurs having an access to various alternative suppliers of important resources (Kilduff &Tsai, 2003). The advantaged access is mainly helpful to highly entrepreneurial businesses because entrepreneurial positioning constitutes a resource-exhaustive calculated posture, which comprises excess uncertainty (Wiklund & Shepherd, 2005).High network centrality, hence, smoothens an entrepreneurial orientation by enhancing an enterprise's ability to rapidly classify, access, and assemble external resources. Certainly, Burton (2002) backs up this perspective and demonstrate that projects with high centrality track highly innovative approaches and have superior odds of obtaining venture capital.

Moreover, enterprises that maintain a central network position are alleged as tradefront-runners, a characteristic that lenders them more trustworthy and visible to potential resource suppliers externally from the industry, such as providers, venture capitalists and customers who may show interest in the entrepreneurial undertakings presented by the organizations (Stuart, 1999). Such outlook of the network ties as "market prisms" (Podolny, 2001) proposes that high centrality indicates the status and quality of a project as an exchange companion. The external constituents can quite willing offer a central firm an access to their assets since they view it as more dependable and of superior quality to the more marginal firms. Precisely, firms enjoying sturdy entrepreneurial orientations gain from the industry management status affiliated with high centrality, since such ventures must obtain resources and rally institutional support from various domains to effectively commercialize their initiatives (Aldrich & Fiol, 1994). The central firms have a higher likelihood of becoming the initial point of contact for the interested third parties, and thus to have better capacities to attract valued resources from various social circles.

Network centrality has previously been used to determine one's power, prominence, or/and popularity in a network (Borgatti, 2006). According to Mehra (2006), people who are centrally positioned in a network usually have better access to others and enjoy a larger crowd of individuals who are ready to share resources and information with them; they have a tendency to possess matchless social benefits for obtaining resources and information. Moreover, centrality suggests higher control over information and resource attainment since central persons have options from

numerous alternative members within the network so as to fulfil their wants (Scott, 2000). In addition, research has proved that centrality contributes to positive outcomes, including social support, information access, enhanced reputation, opportunities to positively inspire other investors (Kratzer & Lettl, 2009).

Research carried out in high schools (on grades four to seven) showed that students with the same levels of aggression or equal academic competence remain closer within their networks, as there are increased interactions and developed sub-groups (Xie, Cairns & Cairns, 1999). However, for adolescents and children, the outcomes back up the idea of a vital relationship between group centrality and academic achievements among high achievers, while the low achievers occupy different social spaces. As high achievers acquire status from their good grades, low performers usually define other means for their centrality to be established (Flores-Gonzales, 2005).

2.4.4 Network Structure

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 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 mainly 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 & 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, 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, 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). Actually, 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, 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 (Nohria & Eccles, 1992). 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 (Kadushin, 2004).

2.4.5 Network Ties

Different views have been taken by researchers who have paid attention to different social capital relations' aspects (characteristics as well as the nature of the ties of social capital). These researchers argue that the quality and strength of bonds is most important in the creation of social capital. For example, attention on good will was by Dore (1983), while trust was by Adler (2001) and Zikmund (2003) on tolerance and forgiveness. Other authors have classified the relationship types into two (Blau, 1964) or three broad groups, namely (Adler & Kwon, 2002) hierarchical, market, and social relations. Social relations are informal and relate to favors and gifts. In contrast, market relations are more formal and relate to the trade in goods and services, these are generally structured. Hierarchical relations generally relate to employment type contracts, which have defined orders and authorities. Different aspects of relations (trust, goodwill, forgiveness) will apply more to some categories of relations than others. For example, goodwill, which is essential in market relations, may not be so critical in hierarchical relations. The evolution process of social exchange relationships is slow, beginning with lesser transactions whereby

minimal trust is needed since less risk is encompassed besides both partners proving their trustworthiness. Hence, they can develop their relationship while engaging in larger transactions. This enables them to expand their relation and engage in major transactions, and therefore the social exchange process increases the degree of trustworthiness needed for it in an independent manner (Blau, 1968).

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. If one person knows another, for example through a tennis club or a company boardroom, then they are structurally connected through this relationship. Structural ties between people or groups can result in a complex network of linkages being created. It is the overall pattern of ties between actors which shows you who can be reached and how they can be reached (Burt, 1992). A 'weak tie' or an indirect tie is one that persons are indirectly connected in a network, and are only reachable via other individuals. Where persons in the network are not directly connected, and can only be reached through other persons, this is referred to as an indirect tie or a 'weak tie' (Granovetter, 2004). Scott (1991) states that these social networks can be studied and measured and implications for the absence or presence of network ties are considerable.

Relational social capital is those bonds or ties' characteristics between persons, which are the type of subjective bonds that individuals have established with one another over time in their interactions (Granovetter, 2004). These bonds may be positive, neutral or negative. If the bond is a friendship or a respected business acquaintance, this bond can be regarded as a positive relation. Trustworthiness is considered an important element in strengthening the bond between the parties (Fukuyama, 1995). Trust between two people is shaped by constant communication, from time past, presently, and in future. In cases whereby trust has been developed, individuals have a higher tendency of socially exchanging and collaborating (Fukuyama, 1995). In contrast, if two players depict mistrust for one another due to previous interaction, a negative relation is manifested in antagonistic behaviour rather than cooperation (Nahapiet & Ghoshal, 1998).

Coleman (1990) states that relationships can also be influenced by behavioural norms. Which represent a certain level of accord within a social system, by obligations and expectations (Bourdieu, 1977) and by the willingness to identify with a group (Lewicki & Bunker, 1996). Social context or rather social capital consist of conventions, values, norms, reciprocity and relationships of trust, which are available in societies and networks as well. (Rutten & Boekema, 2007). Generally, entrenchment is the bringing of economic activity to its context in the constant social relational patterns, while capturing the contingent nature of the player's activities just by being entrenched in a broader social system (Choi & Kim, 2008). The entrenchment in societal context or in networks therefore permits people to gain from the social capital of the exact context. Stronger cohesiveness of such social relations, lead to stronger network ties, and hence ample influence on business performance and human behavior (Rutten & Bockema, 2007).

The economic performances are entrenched in the network of social relationships, which offer the economic processes' context (Granovetter, 2004). In particular, economic outcomes and decisions are influenced not just by an individual isolated relations among other distinct actors, for instance, the chains of supplier-buyer relations, but by the overall network structure of relationships under which the player dwells, bigger network supplies (Choi & Kim, 2008). Since each behavior is realized via a typical outcome form, nearly all economic developments are supposed to be entrenched in relational networks (Rutten & Boekema, 2007).

The research on interlinking boards of administrators by Mizruchi (1996) backs up the idea that peripheral cluster ties can play a vital responsibility in the cluster's success by offering important information from other management boards. However, some researchers have reported some researchers have reported mixed findings about the essence of borderline crossing ties. There is no relationship that exists between a team's performance and its external ties according to Baldwin *et al.* (1997), who propose that their null outcomes merely replicate the fact that clusters in their research, had slight necessity for the external communication; because of the task's nature, the structure of inner ties proved more significant in comparison with externalities. Basically, a cluster's necessity for the external resources, according to

the task's nature, controls the influence of externalities. The exterior ties have the capacity to influence cluster performance via varied mechanisms, besides flow of information. The frequency of robust cross-group ties was related to lesser degrees of conflict in organizations (Nelson, 1989).

2.4.6 Financial Performance

The action of executing financial activity is defined as financial performance. Broadly, the latter describes the level in which financial goals have been or being realized. Financial performance is employed in the measuring of the enterprise's overall fiscal health over a particular period, in addition to comparing similar firms within the same industry or in comparing sectors or industries in aggregation. It is a portion of organizational financial management that involves the science and art of governing financial assets within an organization. The area demands experience, skills and knowledge while its objectives include limiting internal conflicts and staff turnover, maximizing sales, profits, seizing a given market niche, firm's survival, and wealth maximization (Jacobs, 2001). There is an essence of determining financial and non-financial performance for an organization. Performance measurement may be divided into two major categories: financial and non-financial measurements.

Individuals who can assist the investor in making viable decisions important for the firm's wellbeing represent medium sized enterprise personal management network. The networking cost is indirectly concealed due to low explicit expenses or costs within an immediate term, for instance, the networking costs will consist of miscellaneous expenses like trade or club members, entrance fee to exhibitions or dinner expenses during trade function. The survey conducted by KPMG indicated that Kenyan companies are progressively fascinated towards formation of joint ventures in conjunction with foreign investors to tap more expertise and capital to expand their growth. The joint venture share among enterprises that were surveyed escalated to 17% when compared to 13% of the preceding year. However, the fully Kenyan-owned firms dropped to 76% from 83% of 2008 (KPMG, 2013). Nonetheless, networking increases the ability to leverage the internal resources and

hence financial performance. Understanding the influence of entrepreneurial networks is a critical success factor to entrepreneurs and medium enterprises today.

2.5 Empirical Review

In every setting, industrialists have to create reputation-promoting relations with the external resource suppliers who can willingly share finance, technology, and valuable information. Moreover, social networks have been employed in examining the way firms interrelate, depicting the various informal associations, which tie executives together and connections, and associations between particular personnel at various companies. The networks, hence, avail means for firms to collect information, prevent competition, as well as colluding in policy and price determination. In particular, entrepreneurs with great industry-specific information enjoy a perfect position of seizing deserted business prospects, in addition to taking efficient strategies, which are vital for the emerging firm's success (Collombo & Grilli, 2005). According to Arman and Dowla (2011) who conducted a study in restaurants in Sweden focused on the following variables density, reachability, size, composition, centrality, focus and network construction .The study was exploratory in nature and used informal an informal interviews and concluded that networking involves social process, deployment of the social networks is preferred along the phase off innovation, while weak ties then are far much efficient compared to the stronger ones.

Terziovski (2003) conducted of the Australian manufacturing trade on SMEs and it was established that networking practices experience an essentially positive influence on business success. Quantitative data acquired from a stratified SMEs' sample within the industry indicated that the relationship's strength between business success and networking practices is essential and positive. It was clear that networking paved way for small enterprises to become successful by incorporating and searching varied perspectives; learning from mistakes; shaking down the status quo; communicating with nonmembers such as experts; and resource allocation to strengthen communication connections.

Thrikawala (2010) carried out a research to illuminate on the social structure, inter-business and enabling networks of medium-sized enterprises in Sri Lanka and classify the networking influence for their triumph. Currently, the majority of developed nations ace most of developed countries access immense advantages and opportunities via the network relations amongst enterprises. The outcomes discovered that as the SMEs are identifying their viable business prospects, they meticulously link with their friends and families. In the beginning stage, the SME proprietors gain influence, initial capital, and encouragement through social networks. In Sri Lanka, however, the relationship between inter-firm- and supportive networks was poor. Contrariwise, there existed a strong influence from the network dealings for the Sri Lankan SMEs to be successful. Hence, donors, socialists, and the policy makers and others ought to enhance the network formation strategies, by planning SMEs' network activities, besides their outdated supporting stratagems.

Setyawati, Shariff and Saud (2011) carried a study on influences of adopting innovation, networking, and learning on successful businesspersons in Central Java, Indonesia. The aim of the study was to test adoption of innovation, networking, and learning models on prosperous entrepreneurs in the city. A survey done on 580 individuals was the basis of the study and a random sampling method was implemented. Structural Equation Model (SEM) was used to analyze the data. The findings were evident that networking and learning have an essential influence on adoption of innovation. Subsequently, innovation adoption fundamentally influences entrepreneurial success.

Batjargal (2012) conducted a research through telephone interviews on 159 respondents in China and Russia on influence of structural holes on the growth of a new venture. Successful businesspersons have a higher likelihood of conserving their networks while the less successful one have the tendency of developing their personal networks. The research therefore, suggests that more and deeper research ought to focus the manner in which conservative/persistent networking behavior of accomplished investors influences business' performance within a given period of time. The practical consequence is for entrepreneurs to become aware of the

influences venture life cycle or business performance on their social conduct like networking.

Supervisors of a growing technology firm bequeathed superior performance appraisals to the personnel whose networks spanned otherwise detached organizational parts (Mehra, Kilduff & Brass, 2001).The individuals could access more information since they were exposed to newer and diverse information bits, eventually becoming very effective (Burt, 2005).

In five firms, a survey of 38 work groups was conducted whereby all of them performed complex tasks where the groups were performing relatively complex tasks (Sparrowe, Liden, & Kraimer, 2001). They found out that under a multifaceted assignment, clusters with devolved communication forms did better compared to the ones under centralized patterns of communication. It was established from the study that there existed a robust negative relations between performance and the team's external ties.

Cummings and Cross (2003), conducted a study that incorporated 182 work clusters that performed multifaceted in a dynamic firm. Their findings established that those groups that functioned under a decentralized communication modes excelled more than the centralized ones. Lipman, Blumen, and Leavit (2001) employed these outcomes in their good-performing theory of hot groups, indicating that the resulting success is partly due to their devolved, fluid, communication structures.

More research has paid more attention on the circumstances, which determine the introduction of centralized structured pattern of ties. Groups were assigned as either low-stress or high-stress, and were established that the stressed ones had a tendency to develop centralized communication patterns and vice versa (Argote, Turner, & Fichman, 989). Miller (2000) whereby half of the studied groups were issued high-complexity task version, and the other half were specified a low-complexity style conducted an experiment. It was established that higher number of centralized patterns was evident in those groups that functioned on low complexity compared to the rest that engaged with high-complexity undertaking.

When members of a group had mutual and multiple overlapping ties, such had a less likelihood of free riding on each other's hard work (Lazer & Katz, 2003). Structural entrenchment controlled the group members' effort level (Uzzi, 1996). Such other findings imply that the influence of external ties can rely on the entire set of institutional and structural contingencies, which are simply starting to be explored. These outcomes highlights the extensive trade-offs faced by teams by devising redundant externalities that can limit unscrupulous behavior when compared embracing non-redundant externalities that could present high access to resources and information (Burt, 1992).

Research done on graduate students endorses the relationship between academic success and social network centrality. In general, as Steinfield, Ellison, and Lampe (2008) indicate, the behavioral social network of college students has been positively linked to their academic grades. For instance, a research was done on the pre-sophomore college students and it was found that learners that had central networks, felt more satisfied and were willing to proceed studying at the university (Thomas, 2000). Nonetheless, a more precise analysis outlined the essence of peculiar ties toward the achievement of academic success. The findings on another study conducted among masters' student's shows that centrality in adversarial ties, communication, and friendship positively influenced the student's grades and attitudes (Cho, 2007). Additional research amongst the graduate students proves that academic successes had a positive correlation with the external connectivity level (outside the university), while it had a negative correlation with the solidity of person's friendship network. Moreover, another study by a panel on 500 sophomores indicated that each student's structural network position by the use of ties regarding organizational participation and awareness of other relevant individuals in the university had no correlation with academic excellence (cumulative GPA) but with equivalent satisfaction with courses and university (Trippet, 2005).

Smith and Lohrke (2007) conducted a study on the development of entrepreneurial network: hoping that with time they would be able to submit the network is able to offer an essential capital source, which consequently may augment an emerging venture's possibility of triumph. The study deployed both quantitative method and

qualitative method of analysis. The researchers identified that while private enterprise research had often studied the way such networks advance and evaluating the extent, trust had been constantly acknowledged as a vital element of the process of building significant networks that aid the entrepreneurial process.

The critical review of a survey, described as network-centered study in entrepreneurship, established that regarding network content; inter-organizational and interpersonal relations are perceived as the means via which players obtain access to various resources from their co-actors (Hoang & Antonicic, 2003). The study used online survey to gather data. A fundamental advantage of networks for these entrepreneurial processes is that they freely have lots of access to advice and information, therefore the dependence on networks does not face constraints in the start-up level, and entrepreneurs constantly depend on the networks for organizational advice, problem solving, and information, even with other contacts presenting diverse resources.

Li (2013) conducted a study on the influence of network characteristics towards firm's performance in a mold firm operating in Zhejiang province, China within group. The study investigated network structure's influence: network relational features and centrality: tie strength, tie quality, and tie stability on the performance firms' performance within cluster ties and extra cluster ties. The study used a total of 252 sample firms and measured the variables of the study on a multi- entry likert-scale that was arranged in such a way that 1 represented totally disagree, while 7 indicated totally agree. Descriptive statistics was the method used to analyze data and regression equation. Finally, it was established from the study that, the additional-cluster tie showed a significant influence on performance in comparison with in-cluster tie even though in -cluster tie had also positive effect on performance. Elements of network characteristics had weak influence on the association between performance and extra-cluster ties, while structure and characteristics of a network, including tie strength and tie stability had significant influence on the association between performance and in-cluster ties. Generally, tie stability indicated certain influence on the performance, whereas tie quality negatively influenced performance. The main limitation that was faced by the survey revolved around the sampling unit

in which the data was collected limited to the specific single sector: mold industry .Thus this situation might affect the generizability of the result of the study to the other sectors.

Kenny (2009) studied the influence of networking capacity on Irelands' SMEs international performance. The focus of the study was on the three independent variables that make up the networking capability namely: networking characteristics, networking operation and networking resources. The networking characteristics comprised of: strong and weak tie form of networking collaboration, relational capability and the trust exist in the relationship .The second independent variable: networking operation composed of learning, coordination, and initiation, exist in the network. The three independent variable networking resources measured with information distribution capability, synergy delicate resources, and human principal resources of the networking capacity. The dependent variable: international performance measured by objective and subjective measures of performance. Exploratory factor analysis, structural equation modelling, and confirmatory factor analysis were the methods used in data analysis. All variables were measured through questionnaires designed in seven point likert scale. Finally it was found that , the strong tie than weak tie , capability in network coordination and firm network human resources were essentially and positively affiliated with the international execution, while the other four which were positively but not significantly related with international performance were synergy sensitive resources, the level of network initiation capability ,trust between partners and strong tie networking. But, the other element of hypothesis namely: information sharing, relational capability of the firm, network learning and weak tie type of collaboration were negatively and insignificantly related with international performance. The major limitation of this study was it did not tell us the influence of trade fairs as a factor of network initiation and its influence on the international performance of Ireland SMEs.

2.6 Critique of the Existing Literature

Terziovski (2003) conducted a research on medium-sized enterprises in Australia, particularly the manufacturing industry, which was only limited to effect of

networking practices on business excellence. The study was also done in Australia, which is a developed economy. The current study was carried out in Kenya, which is a developing economy. Peprah (2010), drawing upon cross-sectional data surveyed the degree by which the various networks influences initial capital, and access to credit quantum. Evidently, there are networks although female entrepreneurs do not implement them. The study concluded that there is thus the essence of the government to help in the establishment of viable and sturdier entrepreneurial network to guarantee feasible entrepreneurship in Ghana.

Stam (2010) examined how involvement in industrial occasions (such as conferences) influenced businesspersons' brokerage positions within the unceremonious business networks and the way such positions, eventually, affect the performance of the ventures. By utilizing a inimitable dataset of 45 incidents and successive network relationships amongst businesspersons from 90 companies in the uncluttered source software business, the findings indicated were such that: participant entrepreneurs in diverse events or those that spanned between events involving rare mutual accomplices had a higher likelihood of being brokers; the association between brokerage and event bridging was firmer for the participants with more extensive previous career experiences; while network brokerage arbitrated events involvement –performance linkage. The events appeared to possibly hinder structural prospective for the brokerage, besides the fact that individual discrepancies determine the exploitation of such opportunities. The findings of the study though looked into entrepreneurial networks; did not include other key areas like network structure, density, ties and centrality. The survey was also conducted in emerging economy. The survey hereby was conducted in Kenya, a developing economy.

Pittaway *et al.* (2004) conducted a systemic evaluation of research associating firm's networking behavior with their inventive capability. The study found that the key advantages of networking as the literature identifies include accumulating harmonizing skills; seeking access to new technologies and market; risk sharing; ensuring products get to the market on time; contingent contracts become impossible or protecting property rights on completion; and acting as a fundamental means of gaining access to external information. Moreover, the findings demonstrated that the

companies, which fail to cooperate and never informally or formally exchange information, hinder their knowledge volume on long-term basis, and eventually lessen their capacity to engage in exchange relations. At the level of institution, national innovation systems play a significant role in diffusing resources with regard to the manner that they influence networking activities.

There is enough evidence from the study that submits that network relations with customers, suppliers, and intermediaries including trade and professional relationships are vital components influencing productivity and innovation performance. Networks fail mainly because of inter-firm conflict, external disruption, inadequate infrastructure, displacement, and absence of scale. There is a significant difference between the current study and this one. For instance, the present survey assumes a field-based approach and explores the influence of networking on the financial performance while Pittaway, (2004) attempted to link the firm's networking behavior according to their innovation capability. Lastly, the two studies differ because the previous study had been done in United Kingdom, which is a developed nation, whereas the current survey had been done in Kenya, a developing nation.

Setyawati, Shariff and Saud (2011) carried a study on effects of innovation adoption, networking, and learning on excellent businesspersons in Central Java, Indonesia. The aim of the study involved the testing of learning, innovation adoption, and networking models on effectiveness of these entrepreneurships in Indonesia. A survey that had been done on 580 individuals through a random sampling was the basis of the study. Data analysis was done via the Structural Equation Model (SEM). Subsequently, innovation adoption importantly influences the entrepreneurs' accomplishment. These two studies differ because the above study had been done in Indonesia one of the developed nations while the study at hand was done in Kenya, which is a developing nation.

Lechner, Dowling and Welpe (2006) examined the role played by various networks, defined as relational mix, with regard to entrepreneurial firm development. A regression analysis of the field data acquired from 60 participating project capital-

financed enterprises queries the essence of network on company advancement. The findings indicated that various forms of are more significant for enterprise growth. Precisely, the study identified an important positive link for reputational networks and a feeble important negative association for collaborative technology networks from the starting point with enough time-to-break-even.

The study findings indicated that entrepreneurial capacities strongly require networking in their development because the latter promotes learning. The entrepreneurs, besides learning, must open or have organization networking in their firms or externally from other sources such as existing firms or individuals. The authors argued that inter-networking is done since the entrepreneur highly relies on the knowledge or technology, raw materials, and information to transform their firms, therefore constantly developing them and making them suitable in the society. This study has been conducted in Russia whereas the study at hand was done in Kenya targeting medium sized enterprises.

Thrikawala (2010) carried out a research to illuminate on the social structure, inter-business and enabling networks of medium-sized enterprises in Sri Lanka and classify the networking influence for their success. Currently, the majority of developed nations ace most of developed countries access immense advantages and opportunities via the network relations amongst enterprises. The outcomes discovered that as the SMEs are identifying their viable business prospects, they meticulously link with their friends and families. In the beginning stage, the SME proprietors gain influence, initial capital, and encouragement through social networks. In Sri Lanka, however, the relationship between inter-firm- and supportive networks was poor. Contrariwise, there existed a strong influence from the network dealings for the Sri Lankan SMEs to be successful. Hence, donors, socialists, and the policy makers and others ought to enhance the network formation strategies, by planning SMEs' network activities, besides their outdated supporting stratagems. The study has been done in developing economy, Kenya, whereas the study above was done in Sri Lanka.

Peprah (2010), drawing upon cross-sectional data surveyed the degree by which the various networks influences initial capital, and access to credit quantum. Evidently, there are networks although female entrepreneurs do not implement them. The study concluded that there is thus the essence of the government to help in the establishment of viable and sturdier entrepreneurial network to guarantee feasible entrepreneurship in Ghana. In this perspective, nevertheless, precaution should be taken to prevent politicizing network use. The networks can be an influential tool that women desiring to engage in entrepreneurships in rural areas can utilize. Therefore, development associates interested in women empowerment should enforce means of making effective networks for the rural groups. Thus, a macro policy will not be advantageous to medium-sized and small enterprise operators generally, and particularly women. Accessibility to credit has to be supported by efficient networking to help make more successful business operators in Ghana. Moreover, institutions should introduce convenient repayment to enhance credit access besides minimizing default. A financial strategy that is all inclusive, must hence put more emphasis on networking and utilization of the prevailing networks. Peprah (2010) studied networking among women entrepreneurs in Ghana but the current study examined entrepreneurial networking among medium sized enterprises in Kenya.

2.7 Research Gaps

A previous literature's critical review indicated that some contextual and conceptual research gaps were evident in the influence of entrepreneurial networks on financial performance of medium sized enterprises. Research by Setyawati, Shariff and Saud (2011) on influence of innovation adoption, networking, and learning, on the success of private enterprises in Central Java, Indonesia; Stam (2010) in his study on network brokerage and business event involvement amongst commercial schemes; Peprah (2010), assessed degree of network influence on initial capital and access to credit quantum in Ghana; Obura, Abeko and Obere (2010) in their study on the influence and role of networks on SMEs sustainability and performance in Kenya, did not capture medium sized enterprises which has been portrayed as a vital driver in the Kenyan economy (RoK, 2011). Understanding the influence of entrepreneurial

networks is a critical success factor to entrepreneurs and medium enterprises today. More so, entrepreneurial networking suggests that structural holes, network structure, network ties and centrality, and network size proof to be viable sources of entrepreneurial relationships that influence financial performance of enterprises (Setyawati, Shariff & Saud, 2011).

Tang (2011) studied effective networking behaviors in backing-up SMEs' internationalization. 210 Chinese medium-sized enterprises were used in the collection of Primary data in Beijing Hong Kong, and a regression analysis used to test relationships between resource availability and networking behavior, and patterns of internationalization. Outcomes indicated that assets availed from networks cannot essentially enhance the internationalization of enterprises. Accessibility of foreign enterprise capitals is positively linked with the accomplishment of swift internationalization although the obtainability of common organizational resources depicts an unfavorable relationship. The capacity of SMEs to organize and implement strategic networking activities with fundamental associates is advantageous to get the significant resources for quickening foreign business growth. This study will use the least investigated domains, which are structural holes, centrality, ties, structure and density. The studies were conducted in technologically advanced and developing nations like UK, Sri Lanka, Indonesia, Australia, and China. Hence, it can be argued that the socio-economic environment of emerging and already developed nations is rather different from the developing economies such as Kenya.

Desta, Tedla and Zerom (2015) examined the role played by the strength of entrepreneurial network (strong vs. ties) on the development of businesses owned by women. 356 Small and SMEs and small enterprises were used to collect primary data from four administrative towns in Eritrea. The findings were evident that feeble entrepreneurial networks mainly included the business firms and cooperatives, which had the sturdiest positive relation with growth. These findings were established from survey data, which was collected from advanced-tech Indian entrepreneurs residing in Silicon Valley. Bayesian estimation was used to test the hypotheses with the aim of an understanding of entrepreneurial growth. The paper precisely evaluates the

links between emergent venture growth, prior initial knowledge, and involvement in diasporic networks. Evidently, businesspersons with prior start-up knowledge illustrated more vigorous involvement in diasporic networks, and had more likelihood of having co-founders. Vigorous network involvement over a period had a positive relation with the growth of new venture. The outcomes play a significant role towards understanding the importance of startup knowledge's in influencing social networks, as well as the relationship between entrepreneurship and diasporic network participation.

2.8 Summary of Reviewed Literature

Entrepreneurial networks are an indispensable component in the social process of entrepreneurship (Anderson, 2010). These networks function as linking tool to the others; they offer an embedding mechanism and they constructed the social platform for entrepreneurship. Similarly, networks are supposed to be strategic alliances that are socially created for running the operations of the business but also most significantly for establishing change, initiating advancement and making the successful firm future. In continuation, networking enables the entrepreneurs to take resources that are held by others and to enhance firm performance (Huang, 2012; Slotte-Kock & Coviello, 2010).

Network practices are involved in growing small firm on specific patterns of activity (Hughes, 2017). It is considered that the prospective benefits resulting from entrepreneurial networks include sharing information, exchange relationship and extra credibility. Similarly, entrepreneurial networks also permit entrepreneurs to exchange several resources and access to the opportunities that boost the firm performance (Minai, 2012). Literature reviewed demonstrated that various studies confirmed significant positive statistical relationship among networks and small firm performance (Huang, 2012; Greve & Salaff, 2003; Wilson & Appiah-Kubi, 2002; Jenssen, 2001; Chell & Baines, 2000). Some other studies show a positive relation among networks and firm performance (Antoncic 2007). Further Huang *et al.* (2012) also highlighted that there is a positive impact of networks on firm performance. It is quite evident from the study of Minai *et al*. (2012) that entrepreneurial networks are

deemed important for making progress in dynamic business environment. Theoretically, resource-based view explains the relationship between entrepreneurial network and small firm performance. Intangible resources such as entrepreneurial networks increase firm performance. It is obvious from the different researcher's arguments that this may provide positive and meaningful relationship.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the methods applied in capturing research data on the influence of entrepreneurial networks on the financial performance of medium sized enterprises in Kenya; it presents research philosophy, research design, sampling frame, target population, sampling techniques, sample size selection, data collection instruments and procedures, pilot tests, data processing and analysis.

3.2 Research philosophy

Research philosophy recounts to knowledge foundation upon which significant predispositions and assumptions of the study are established. It is a belief regarding the manner in which data of a phenomenon ought to be collected, analyzed and implemented. There exists two major research philosophies, namely, phenomenology (interpretivism) and positivism (scientific) that may as well be perceived according to two outlooks, which are qualitative and quantitative strategies(Coopers & Schinder, 2006).

As an epistemological position, positivism studies societal veracity and more by utilizing methods of natural sciences and beyond by employing natural sciences' methods (Bryman & Bell, 2007). The aim of this study was to evaluate the influence of entrepreneurial networks on financial performance medium sized enterprises. Employing the positivistic theoretical approach, the researcher established the hypotheses basing it on the prevailing pertinent theories. Consequently, the premises were verified and disapproved or confirmed using statistical and quantitative means to respond to the research questions, thus achieve the research goals. The final findings of such a research are relevant under the positivist approach (Remenyi, 2005).

The hypothesis of positivist philosophy is that information is founded on facts, and no subjective individual status or abstractions are considered. Therefore, positivism acquires a quantitative outlook that embraces that there exist an objective authenticity, which can be numerically expressed, with predictive and explanatory power (Furrer, Thomas, & Goussevkaia, 2008).Within this paradigm, information is binding only if it is founded on values of facts, reasons, acquired via experience and direct observations, and is empirically measured through statistical analysis and quantitative methods. Moreover, theoretical models which can be simplified to clarify reason- and effect relations (Saunders, Lewis & Thornhill, 2007). Subsequently, solving problem using the method tracks a hypotheses formulating pattern whereby conventions of social reality are derived and hypotheses verified usually by quantitative methods (Buttery & Buttery, 1991; Stile, 2003). The study's philosophical foundation was positivism in which scientific procedures were adhered to in theorizing essential laws followed by inferring the observations to falsify or gauge the truth the stated hypotheses. Moreover, it is the most popular research paradigm amongst social science studies, as was indicated in a review of relevant literature by (Andreasen, 2008).The philosophy has informed the research design of the study.

3.3 Research design

A research design refers to the conceptual configuration whereby research is done; it establishes the collection blueprint, measurement and data analysis. A descriptive research design comprises a process of data collecting to respond to the questions regarding the prevailing position of the matters under study and that it uses a preplanned design for analysis (Zikmund, 2010). The purpose of research design is to advance planning of the method used to collect relevant data and technique used in data analysis, keeping in view the research objectives (Kothari, 2012). According to Sekaran and Bougie (2011), descriptive survey design consists of surveys and various forms of fact-finding explorations, and main objective is explanation of the state of affairs presently. A survey is the most common method of generating primary data, and questionnaires were used.

Descriptive survey design was adopted and used to collect data on network structure, size, density, centrality, structural holes and SMEs' financial performance in Kenya. It was cross-sectional and therefore collected data from a number of different participants. The design was appropriate since the purpose of this research study happens to be descriptive and a relationship between dependent variable (entrepreneurial networks) and independent variable (financial performance) of medium sized enterprises. Descriptive survey design therefore helped the researcher to elaborate the current state, what people believe now, and what they may be doing presently in relation to the variables under study: network structure, density, centrality, size, structural holes and financial performance. Descriptive research provides an accurate account of characteristics of a particular individual event or group in real life situation (Orodho & Kombo, Kothari 2013, Mugenda and Mugenda, 2004). Studies that have been undertaken in the area of research using the same research design are by (Arman & Dowla, 2011) in Sweden, (Thrikawala 2010) in Sri Lanka, (Peprah, 2010) in Ghana, Obura, Abeko and Obere (2010) in Kenya, (Mungania, Gakure & Karanja, 2017) in Kenya, (Fatima,Ali & Arif, 2012) in Kenya.

3.4 Target Population

Population is the whole group of people, objects or events sharing collective apparent characteristics. Population can be described as all the features, which satisfy the standards for them to be included in a study (Burns & Grove, 2003). For this research, the population was the medium sized enterprises in Kenya. Target population incorporates all the participants of a hypothetical or real set of objects, events, or individuals from which scholars can simplify the findings of the research. 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 were 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. Out of a total number of 500 enterprises those that consistently appeared three or more times were 51 enterprises as shown on Appendix III, which is the sampling frame. The reason for the selection of top 100 mid sized enterprises in Kenya is due to the fact that a top 100 medium sized company is a one which ranks ahead of its peers in

terms of revenue growth, profit growth, returns to shareholders and cash generation/liquidity. Moreover, for a such company to appear three or more times consecutively it shows the company must be doing something different from its peers.

3.5 Sampling Frame

A sampling frame refers to the population list in which a sample can be drawn. Bailey (2008), states that it enhances generation of a sampling unit, which describes a member of entity set being surveyed, and is the principle basis of random variable. A list of 500 enterprises helped in drawing the study sample, as they were arranged according to years and in alphabetical order to enable spot the ones that appear three or more times. Therefore, the sampling frame consisted of a list of 51 medium sized enterprises as presented on Appendix III .In the sampling frame the unit of analysis is the medium sized enterprises.

3.6 Sample and Sampling Techniques

The systematic assortment of an inadequate number of features from a theoretically quantified population of components is referred to as sampling. A design sample, according to Kothari (2014), is an architecture or rather, the strategy utilized to select study respondents or actors. The final assessment of a sample design is the way it best epitomizes the population features of the population it implicates. A sample of 30% of the overall accessible demographic is regarded an ample sample (Mugenda & Mugenda, 2003). The sample was determined at two levels. The sampling was at an organisational level or medium sized enterprise and the respondents' level (Kothari, 2014). Purposive sampling as a method, permits researchers to employ circumstances that have needed knowledge according to the study objectives (Mugenda & Mugenda, 2003).

Sampling for the study was done to reduce accessibility and cost of the study and ensures quick data collection. The study employed purposive sampling. At organization level, purposive sampling was used to identify only those enterprises that appeared in the KPMG recommendations for at least three times within the years

of study. 51 enterprises had appeared at least three times in the list of top 100. From the 51 enterprises, five respondents with the capacity to give the necessary study information were purposively selected. The study sample size was 255 as presented in Table 3.1. Subject's cases were hence chosen since they were informative and had the necessary features. The justification was to make conclusions regarding the population as a whole.

In selecting the study's unit of analysis, 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. From each enterprise, using only one respondent from each of the 51 enterprises selected five respondents from three different sections since they had the required information for the study and to avoid single biasness, which would have resulted. The selected respondents from Human resource, marketing and business development department were more involved in entrepreneurial networking in their enterprises. Notably the sampling process was non-scientific and therefore no need for using the formula.

Table 3.1: Sample Size

Category	**Sample Size**
Human resource department	51
Marketing department	102
Business development department	102
Total	**255**

3.7 Data Collection Instruments

Data collection is a method of collecting data (Mugenda & Mugenda, 2003). Kothari, (2014) describes a questionnaire as the document, which comprises several printed questions in a structural formatted order on a form, and is obtained from the selected

subjects of investigation. According to Krishnaswamy, Sivakumar and Mathirajan (2006), A questionnaire is essential since, an impersonal and standard questionnaire formats are uniform and assist in acquiring data in an objective manner, information on knowledge, motivation, and facts can be acquired effortlessly. The overall aim of the study was to establish whether the various independent variables are related to financial performance.in this study the primary tool of data collection was a structured questionnaire which was used to collect factual information with the Likert scale ranging from 1 to 5.The structured questionnaires are recommended because they help the respondents to respond more easily and help the researcher to accumulate and summarize responses more efficiently (William, 2006; Blaxter, Hughes & Tight, 2006).

The study used a questionnaire with different questions set that were answered by respondents. Respondents were employees in human resource, marketing and business development departments of the sampled companies. The questionnaire included Likert scale psychometric constructs with a scale ranging from 1-5 whereby each respondent was required to rate every statement given describing a given variable. The study used a five-anchor, and as an interval scale, it precisely anchors; 5= Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree and 1=Strongly Disagree, and therefore measures the degree of disagreement or agreement. Every item in the psychometric constructs was meant to measure a certain attributes of the main variable. These are normally efficient at measuring behavior, values, attitude, and perception (Bell, 2005), therefore the reason why it was adopted in the study, besides being a universal data collection means that is easy to understand. Using quantitative data, conclusions graphs, results, and reports are easily drawn from the feedback. Moreover, since the Likert Scale queries apply a scale, individuals freely express themselves while responding, and they can even be neutral, as they may like. On receiving all responses, analyzing them was quite easy. Lastly, running such kind of a survey is easy and quite rapid.

The questionnaire was structured into sections to cover the general information, structural holes, network density, network ties, network size, network centrality, network structure and financial performance of the medium sized enterprises. A

questionnaire was used with majority Likert scale questions and limited open-ended questions. Upagade and Shende (2012) clarify that the scales of Likert scale assists the conversion of qualitative replies into quantitative form. The main advantage of close ended questions was that they were easier to analyze since they were in an immediate usable form. They were also easy to administer because each item was followed by an alternative answers and is economical (Kothari, 2004). An introduction letter was collected from the university to form the basis of researcher identification to ease the data collection process. The respondents were requested to fill the questionnaires immediately but if too busy, the questionnaires were dropped and picked after two weeks. To confirm that all the issued questionnaires were fully filled and collected, a follow-up had to be done.

3.8 Data Collection Procedures

The collection of the already available information from published sources in order to analyze data at hand is what secondary data encompasses. It is easier to access and there is low cost to acquire data. Secondary sources of data were used from the KPMG publications, which gave access to the list of the top 100 Medium Sized Enterprises in Kenya. The survey of the sample targeted the managers in marketing, business development services and human resource of the medium sized enterprises who were most knowledgeable with respect to the area of study. Therefore, the primary data was collected by the use of questionnaires. A total of 255 questionnaires were administered in medium sized enterprises in Kenya of the selected enterprises. Included in the self-administered questionnaire are both closed and open ended and Likert scale psychometric constructs. Due to the busy schedules of the managers who were the respondents of the study, drop and pick later method was used for questionnaires. This gave managers enough time to reflect and respond to all questions.

Cooper and Schindler (2006) commends the use of questionnaires in descriptive studies because of the following advantages; self-administered are less costly as compared to personal interviews, it is easy to reach out later to participants who might also be inaccessible ,respondents can take more time to collect facts from

others in areas they may not have the facts and also have time to consider their replies to the questions in the questionnaires than it is possible in an interview and finally since in surveys no name is indicated is perceived as more impersonal as compared to interviews or focus groups.

For this study, data was collected through administration of the questionnaires to 255 respondents in medium sized enterprises. The questionnaire was divided into sections to ensure it covered all the variables of the study. For instance structural holes addressed (network membership, subscription, social medial personalities, policies), network Density addressed (contacts, interactions, competencies of team members), network structure addressed (interconnections, characteristics of partners ,number of resourceful partners), network ties addressed (diversity, personal networks, linkages), network centrality addressed (enterprise position, partnership opportunities, access to information) these were the constructs of the independent variables. The dependent variable had items such as increased profitability, financial leverage, total revenue, assets and returns on physical capital, sales growth competitive advantage, equity returns and dividends to shareholders. Previous studies that adopted the use of questionnaire as the primary source of relevant data and were successful in this approach are (Stam, 2010; Desta *et al.*, 2015; Thrikawala, 2012).

3.9 Pilot Test

Pilot test, being a test of comprehensive measurement, should meet the practicality, validity, and reliability tests. The significance of a pilot test is immeasurable because there are those questions that respondents do not comprehend, and thus are interpreted differently (Newing, 2011). Moreover, some questions leave respondents in a dilemma while others turn out merely not to elicit vital information.

The pilot study aim was to assess dependability of the psychometric measures used in the study. The thumb's rule states that pilot test should be established by 10% of the entire sample (Cooper & Schindler, 2013; Creswell, 2013). For the purpose of this study the pilot test was conducted using questionnaires administered to 10% of the sample size of the study and these were not part of the study. A total of 25 top management employees were picked randomly from the top 100 medium sized

enterprises that were on list of the top 100 in any of the years between 2011 and 2015 and not on the sample frame was used to carry out the pilot test. From the feedback that was obtained, the questionnaires were refined and several of the measures that needed to be revised were checked to ensure their theoretical significance. The revised instruments were used to collect data. To eliminate fatigue in the survey, the subjects partaking the pilot study were avoided in the actual study. The pilot study had been done to determine the reliability and validity of instruments collecting data.

3.9.1 Validity

Validity is level of measurement achieved by a research study in comparison to all that it anticipates to measure. Validity is the meaningfulness and precision of extrapolations that are established according to the research results (Mugenda & Mugenda, 2003). Basically, the latter is level in which the findings acquired form data analysis essentially signifies the studied phenomenon. To determine and boost the questionnaire validity, the researcher randomly chose nine executives drawn from three medium sized enterprises in Kenya, and discussed the questionnaire contents, thus helping the process of assessing the questionnaire's content validity. The nine administrator's responses were examined and merged to promote the questionnaire's validity.

3.9.2 Reliability

Reliability refers to a way of assessing the quality of the measurement procedure used to collect data. Cronbach (1951) describes it as the steadiness of organized measurement items. It is the uniformity of measurement, or rather, the degree of preciseness that a device measures repeatedly under similar conditions and same subjects, and thus, the replication of measurement. Reliability of a measure can only be considered if an individual's score of similar tests done twice remains the same. Testing of the reliability of the scale is very important as it shows the extent to which a scale produces consistent results if measurements are made repeatedly. This is done by determining the association in between scores obtained from different administrations of the scale. If the association is high, the scale yields consistent results, thus it is reliable.

Testing the reliability of questionnaires was done as questionnaires were issued to fifteen top managers of medium sized enterprises in Kenya. These managers involved in pilot testing were not included in the sample selected for the study to avoid fatigue. The findings from fifteen questionnaires were coded with the responses ultimately fed into SPSS that was used in generation of steadiness coefficient. Cronbach's Alpha. The researcher used the most common internal consistency measure known, as Cronbach's Alpha (α), the commonest measure of internal consistency that SPSS generated was the means used by the researcher. A set of assessment objects is indicated by the Cronbach's Alpha (α) and may be perceived as measuring a sole latent variable according to Cronbach (1951). For the study, the suggested 0.7 value was used as the stability cutoff.

3.10 Data Processing and Analysis

Data Analysis refers to the procedure of systematically relating logical or/and statistical methods to define and demonstrate, summarize and review, and to assess data. It is the processing of data, thus making it meaningful and significant (Sounders, Lewis & Thornbill, 2009). Data analysis is important because it brings a feel for the final data, analyzing the viability of the resulting data and hypotheses testing (Sekaran & Bougie, 2010). Data processing comprises the translation of the responses in the questionnaires into a form which can be influenced, and thus generate statistics (Hyndman, 2008).

Data analysis was guided by the research objectives. After collection of data through questionnaires, data was edited; handling of blank responses was done, coded, categorizing the data and creating a data file. The data was the keyed into SPSS version 21. The SPSS software was utilized to produce the means, standard deviations, correlation and frequency distribution of each independent and dependent variables. The mean, standard deviation and variance of the independent and dependent variable were used to show how clustered or dispersed the variables were; this showed how well the questions were structured for tapping the required information on the study variables. Goodness of measures was also done through testing of reliability and validity. Reliability was done to test the consistency and

stability of the instrument of data collection. Consistency indicated how well the items measuring the concepts fall together as a set. Cronbach alpha was used to measure reliability. For validity tests factor analysis was used to reveal whether the dimensions were actually tapped by the items in the measures.

In the study mean score were used to analyze the Likert scale based on the psychometric constructs ranging from 1-5 and presented in a nominal scale and the Cronbach alpha coefficient was used to check the goodness fit of the data leading to consistency and reliability of measures in the constructs. For the study, an alpha level of 0.7 value and above was used as the stability cutoff for reliability and consistence in the items included in each variable in the questionnaire.

Inferential statistics were used to test the relationships and influences of study variables in the regression analysis. To determine the relationship that the independent variable has on the dependent variable ordinary least square regression was used. To test the linear relationship between the various independent variables which were structural holes, network structure, network ties, network density, network centrality and the dependent variable which is financial performance, Spearman's rank correlation was used whereby the designation r represented correlation coefficient which varies over a range of plus 1 to minus 1 and the sign shows the direction of the relationship. This coefficient is significant in circumstances where the significance level is $P < 0.05$ and $P < 0.01$. The regression output obtained in OLS gave the coefficient of determination (R^2) and the F-statistics which were the used to determine the goodness of fit and the model validity respectively. The F-statistics is significant when p-value $P<0.05$ while the R Squared output above 0.7 is considered good for the model fitness. Finally, the hypotheses were tested. (Sekaran, 2008: Kothari, 2013) supporters for this procedure of data analysis.

3.10.1 Statistical model

A multiple regression model was adopted for this study, and it attempted to predict the degree to which the dependent variable (y), financial performance, is influenced by all the five (x_1, x_2, x_3, x_4,and x_5) independent variables through entrepreneurial

networking activities of the medium sized enterprises in Kenya. The influence of Xi,,i=(1,2,3,4,5) and Y is expressed in the following functional relationship.

$Y=\beta_0+\beta_1x_1+\beta_2x_2+\beta_3x_3+\beta_4x_4+\beta_5x_5+e$

Whereby:

Y = Financial Performance

X_1 =Structural Holes

X_2 = Network Centrality

X_3 = Network Structure

X_4 = Network Ties

X_5 = Network Density

e- Error/blunder term is hereby presumed to have a normal distribution with constant variation, and zero mean. It is accordingly ignored in this study.

β_0 in the equation is the constant term whereas β_i (i=1 to 5) is the coefficient that was engaged in measuring the dependent variable's (y) sensitivity relative to the unit adjustment of the x_1, x_2, x_3, x_4 and x_5, the predictor variables. The error term e, seizes the unsolved model variations.

Pearson Bivariate correlation coefficient was used to test the relationship between independent and dependent variables.it measures how closely related two variables are and both are measured at the interval ratio level. The relationship was linear but the correlation was used to measure how strongly clustered data points are around the line of best fit. Correlation ranges from negative one (-1.0) which is a perfect negative relationship to one (1.0) which is a perfect positive relationship (Kothari, 2004; Sekaran, 2008).The correlation coefficient was calculated to determine the strength of the relationship between entrepreneurial networks and financial performance. To test whether the individual hypothesis was statistically supported or

not, multiple regression analysis was conducted for each hypothesis (Sekaran, 2008). Inferential statistics were used to help in deductions to be made on the data collected, to test the study hypothesis and relate the findings to the sample.

Analysis of Variance (ANOVA) test was then used to study the amount of variation within each of the sample relative to the amount of variation between samples. ANOVA test was used for it makes use of the F-test in terms of sums of square effects over sums of squares residual (Mugenda, 2008; Sekaran, 2008).

3.10.2 Hypothesis testing

The regression models, by use of SPSS, were tested on their effectiveness on fitting the data. Estimation of the model fitness was done through the coefficient of determination that helped enlighten the closeness between the predictor variables structural holes, network structure, network ties, network density, network centrality and the variations of the dependent variable financial performance Each independent variable's significance was also tested. Testing the essence of hypothesis, and every distinct independent or predictor variable was done using t-test statistic. Each t-test p-value was used in making conclusions about whether to fail to reject or fail to accept the null hypotheses. The study benchmark for failure to accept or failure to reject the null hypotheses is a 5% significance level. For the p-value lower than 5%, the null hypotheses fails being accepted, and vice versa. Moreover, for the p-value more than 5%, the null hypotheses fails rejection and the alternative hypotheses fails being accepted.

Similarly, F-test, also Fischer distribution test, was implemented. It describes the ratio between the error mean square on dividing the model mean square. The overall model's significance was tested using F-test at 95% confidence level. The model's robustness was determined using the F-statistic's p-value. The p-value was the basis of conclusion, in which, if the beta's null hypotheses was rejected, then the entire model would have been significant, and in case the null hypotheses was accepted, then the whole model would be insignificant.

In other words if the p-value was less than 0.05 then it was concluded that the model was significant and had good predictors of the dependent variable and that the results are not based on chance. If the p-value was greater than 0.05 then the model was not significant and was not used to explain the variations in the dependent variable.

3.10 Operationalization and Measurement of Variables

Financial performance was the dependent variable for the study whereas the independent variables were the entrepreneurial networks. The six study variables description is presented in Table 3.2, besides the way they had been operationalized.

Table 3.2: Operationalization of Variables

Variable	Type	Operationalisation	Unit of Measurement	Type of Scale	Question No
Structural Holes	Independent	• Professional network • Policies • Social media personality	5 point-Likert Scale	Ordinal scale	Appendix II: Section B; Part A
Network density	Independent	• No. of contacts • Competencies of team members • Interaction	5 point-Likert Scale	Ordinal scale	Appendix II: Section **B**; Part B
Network Structure	Independent	• Interconnections • Characteristics of partners • No. of resourceful partners	5 point-Likert scale	Ordinal scale	Appendix II: Section B; Part C
Network Ties	Independent	• Diversity • Personal networks • Linkages	5 point-Likert Scale	Ordinal scale	Appendix II: Section B; Part D
Network Centrality	Independent	• Enterprise position • partnership opportunities • access to information	5 point-Likert Scale	Ordinal scale	Appendix II: Section B; Part E
Financial performance	Dependent	• Profit • Sales Growth • Return on Investment • Return on Assets	5 point-Likert Scale	Ordinal Scale	Appendix II: Section B: Part F

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The aim of the study was to examine the influence of entrepreneurial networks on the medium sized enterprises in Kenya. The specific objectives aimed at determining whether structural holes, network density, network structure, network ties, and network centrality influenced financial performance of the medium sized enterprises in Kenya. In this chapter, the results and empirical findings of the application variables have been presented by using the methods indicated in chapter three. Precisely, data analysis was established according to the specific objectives whereby patterns were explored, construed, and implications drawn accordingly. To begin with, preliminary data analysis has been done prior to study variable analysis.

4.2 Response Rate

A total of 255 questionnaires were distributed to Human resource department, Marketing department, Business development department of the top 100 medium sized enterprises. The study sought to establish the respondent rate. The findings indicate that most (80%) of the questionnaires were submitted while (20%) were unreturned. Since the above 60%, which is the recommended range, it was found adequate for deeper statistical analysis as Mugenda and Mugenda (2003) states. Willimack (2002) suggested that response rate ranging between 50% to 65% is adequate for analysis. The states scholars' references were taken into consideration. Table 4.1 presents the study's response rate.

Table 4.1: Response Rate

Response Rate	Frequency	Percent
Returned	205	80%
Unreturned	50	20%
Total	255	100%

A study conducted by Mc Cormick (1996) on barriers to small firm growth used a sample size of 268 and obtained a response rate 76 %. Batjargal (2012) conducted a research through telephone interviews on 159 respondents in China and Russia on effects of structural holes on new venture growth and the response rate was 69%. Peprah (2010) explored the role of networking towards a more sustainable entrepreneurship, whereby 320 female entrepreneurs from Mfantsiman, Ghana, participated in the study, and received a response rate of 75%. The current study hereby, attained an 86% response rate and therefore, was considered adequate for further statistical analysis

4.3 Reliability Test

Mugenda and Mugenda (2003) described reliability as a measure of the step to which a data collection instrument delivers the same results after being repeated over and over again. During research, reliability is impacted by random error which is basically the deviation from the correct measurement because of issues that the researcher may not have addressed adequately. Some of the errors maybe in coding if not correctly done, instructions that are not clear, respondents getting fatigued, interviewers getting too worn out (Zikmund, 2010). In this study the research instrument was pretested to ensure clarity and content validity before being administered to the respondents.

Reliability analysis for testing reliability, internal consistency and quality of the measurement procedure of the data items was conducted using the Cronbach's alpha.

Cronbach's Alpha is a reliability coefficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003). As rule of thumb, reliability value of 0.7 and above is recommended for most researches to denote the research instrument as reliable (Sekaran, 2003; Robert, 2006). The questionnaire was pilot tested in the medium sized enterprises and the respondents were 10% of the population that did not form part of the sample. According to Mugenda and Mugenda (2003), the percentage is largely recommended by social researchers. After pilot testing, the questionnaires were reviewed to incorporate the feedback that was provided the respondents involved in the pilot test. In the study, reliability, which is a degree of internal consistency and average correlation, was measured using Cronbach's alpha coefficient which ranges between 0 and 1. The higher the alpha coefficient value mean scale is the more reliable it is. As a rule of thumb, acceptable alpha should be at least 0.70 and above.

After the items on each of the variables in the questionnaire were subjected to Cronbach's coefficient alpha test, all the items were found to be reliable for measurement because the reliability coefficient was found to be above the recommended threshold of 0.7. The outcomes established that, structural holes had a 0.737 coefficient, 0.883 as network density's coefficient, network structure had a 0.876 coefficient, network ties had a 0.907 coefficient, and network centrality had a 0.911 coefficient, while financial performance's coefficient was 0.925. All constructs depicted that the value of Cronbach's alpha was greater or equal to 0.7 and therefore, the study constructs were all reliable. Table 4.2 shows the results.

Table 4.2: Reliable Test Statistics

Variable	Cronbach's Alpha	N of Items
Structural Holes	0.737	7
Network Density	0.883	10
Network Structure	0.876	8
Network Ties	0.907	9
Network Centrality	0.911	10
Financial Performance	0.925	10

4.4 Demographic Information

4.4.1 Gender of the Respondents

The study aimed at finding out the respondents' gender. Results indicated that the majority (64%) were male while (36%) were female as Figure 4.1 indicates.

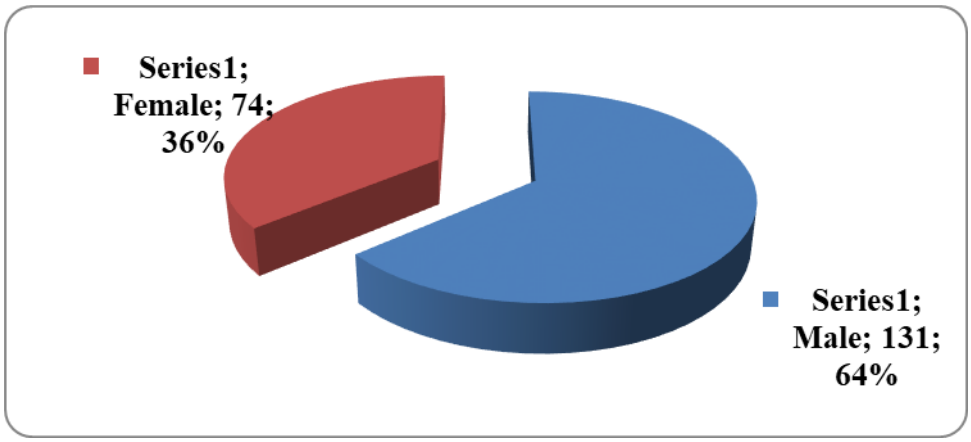

Figure 4.1: Gender of the Respondents

The findings concur with Mwirigi (2012) whose study on the supply chain relationship's influence on the growth of SMEs in Kenya and gender representation was 57% male and 43% female. The given findings may be credited to the robust male dominant culture, which until lately were consigned to domestic chores in Kenya. The culture is slowly fading off and quite many women are now intensely competing in the majority of investments (RoK, 2010). This implies that medium sized enterprises are a male dominated field.

4.4.2 Level of Education

In the study, the respondent's education level was established. Findings from the study indicated that majority (67%) of the respondents were university graduates and above, whereas 33% of the total participants were college graduates as presented in Figure 4.2.

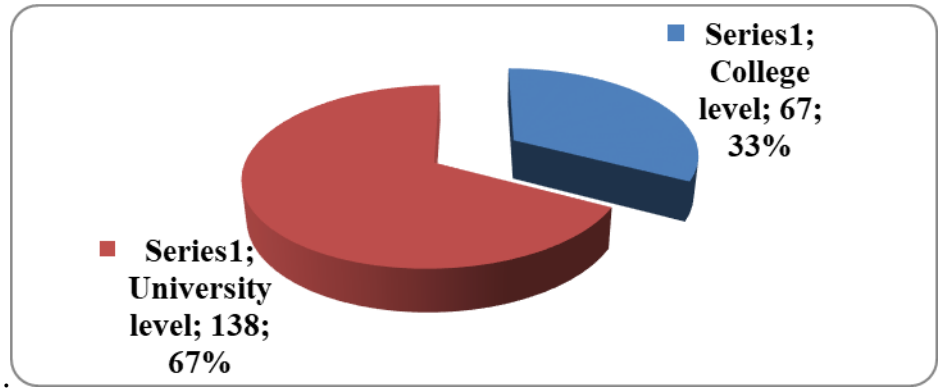

Figure 4.2: Level of Education of Respondents

Empirical studies reviewed concur with the result of this study. For instance, Ngugi (2012) while studying the challenges hindering sustainability of medium and small firms in Kenya, after their founders exit, observed that the latter is education level influence the conveyance of managerial and entrepreneurial skills that is key in entrepreneurial networking among entrepreneurs. In his survey he discovered that, of the total participants, 70% had attained secondary level education and above. Seens (2013), in his study on the performance of SMEs in Canada established that education is directly proportional to business success. The results of the current study show that 100% had secondary level education and above. According to this study's outcomes, most respondents' education level was beyond college level, thus agreeing with Ntiamoah, Li, and Kwamega (2016) whose study depicted that education is key factor towards impartation of positive advancement of firms, especially in the prevailing unsteady business environment, since the personnel is well an easily adapted to its firm's unexpected fluctuations.

The implications of the findings are that 100 percent of the respondents had basic understanding of entrepreneurial networking and financial performance. Therefore, they were in a good position to give adequate, reliable and accurate information about entrepreneurial networking activities and financial performance in medium-sized enterprises in Kenya. The role of education in entrepreneurial networking is indisputable and thus sustainability and improved financial performance is creditable to the management's education level since 67% were found to have attained the

university level. Therefore, this shows academic qualification affects financial performance of medium sized enterprises in Kenya.

4.4.3 Years Worked

The number of years worked by the respondents in their respective organization was also established in the study. The study revealed that 44.9% of the respondents specified that they were organization's employees/owners for over 5 years while 45.4% indicated to have worked around 3 to 5 years and 9.8% of the respondent indicated less than 2 years. This is depicted on Figure 4.3.

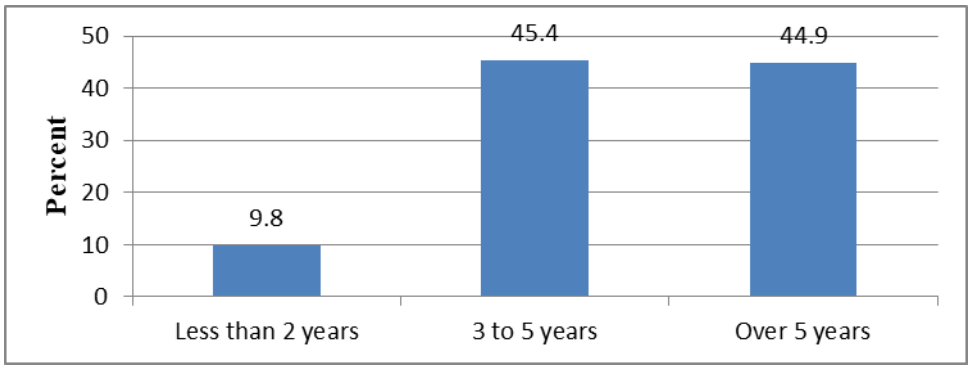

Figure 4.3: Years Worked

Prior research has shown similar findings. Bass (2005) in his study on performance and leadership observed that service duration leads to networks, responsibilities, skills, and experience. Thrikawala (2010) in a study of SMEs in Sri Lanka noted that SMEs management's business experience is usually less than 20 years, with an average business experience of which 30% have below 10-years-business experience. In study of a small developing technology firm, it was observed that most employees had over five years of experience (Mehra, Kilduff & Brass, 2001). Arman and Dowla (2011) conducted a study in restaurants in Sweden and most of the participants had worked for a period of more than five years.

The findings, therefore, illustrate that majority of medium sized enterprises in Kenya are managed by executives with some working experience and who essentially contribute to entrepreneurial networking that can influence financial performance.

The implication of the findings is that these respondents must have worked for a number of years in medium sized enterprises, and therefore were well informed of all issues relating to entrepreneurial networking and financial performance among medium sized enterprises in Kenya.

4.4.4 Type of Enterprise

The types of enterprise of the respective respondents were also indicated. The findings indicated that 27.8% of the respondents indicated Technology, 25.4% indicated service while 12.7% indicated manufacturing and 9.8% indicated Hospitality. In addition, 11.7% indicated others, 9.8% indicated hospitality, 8.3% indicated health and 4.9% indicated construction. The results are shown in Table 4.3.

Table 4.3: Types of Enterprise

Type of Enterprise	Frequency	Percent
Construction	10	4.9
Manufacturing	26	12.7
Hospitality	20	9.8
Health	17	8.3
Technology	57	27.8
Service	52	25.4
Others Specify	23	11.2
Total	205	100

The results on type of enterprise indicate consistency with prior empirical researches regarding the type of medium sized enterprises in Arizona, USA by Caldwell (2013).The results indicated that in 2012, an average growth rate of employment was 2.7% and 2.1% for middle market and large firms respectively. The firms included restaurant businesses, healthcare, manufacturing, technology, construction, and services industry enterprises. The findings relate with those of Thrikawala (2010), studied the strategic networks' influence on the performance of medium-sized enterprises in Sri Lanka. The study revealed that major types of enterprises in Gampaha District, Sri Lanka where the study was conducted were manufacturing,

construction materials, wood and related products, and food and beverages. Kenny (2009), studied the influence of networking capability on the international performance of Ireland medium-sized enterprises. It was clear that most of SMEs were in technology category followed by service, which is in parallel to the current study.

The results in Table 4.3 show that technology and service had higher number of enterprises compared to others and this could be attributed to demand of the services and the enabling environment in the country. Construction had the lowest number and this could be attributed to the cost involved in setting. The findings imply that the study represented all the types of the enterprises and thus high accuracy across the sectors to make generalized findings.

4.4.5 Firm Age

The firm's age was sought by the study to discover how old the business is since it was launched. The results of firm age are presented in Figure 4.4 and reveal that 78% of the respondents showed that their businesses were operating for a period of more than 15 years then, whereas 9.8% showed between 6-10 years and 8.8% indicated between 11-15 years.

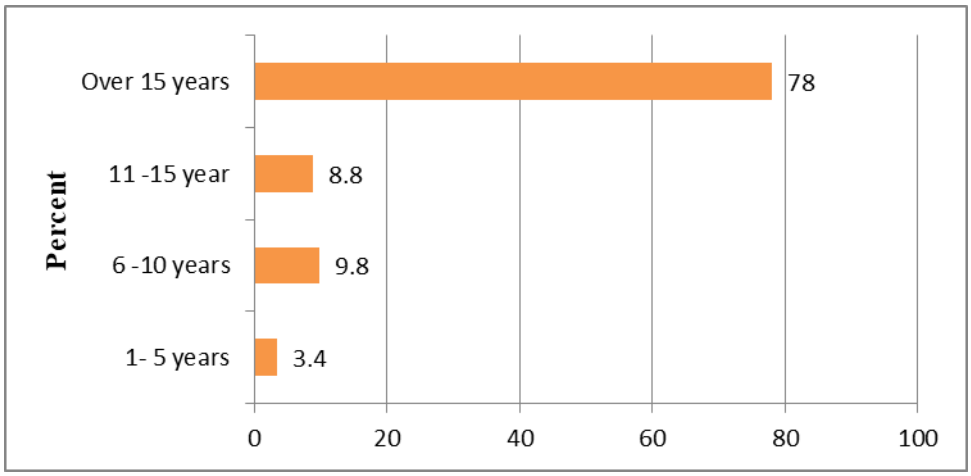

Figure 4.4: Age of the Firm

The findings collaborate with those of Desta, Tedlaand Zerom (2015) who examined the influence of the entrepreneurial network strength on the advancement of female-owned enterprises in Eritrea and observed that most firms under study had existed for over eight years. In a survey of Australian medium-sized firms in the manufacturing sector, it was established that the firms' average age was approximately 11 years (Terziovski, 2003). Examining the way contribution in business associated with brokerage positions of entrepreneurs in the informal business networks, as well as the way the positions, consequently affect new venture performance was done by Stam (2010). 60% of the firms under study by Stam had existed for over 15 years. This is in tandem with the results shown in Figure 4.4.

The findings imply that the medium sized enterprises had been in operation long enough and hence accurate responses and findings in regards to entrepreneurial networks that lead to financial performance. Therefore, the age of the firm is likely to influence the financial performance of medium sized enterprises in Kenya.

4.4.6 Relationship between Gender, Level of education and Years Worked in Enterprises

Cross tabulation helped in bivariate analysis to identify the connection between demographic components. Demographic factors included gender, level of education and years worked in the enterprises. Table 4.4 presents the results. The respondents gender was established as statistically vital with the years worked in the enterprises (P=0.03301). Comparing male and female those that have worked for less than 2 years and more experienced those that have worked over 5 years; experienced employees regardless of gender had higher probability of performing better in comparison with the less experienced employees who have worked for less than 2 years. Gender was not an important component of education level.

Table 4.4: Relationship between Gender, Level of education and Years Worked

		Gender		Chi-square
		Male	**Female**	
Level of education	College level	38	29	
	University level	93	45	X2=2.228(p=0.136)
Years worked	Less than 2 years	16	4	
	3 to 5 years	51	42	
	Over 5 years	64	28	X2=6.838(p=0.033)

The study findings are in line with those of Klyver and Terjesen, (2007) who did a study to identify gender variances in the structure of businesspersons' networks in four developing venture phases: discovery stage, the emergence phase, the young stage, and the already established. The study found out that female entrepreneurs essentially have fewer proportions of males within their social networks in the advent venture advancement phases, but same levels at their later phases. In addition previous studies (Marsden, 1987; Boxman 1991; Groot, van den Brink & Van Praag, 2007) it is evident social and human capitals are co-produced, with education having an influential effect on the configuration of persons' social network structures. The findings imply that all employees whether male or female can perform better if correct measures are put in place regardless of the level of education attained.

4.4.7 Relationship between Firm Age and Types of Enterprises

Firm age was observed to have statistical significance according to the type of enterprise (P=0.000). Comparing developing enterprises, those below 5 years of age and older businesses, those that are 15 years or more; the older enterprises had a more probability of competitiveness in comparison with those below the age of 5 years. Table 4.5 displays the results.

Table 4.5: Relationship between Firm Age and Types of Enterprises

		Firm Age				chi-square
		1- 5 years	6 -10 years	11 -15 year	Over 15	
Type of enterprise	Construction	0	0	0	10	
	Manufacturing	1	0	3	22	
	Hospitality	0	0	0	20	
	Health	2	3	2	10	
	Technology	1	1	12	43	
	Service	3	14	0	35	
	Others Specify	0	3	0	20	X2=55.883(p=0.000)

The findings collaborate with those of Desta, Tedla and, Zerom (2015) who examined how entrepreneurial network strength influences the growth of female-established enterprises (strong vs. ties) in Eritrea and observed that most firms under study had existed for over eight years. In a survey of Australian medium-sized firms in the manufacturing sector, it was established that the firms' average age was approximately 11 years (Terziovski, 2003). Thrikawala (2010) carried out a research to illuminate on the social structure, inter-business and enabling networks of medium-sized enterprises in Sri Lanka, and found out that over 50% of the firms had existed for over 10 years. The research outcomes suggest that the medium sized enterprise had been in operation well enough and hence accurate responses and findings in regards to entrepreneurial networks that lead to financial performance. Therefore, the age of the firm is likely to have an influence on the financial performance of medium sized enterprises in Kenya.

4.5 Structural Holes and Financial Performance

Objective One: To determine the influence of structural holes on financial performance of medium sized enterprises Kenya.

4.5.1 Sampling Adequacy

To scrutinize if the collected data was enough and suitable for inferential statistical tests like regression analysis, factor analysis, and others, two major tests were carried out, namely; Barlett's Sphericity Test, and Kaiser-Meyer-Olkin (KMO). The latter determines sampling adequacy. According to Field (2000), data set is considered appropriate and adequate for statistical analysis when the KMO value is more than 0.5.

Results indicated that KMO's statistic value is 0.667 (see Table 4.6) and it was considerably high; hence, more than the test's significance critical level that is set at 0.5 according to Field (2000). Moreover, the Bartlett Sphericity Test was quite important as well (Chi-square = 495.648 at 21 degree of freedom, with $p < 0.05$). Table 4.6 summarizes Barlett's and KMO's test results, offering a perfect justification for deeper statistical analysis that may be done.

Table 4.6: Structural Holes KMO Sampling Adequacy and Bartlett Spericity Tests

Kaiser-Meyer-Olkin Measure	0.667
Bartlett's Chi- Square	495.648
Bartlett's df	21
Bartlett's Sig.	0

4.5.2 Factor Analysis

Following the successful tests on reliability and validity using Cronbach alpha and aKMO coefficient results, factor analysis was done via the Principal Components Method (PCM) method. The factors were extracted after the Kaiser Criterion in which Eigen value of 1 or more signifies a common element. The entire Variance analysis shows that the 7 accounts on structural holes can be deducted into 1 factor. As Table 4.7 indicates, the total variance elucidated by extraction element is 41.83%.

Table 4.7: Structural Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.928	41.832	41.832	2.928	41.832	41.832
2	1.469	20.982	62.814			
3	1.003	14.327	77.141			
4	0.571	8.16	85.301			
5	0.494	7.054	92.354			
6	0.312	4.45	96.805			
7	0.224	3.195	100			

Extraction Method: Principal Component Analysis.

On Table 4.8, the factor loadings for sub-constructs of structural holes are 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 who affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 4.8: Factors Loading for Structural Holes

Statement	**Component**
Members of our organization belong to professional network	0.785
By being part of the professional network has improved the organization's overall performance	0.805
Our organization pay for its member's annual subscription fee for being members of the professional networks	0.528
Our organization uses social media personalities/ brand ambassadors to sell our brands to the general public	0.475
Our enterprise formulates policies relating to networking	0.766
The internal policies and guidelines of our organization are effectively made clear to all employees	0.567
Our organization's management is open to diverse ideas	0.501

Extraction Method: Principal Component Analysis.

4.5.3 Descriptive Analysis

a) Professional body

The study invested on identifying the professional body the enterprise employees are affiliated to; 38.5% indicated that they were affiliated to marketing society of Kenya while 16.6% were members of CPS (K) and16.1percentage were members of Business network international as shown in Table 4.9.

Table 4.9: Professional body Affiliated to

Professional Body	Frequency	Percent
Marketing Society of Kenya	79	38.5
Business network international	33	16.1
CPS (K)	34	16.6
ICPAK	11	5.4
Others Specify	48	23.4
Total	205	100

Results are in support of other research, which explains the way professional services are categorized to assist businesspersons organized their businesses as per the legal settlements in the venture municipal (Suchman, Steward, & Westfall, 2001). Employing a case study, they showed the significance of Silicon Valley law organizations towards standardizing entrepreneurial community services besides the way entrepreneurship relies mostly on convention as it does on innovation. It was definite from the findings that majority of respondents were in professional bodies and they were aware of issues associated with professional bodies and networking. This implies that the respondents had strong networks and connections with other enterprises.

The study sought to find out what causes their enterprise's employees not to subscribe to the professional bodies. Figure 4.5 demonstrates that 48.3% of all

respondents were not aware of them while 31.7% indicated costs and 17.6% indicated lack of interest. Only 2.4 % of the respondents indicated other reasons for not subscribing to professional bodies other than cost and being unaware.

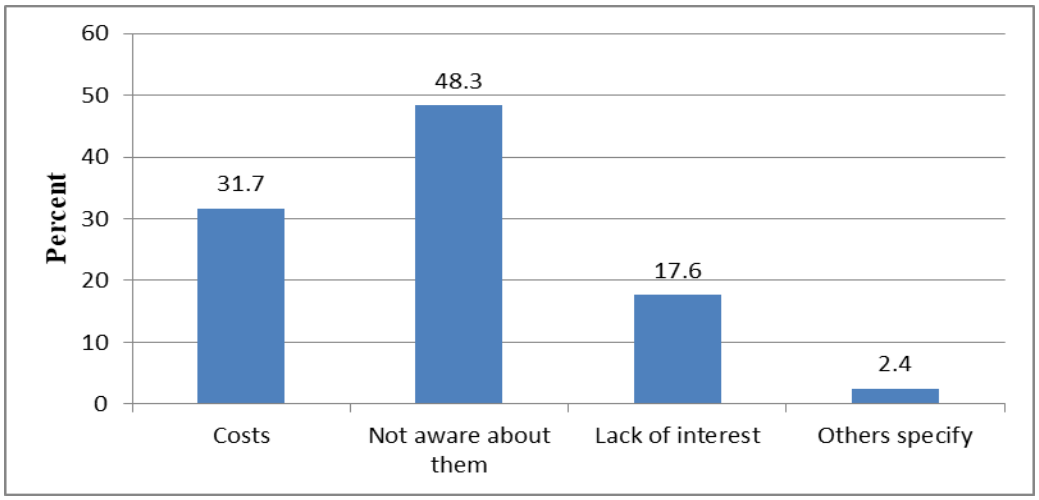

Figure 4.5: Cause for not joining Professional Body

The results shown on Figure 4.5 agree with those of Kiriinya and Kirimi (2016), which found out that in Kenya, network marketing; innovative marketing and work of mouth communication were the most significant factors used by medium sized enterprises to compensate for any disadvantages experienced because of their size and nature of their business. This was because these were less costly to join as compared to the professional bodies. As per the findings, more should be implemented so that enterprises and employees can be made aware of the benefits that are associated to joining professional bodies and the kind of networking one can benefit from professional bodies. The first study objective involved the determining of whether structural holes influence the financial performance of medium sized Enterprises Kenya. The findings are presented in Table 4.10. From the results it was clear that 31.7% of the total respondents mutually concurred that members of their organization belong to professional network, while 28.3% agreed that by being part of the professional network has improved the organization's overall performance and

70.2% disagreed that their organization pay for its member's annual subscription fee for being members of the professional networks.

Moreover, 22.5% of all respondents were in agreement that their organizations uses social media personalities/ brand ambassadors to sell their brands to the general public, 37.1% agreed that their enterprise formulates policies relating to networking and 67.9% agreed that the internal policies and guidelines of their organization are effectively made clear to all employees. Finally, 72.7% of the respondents agreed that their organization's management was open to diverse ideas.

Table 4.10: Structural Holes Descriptive Statistics

Statement	strongly disagree	disagree	neither agree nor disagree	Agree	strongly agree	Mean
Members of our organization belong to professional network	3.4%	6.3%	58.5%	22.9%	8.8%	3.27
By being part of the professional network has improved the organization's overall performance	2.4%	9.8%	59.5%	21.5%	6.8%	3.2
Our organization pay for its member's annual subscription fee for being members of the professional networks	36.1%	34.1%	17.1%	8.3%	4.4%	2.11
Our organization uses social media personalities/ brand ambassadors to sell our brands to the general public	5.4%	16.1%	56.1%	21.0%	1.5%	2.97
Our enterprise formulates policies relating to networking	1.5%	6.8%	54.6%	33.2%	3.9%	3.31
The internal policies and guidelines of our organization are effectively made clear to all employees	1.0%	2.0%	29.3%	45.9%	22.0%	3.86
Our organization's management is open to diverse ideas	2.9%	2.9%	21.5%	35.1%	37.6%	4.01
Average	7.5%	11.1%	42.4%	26.8%	12.1%	3.25

The results of the study revealed that people who can successfully linked structural holes acquire more advantages. The study outcomes show coherency with Podolny &

Baron, (1997) who studied effect of structural holes on promotion of senior managers and concluded that senior executives who bridge structural holes have a higher likelihood of being promoted promptly. Another study carried out on Loan officers and networks by Mizruchi and Sterns (2001) concluded that bridge structural holes were presented as more probable to close a deal. This concurs with the findings of the study.

Mehra, Kilduff, and Brass (2001) carried out a study on developing technology firms and established that supervisors in the firm gave greater performance evaluations onto personnel whose networks spanned else incoherent organizational parts since the individuals can access extra information for they have been ex-posed to more new-fangled and diverse jiffies of information and knowledge, and sequentially become more active staffs .The study results show coherence with the finding of another study that showed being attached to the professional network has improved the organization's overall performance. This implies that professional networks have a direct stimulus on the performance of the Kenyan medium enterprises.

The study findings on usage of social media personalities/ brand ambassadors to sell brands to the general public are in line with those of Zaheer and Bell (2005) who carried out a survey on the Canadian mutual fund firms in addition to the use of brand ambassadors and found out that firms which intentionally use Influencers in spanning the structural holes can generate brand parity more competently. Innovative companies, which span structural holes, too, obtain a deeper performance boost, implying that companies should be able to develop network-facilitated capacities adding to innovative companies, which span structural holes.

A study conducted by Booth and Matic (2011) to determine customers' incentives to interrelate with or/and regarding the brands or trademarks on the social media and to advance an associated scale in the health sector. Findings of confirmatory and exploratory examines the exposed five distinctive motivation factors; "Conversation", "Investigation", "Entertainment", "Opportunity Seeking", and "Brand Affiliation".

This is in tandem with results of this study that found out that medium-sized enterprise in Kenya use social media brand ambassadors to sell their brands to the general public. Therefore, this implies that social media sites enjoy the capacity to generate conversations about a product/ brand. The Influencers can be labeled as Brand Ambassadors or Brand Storytellers as well since they determine and positively influence the sentiments of services and products.

Freberg *(*2011) carried out a study among students in China on who consists of the influencers of social media. From a study of public views of temperament and personality found out that brand, personality influences the uptake of products. However, the study also concluded that these could be damaging especially if a marketing department fails to share the control of a brand, but rather employs influencers as pawns. An illustration of this can probably be a poor comment or review dispatched on the social networking media. Buyers can influence the brands, although excellent companies embrace this conclusion, heed, and follow up on conversations to modify their services and /or products accordingly. This goes in alignment with the outcomes of the present study that showed that medium sized enterprise in Kenya social media personalities/ brand ambassadors to sell their brands to the public. It is therefore implied that the choice of the brand personality would influence the medium sized enterprises financial performance in Kenya.

The availability of structural holes in a firm can enhance growth in the team's capacity to generate or embrace emergent problem solutions. Openness to newly made ideas and diverseness of outlooks in the group are, thus, highly probable to get protection due to the availability of structural holes among teams. Oh, Chung, and Labianca and (2004) state that the teams without structural holes are not inclined to embrace new ideas that have been acquired from outside the team, and according to Sherif (1961), they usually perceive non-group associates negatively. The average response score for this part was 3.25, thus indicating that most of the participants agreed to a little extent that structural holes influence financial performance of medium sized enterprises in Kenya. The study findings are in line with Batjargal (2012) who conducted a research through telephone interviews on 159 respondents in China and Russia on effects of structural holes on new venture growth and found out

that excellent businesspersons have a higher likelihood of conserving their networks while the less successful entrepreneurs are probable of expanding their individual networks. This denotes that the presence of structural holes within medium sized enterprises influences its financial performance.

4.5.4 Structural Holes Normality Test

In checking for normality, kurtosis and skewness statistic were adopted for the study as George and Mallerry (2010) recommends. The normal distribution skew value is zero, typically suggesting symmetric distribution, while Kurtosis is the measure of peakness in a distribution. West *et al*. (1996) recommended a reference of important retreat from the normality as the outright skew value > 2,as well as an absolute/outright kurtosis value > 7. However, for this study the recommendation of George and Mallery (2010) who asserted that as a thumb's rule, a variable is rationally adjacent to normal when its kurtosis and skewness have values ranging from -3.0 to + 3.0. The findings presented in Table 4.11 indicate that structural holes had kurtosis coefficient of 1.826, and skewness coefficient of -0.003. Centered on these, structural holes were concluded to be normally distributed because they are usually within the range of ± 3 range as well endorsed by George and Mallery (2010).

Table 4.11: Structural Holes Normality Test

Structural holes	Statistic	Std. Error
Skewness	-0.003	0.17
Kurtosis	1.826	0.338

4.5.5 Structural Holes Linearity Test

Linearity of variables was verified by means of correlation coefficients as Cohen, West and Aiken (2003) suggest. To determine whether there exists a linear relationship, Pearson product of moment's correlation was adopted by the study, and are presented in Table 4.12. The findings designate that the structural holes and the

variables, financial performance had a robust positive connection as shown by the correlation coefficient of 0.770, which implied that there existed a positive linear relationship. The study findings are in line with Batjargal (2012) who conducted a research through telephone interviews on 159 respondents in China and Russia on effects of structural holes on new venture growth and found out that prosperous entrepreneurs have a higher likelihood of conserving their networks while the less prosperous ones are more likely to advance their personal networks. The findings imply that there exist a linear positive association between the structural holes and financial performance.

Table 4.12: Structural Holes Correlations Coefficients

Variable		Financial performance	Structural holes
Financial performance Sig. (2-tailed)	Pearson Correlation	1	
Structural holes	Pearson Correlation	0.770	1
	Sig. (2-tailed)	0.000	

Figure 4.6 shows the scatter plot of financial performance and structural holes. The figure reveals that there was a positive association between these two variables. Therefore, an increase in the effectiveness of structural holes affects performance positively. The study findings are in line with Batjargal (2012) who conducted a research through telephone interviews on 159 respondents in China and Russia on effects of structural holes on new venture growth and found out that successful businesspersons are have a higher likelihood of conserving their networks while on the other hand, the less successful ones have the likelihood of advancing their individual networks. The findings imply that there exist a linear positive association between the structural holes and financial performance.

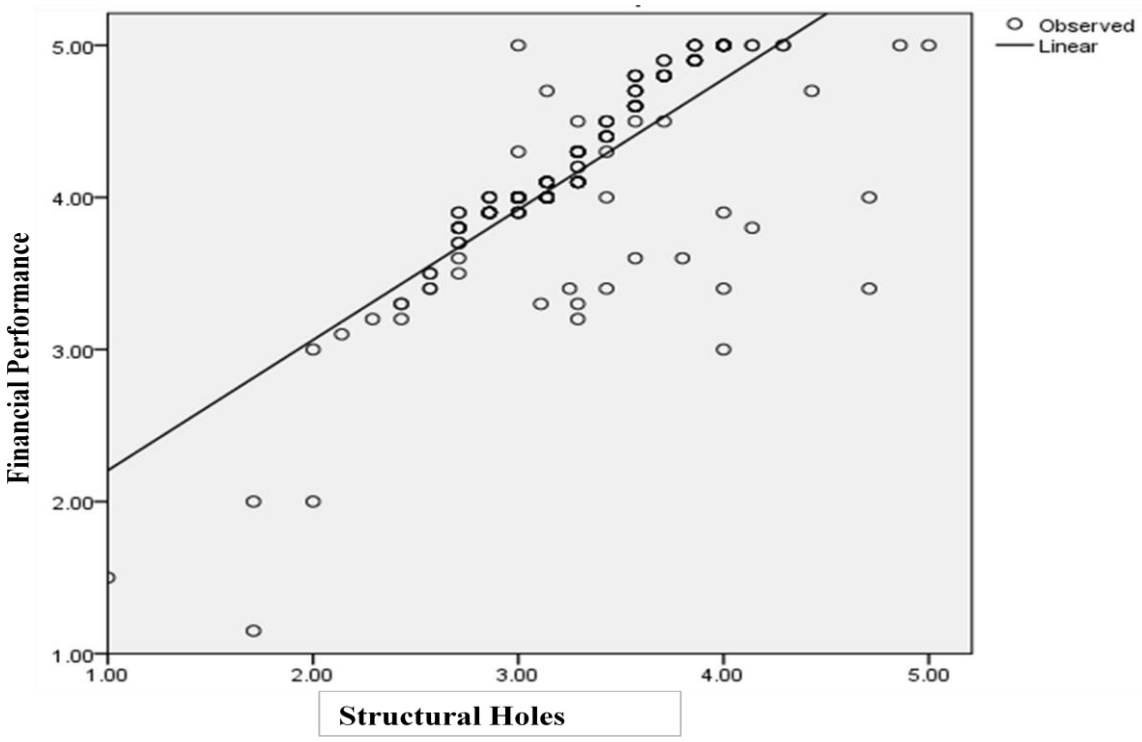

Figure 4.6: Scatter Plot Relationship between Financial Performance and Structural Holes

4.5.6 MultiCollinearity

Multi-collinearity tests in the study were accomplished via the Variance Inflation Factor (VIF). The latter's value greater than 10 (VIF ≥ 10) indicate an issue of multi-collinearity. According to Montgomery (2001) the cutoff threshold of 10 or more specify the existence of multi-collinearity whereas tolerance statistic values of less than 0.1 are an indication of a serious problem, and even worse, those with values under 0.2 imply a possible problem. The findings in Table 4.13 illustrate that the VIF value for structural holes was established to be 4.329 while its tolerance statistic was reported to be 0.231. Based on these the assumption of no multi-collinearity between predictor variables was thus not rejected as the reported VIF and tolerance statistics were within the accepted range.

Table 4.13: Structural Holes Multi Collinearity

Collinearity Statistics	
Tolerance	VIF
0.231	4.329

4.5.7 Relationship between Structural Holes 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. Table 4.14 regression results signify that the regression's fit alignment for the regression of the structural holes alongside the financial performance was satisfactory. A 0.593-squared value of R of signifies that 59.3% of total variations in the financial performance are expounded by the variations in structural holes.

Table 4.14: Model Summary for Structural Holes

Indicator	**Coefficient**
R	0.77
R Square	0.593
Adjusted R Square	0.591
Std. Error of the Estimate	0.38961

Further, F-test was established, testing the null hypothesis and it was found that structural holes have no significant influence on financial performance of medium sized enterprises in Kenya. Determination of the existence of regression relationship the structural holes and financial performance was done via analysis of variance (ANOVA). Table 4.15,represents the ANOVA test showing that the significance of F-statistic 0.000 was below 0.05 which indicates the null hypothesis is therefore rejected and thus concludes that there is an important connection between structural holes as well as the financial performance of medium sized enterprises. The findings indicate that structural holes were statistically significant towards clarifying more about the financial performance of medium sized enterprises in Kenya. Results are

inconsistent with Ahuja (2000) who found that a network richly endowed with in structural holes is usually less effective compared to innovations producing networks, for instance where the company comprise of a broader network for generating innovations, which is the case for firms having vast network of secondary ties.

Another similar study on profiting from network position: performance, structural holes, and firm capabilities were conducted (Zaheer & Bell, 2005). The study posited that companies endowed with greater network structures are better positioned to exploit their internal capacities and therefore promoting their ultimate performance. The results revealed that both company's innovative abilities as well as its network structure promote company performance, whereas the innovation aptitudes of its associates do not directly do that. Innovative enterprises that also span structural holes acquire a deeper performance improvement, implying that companies ought to develop network-enhanced capacities capabilities adding to innovative enterprises, which span structural holes.

Table 4.15: ANOVA for Structural Holes

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	44.971	1	44.971	296.269	0.000
Residual	30.814	203	0.152		
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 structural holes. The null hypothesis indicate that, β (beta) = 0, (implying lack of a association between the variables). Findings regarding the beta coefficient of the resultant model as on Table 4.16 indicates that α = 1.347, a constant, is significantly dissimilar from 0, because p- value = 0.000 is below 0.05. The coefficient β = 0.858 is significantly distinct from 0 with a p-value=0.000 and is evidently below 0.05.

This indicates that the null hypothesis $\beta_1=0$ has been rejected while the alternate hypothesis $\beta_1\neq0$has been held suggesting that the model of, Y=1.347+0.858 (structural holes) + e, is observed as significantly appropriate. The model firm, financial performance= $\alpha + \beta$ (structural holes) is consistent as indicated by the above test. This was tested at 5% significance level. The results show that structural holes contribute importantly to the model because gradient and the constant is the p-value is 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 85.8% rate. Therefore, it ratifies that there is a positive linear relationship between financial performance and structural holes. The following is the fitted equation:

$Y= 1.347 + 0.858X_1+ e$

Table 4.16: Coefficients of Structural Holes

Variable	Beta	Std. Error	T	Sig.
Constant	1.347	0.165	8.147	0.000
Structural holes	0.858	0.05	17.212	0.000

The outcomes of the study are in line with Batjargal (2012) who conducted a research through telephone interviews on 159 respondents in China and Russia on effects of structural holes on new venture growth and found out that excellent entrepreneurs have a higher likelihood of conserving their networks while the less prosperous ones have a likelihood of advancing their individual networks.

4.6 Network Density and Financial Performance

Objective Two: To examine whether network density influences financial performance of medium sized enterprises in Kenya.

4.6.1 Sampling Adequacy

To scrutinize if the collected data was enough and suitable for inferential statistical tests like regression analysis, factor analysis, and others, two major tests were carried out, namely; Barlett's Sphericity Test, and Kaiser-Meyer-Olkin (KMO). The latter determines sampling adequacy. According to Field (2000), data set is considered appropriate and adequate for statistical analysis when the KMO value is more than 0.5.

The outcomes on the study indicated that the value of KMO statistic was 0.844(see Table 4.17) and thus it was quite high as it was greater than the set critical significance level of 0.5 (Field, 2000). Bartlett's Test of Sphericity was used as well, besides the KMO test, and it proved highly critical (Chi-square = 1011.38 and 45 degree of freedom, with p-value at $p < 0.05$). The Barltlett's and KMO tests results have been summarized as shown in the Table 4.17. The results offer an efficient justification for deeper statistical analysis to be done.

Table 4.17: Network Density KMO Sampling Adequacy and Barletts Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.844
Bartlett's Chi- Square	1011.38
Bartlett's df	45
Bartlett's Sig.	0

4.6.2 Factor Analysis

Following the successful tests on reliability and validity using Cronbach alpha and aKMO coefficient results, factor analysis was done via the Principal Components Method (PCM) method. The factors were extracted after the Kaiser Criterion in which Eigen value of 1 or more signifies an inimitable element. The entire Variance analysis shows that the 10 accounts on structural holes can be deducted into 1 factor.

The overall variance elucidated by the factor taken out is 49.48% as Table 4.18 indicates.

Table 4.18: Network Density Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.949	49.488	49.488	4.949	49.488	49.488
2	1.272	12.719	62.206			
3	0.943	9.433	71.639			
4	0.635	6.355	77.994			
5	0.538	5.377	83.371			
6	0.453	4.527	87.898			
7	0.397	3.967	91.865			
8	0.371	3.705	95.57			
9	0.267	2.674	98.244			
10	0.176	1.756	100			

Extraction Method: Principal Component Analysis.

On Table 4.19, factor loadings for sub-constructs of network density are 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 who affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 4.19: Factor Loading for Network Density

Statement	Component
Our organization's contacts give us access to important networks	0.483
Individuals we interact with while networking are generally honest and truthful	0.669
Our organization interacts with many other firms and individuals in the market.	0.701
Network members like to spend time together outside work	0.759
Firms we interact with tend to deliver on promises and commitments they make	0.762
Our enterprises connects with the industry through marketing officers	0.739
Our enterprises access linkages through trade fairs	0.774
Through our network we get invitations to attend workshops and conferences	0.81
Our employees attend cocktails to learn and interact	0.635
Our enterprise linkages provide access to other networks that would be difficult to penetrate?	0.645

Extraction Method: Principal Component Analysis.

4.6.3 Descriptive Analysis

The study sought to find out how the enterprises benefit from these networks. 90% of all respondents accessed new markets while 3.4% indicated access to suppliers and 2.4% indicated access to distributors as Figure 4.7 illustrates.

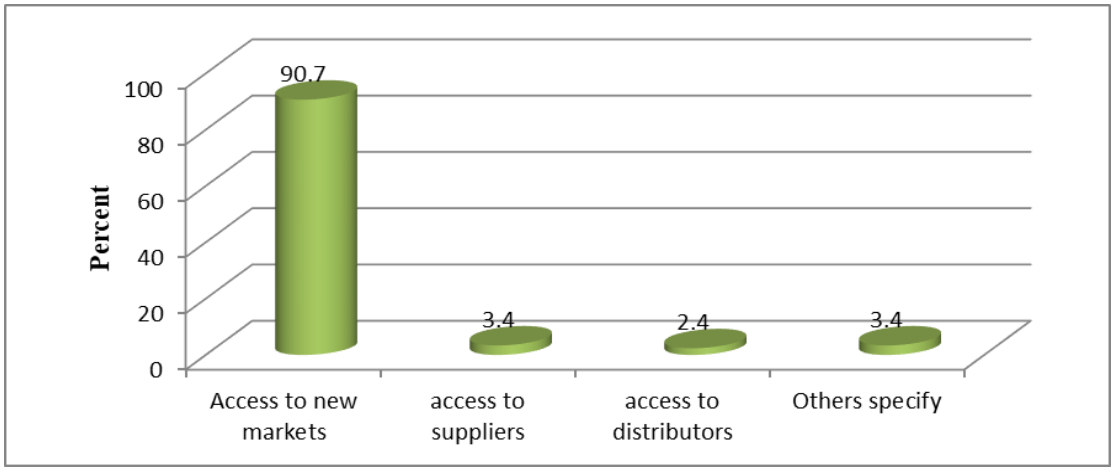

Figure 4.7: Benefits of networks to enterprises

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. Moreover, Baum et al. (2000) asserts that early inter-firm relations are valuable for the start-ups' financial performance since such relationships help companies to overcome many possible perils in their initial development stages. According to Teece (1986) entrepreneurs can competently avail access to varied capabilities and information by launching relationships. These findings imply that social networks are beneficial to firms and help in creating a healthy environment for business, which directly influences performance.

The second study objective involved the evaluation of whether network density influences the financial performance of medium sized enterprises in Kenya. Table 4.20 presents the study findings indicate that of all respondents, 75.1% agreed that their organization's contacts give them access to important networks, while 57.1% agreed that individuals they interact with while networking are generally honest and truthful and 63.9% agreed that their organization interacts with many other firms and individuals in the market.

In addition, 51.7% of the respondents agreed that network members like to spend time together outside work, 55.2% agreed that firms they interact with tend to deliver on promises and commitments they made and 63.9% agreed that their enterprises connect with the industry through marketing officers. Fifty five point six percent of the respondents agreed that their enterprises access linkages through trade fairs, 61.4% agreed that through their network they get invitations to attend workshops and conferences while 55.1% agreed that their employees attend cocktails to learn and interact and 60.5% of the respondents agreed that their enterprise linkages provide access to other networks that would be difficult to penetrate.

Table 4.20: Network Density Descriptive Statistics

Statement	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	Mean
Our organization's contacts give us access to important networks	0.5%	2.0%	22.4%	66.3%	8.8%	3.81
Individuals we interact with while networking are generally honest and truthful	0.5%	2.0%	40.5%	51.2%	5.9%	3.6
Our organization interacts with many other firms and individuals in the market.	0.0%	1.5%	34.6%	53.7%	10.2%	3.73
Network members like to spend time together outside work	0.5%	2.9%	44.9%	46.8%	4.9%	3.53
Firms we interact with tend to deliver on promises and commitments they make	0.0%	2.4%	42.4%	49.8%	5.4%	3.58
Our enterprises connects with the industry through marketing officers	1.5%	2.4%	32.2%	53.2%	10.7%	3.69
Our enterprises access linkages through trade fairs	1.0%	4.9%	38.5%	49.3%	6.3%	3.55
Through our network we get invitations to attend workshops and conferences	0.5%	2.9%	35.1%	50.7%	10.7%	3.68
Our employees attend cocktails to learn and interact	2.4%	3.9%	38.5%	47.8%	7.3%	3.54
Our enterprise linkages provide access to other networks that would be difficult to penetrate.	1.0%	3.4%	28.8%	56.6%	10.2%	3.72
Average	0.8%	2.8%	35.8%	52.5%	8.0%	3.64

The study findings concur with those of other studies for instance Thrikawala (2010) found out that attending of trade fairs, exhibitions and seminars positively influenced the performance of SMEs in Gampaha Sri Lanka. Interrelating with an assorted set of alters usually involves access to greater non-redundant sets of societal resources without which genetic, behavioral, cultural, or material information which flows across networks is likely to be localized (McPherson, 2001).This study is also consistent with previous research regarding the way bonding and spanning social networks influence entrepreneurial goals (Linan & Santos, 2007). They established

that bonding social networks influence growth of entrepreneurial purpose secondarily via alleged feasibility and alleged desirability, while spanning social networks indirectly influence entrepreneurial purpose via alleged feasibility.

Having a varied individual network is also related to significant health reimbursements (Pescosolido & Levy, 2002). With respect to ethnicity/race precisely, network heterogeneity has been established as positively related to such findings as cultural cognizance (Antonio, 2001), condensed in intergroup anxiety and group bias (Levin, 2003), and constant future interracial connection (Emerson, 2002).

Because investors with more varied personal networks enjoy a higher likelihood of identifying innovative prospects (Ruef, 2002), and network diversity ends up being predominantly significant for small enterprises in developed economies. The response mean score for this segment was 3.64 that signifies most of the respondents were in agreement on the statements concerning influence of network density on the financial performance of Kenyan-based medium sized enterprises.

Results are in tandem with Setyawati, Shariff and Saud (2011) who carried a study on effects of learning, networking and innovation adoption on successful entrepreneurs in Central Java, Indonesia and concluded that learning and networking have a significant effect on innovation adoption. Consequently, innovation adoption significantly affects the success of the entrepreneurs. The results also concur with Obura, Abeka and Obere (2012) who noted that if market expansion ensues, the network formation is positively associated with the market development. The conclusion of the findings was that, in case the market develops yonder the regional boundary, the stimuli of the network relations are important and vital for the developing entrepreneurships. The results agree Fatima, Ali and Arif (2012) who concluded that the enterprises need support and resources from external parties such as other enterprises, supporting institutions, relatives and friends, which are their entrepreneurial networks. This denotes that network diversity is central to the expansion and success of a firm and hence influences the financial performance in the long run.

In checking for normality, kurtosis and skewness statistic were adopted for the study as George and Mallerry (2010) recommends. The normal distribution skew value is zero, typically suggesting symmetric distribution, while Kurtosis is the measure of peakness in a distribution. West (1996) recommended a reference of important retreat from the normality as the outright skew value > 2, as well as an absolute/outright kurtosis value > 7. However, for this study the recommendation of George and Mallery (2010) who asserted that as a thumb's rule, a variable is rationally adjacent to normal when its kurtosis and skewness have values ranging from -3.0 to + 3.0.

The study findings presented in Table 4.21 indicated that network density had kurtosis coefficient of 0.013, and skewness coefficient of 0.03.Centered on these, network density were concluded to be normally distributed because they are usually within the range of ± 3 range as well endorsed by George and Mallery (2010).

Table 4.21: Network Density Normality Test

Network Density	Statistic	Std. Error
Skewness	0.03	0.17
Kurtosis	0.013	0.338

4.6.5 Network Density Linearity Test

Linearity of variables was verified by means of correlation coefficients as Cohen, West and Aiken (2003) suggest. To determine whether there exists a linear relationship, Pearson product of moment's correlation was adopted by the study, and are presented in Table 4.22. The findings designate that the structural holes and the variables, financial performance had a robust positive connection as shown by the correlation coefficient of 0.816, which implied that there existed a positive linear relationship. The study findings are in line with those of Swaminathan and Moorman (2003) who examined how network density and network diversity in strategic marketing alliances influence firm performance in the areas of market share,

innovativeness and firm value. Results revealed that network density positively influences the market share but does not affect firm innovativeness or value. The findings confirmed that the location of a firm within a dense network of interconnected actors could provide a basis for creating trust and cooperation between alliance partners.

Table 4.22: Network Density Correlations

		Financial performance	**Network Density**
Financial performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Network Density	Pearson Correlation	0.816	1
	Sig. (2-tailed)	0.000	

The scatter plot of financial performance and network density is shown on Figure 4.8 .The figure reveals that there was a positive association between both variables. The figure indicates that a positive relationship exists. Therefore, an increase in the effectiveness of network density affects performance positively. The study findings are in line with those of Swaminathan and Moorman (2003) who examined how network density and network diversity in strategic marketing alliances influence firm performance in the areas of market share, innovativeness and firm value. Results revealed that network density positively affects the market share but it does not affect firm innovativeness or value. The findings suggest that the location of a firm within a dense network of interconnected actors can provide a basis for creating trust and cooperation between alliance partners.

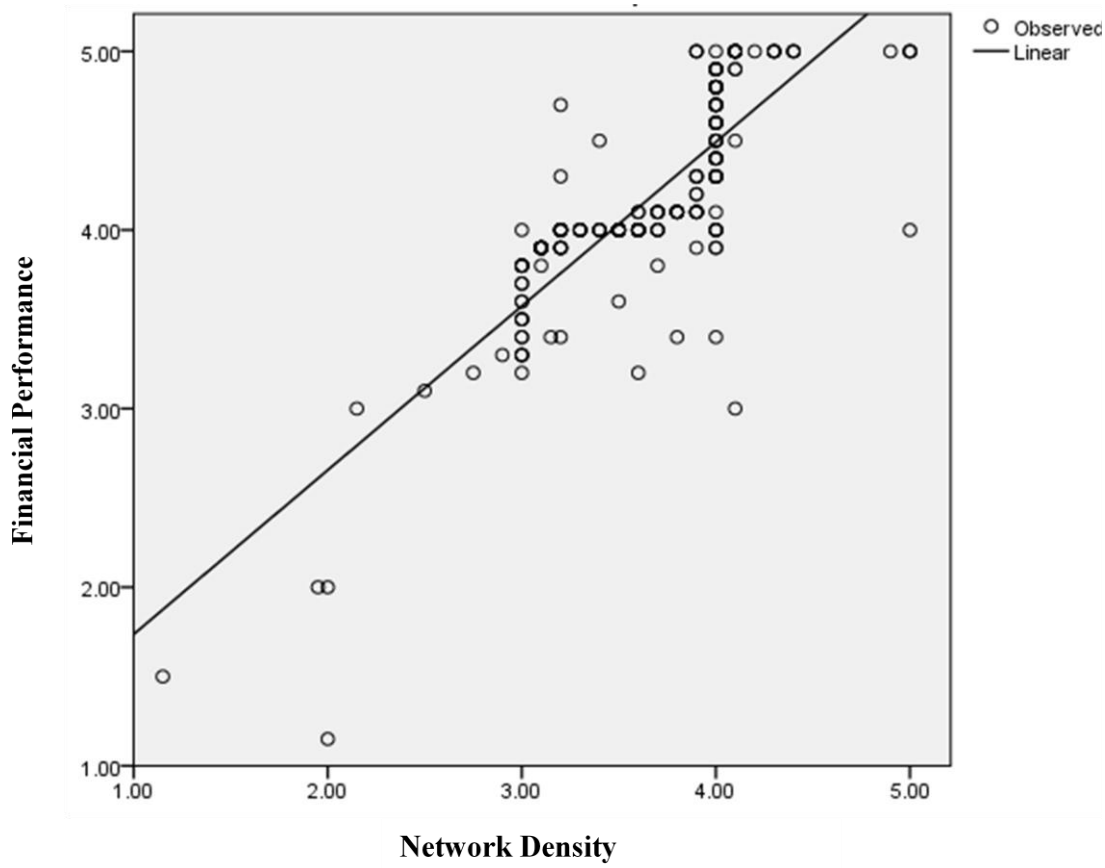

Figure 4.8: Scatter Plot Relationship between Financial Performance and Network Density

4.6.6 Multi -Collinearity

Multi-collinearity tests in the study were accomplished via the Variance Inflation Factor (VIF). The latter's value greater than 10 (VIF ≥ 10) indicate an issue of multi-collinearity. According to Montgomery (2001) the cutoff threshold of 10 or more specify the existence of multi collinearity whereas tolerance statistic values of less than 0.1 are an indication of a serious problem, and even worse, those with values under 0.2 imply a possible problem. The findings in Table 4.23 illustrate that the VIF value for network density was established to be 9.441 while its tolerance statistic was reported to be 0.306. Based on these the assumption of no multi collinearity between predictor variables was thus not rejected as the reported VIF and tolerance statistics were within the accepted range.

Table 4.23: Network Density Multi Collinearity

Collinearity Statistics	
Tolerance	VIF
0.306	9.441

4.6.7 Relationship between Network Density 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 in Table 4.24 signify that the regression's fit alignment for the regression of the structural holes alongside the financial performance was satisfactory. A 0.665-squared value of R of signifies that 66.5 % of total variations in the financial performance are expounded by the variations in network density. The findings are in tandem with Arman and Dowla (2011) who conducted a study in Sweden focused on the following variables; density, reachability, size composition, centrality, focus, and network construction. The study was exploratory in nature, used informal interviews, and concluded that networking involves social process. Employment of the social networks is deeper in the innovation stage, and the feeble ties are more efficient compared to strong ties.

Table 4.24: Model Summary for Network Density

Indicator	**Coefficient**
R	0.816
R Square	0.665
Adjusted R Square	0.663
Std. Error of the Estimate	0.35362

F-test was utilized, testing the null hypothesis and it was found that network density has significant influence on financial performance of medium sized enterprises in

Kenya. Determination of the existence of regression relationship between network density and financial performance was done via analysis of variance (ANOVA). Table 4.25, representing the ANOVA test indicates that the essence of F-statistic 0.000 is below 0.05, which implies that the null hypothesis was rejected. Therefore concludes that there is an important connection between network density as well as the financial performance of SMEs. Results are in tandem with Setyawati, Shariff and Saud (2011) who carried a study on effects of learning, networking and innovation adoption on successful entrepreneurs in Central Java, Indonesia and concluded that learning and networking have a significant effect on innovation adoption. Consequently, innovation adoption significantly affects the success of the entrepreneurs.

Table 4.25: ANOVA for Network Density

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	50.401	1	50.401	403.053	0.000
Residual	25.385	203	0.125		
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 lack of association between the variables). Findings regarding the beta coefficient of the resultant model as on Table 4.26 indicates that α = 0.819, a constant, is significantly dissimilar from 0, because p- value = 0.000 is below 0.05. The coefficient β = 0.918 is significantly distinct from 0 with a p-value=0.000 and is evidently below 0.05. This was tested at 5% significance level.

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= 0.819+0.918 (network density) + e, is observed as significantly appropriate. The model Firms

financial performance= $\alpha + \beta$ (network density) is consistent as implied by the above test. The results show that network densities contribute importantly to the model because gradient and the constant the p-value is below 0.05. These outcomes suggest that a sole positive unit alteration in network density efficiency contribution to a transformation in financial performance at the 91.8% rate. Therefore, it ratifies that there is a positive linear relationship between financial performance and network density. The following is the fitted equation:

$Y= 1.347 + 0.858X_2 + e$

Table 4.26: Coefficients of Network Density

Variable	Beta	Std. Error	t	Sig.
Constant	0.819	0.168	4.873	0.000
Network Density	0.918	0.046	20.076	0.000

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.

4.7 Network Structure and Financial Performance

4.7.1 Sampling Adequacy

To scrutinize if the collected data was enough and suitable for inferential statistical tests like regression analysis, factor analysis, and others, two major tests were carried out, namely; Barlett's Sphericity Test, and Kaiser-Meyer-Olkin (KMO). The latter determines sampling adequacy. According to Field (2000), data set is considered appropriate and adequate for statistical analysis when the KMO value is more than 0.5.

Results on Table 4.27 indicated that KMO's statistic value as 0.871, and it was considerably high; hence, more than the test's significance critical level that is set at 0.5 according to Field (2000). Moreover, the Bartlett Sphericity Test was quite important as well (Chi-square = 904.09 at 28 degree of freedom, with $p < 0.05$). Table 4.27 summarizes Barlett's and KMO's test results, offering a perfect justification for deeper statistical analysis that was done.

Table 4.27: Network Structure KMO Sampling Adequacy and Bartlett's Sphericity

Kaiser-Meyer-Olkin Measure	0.871
Bartlett's Chi- Square	904.09
Bartlett's df	28
Bartlett's Sig.	0

4.7.2 Factor Analysis

Following the successful tests on reliability and validity using Cronbach alpha and KMO coefficient results, factor analysis was done via the Principal Components Method (PCM) method. The factors were extracted after the Kaiser Criterion in which Eigen value of 1 or more signifies an inimitable element. The entire Variance analysis shows that the 8 statements on network structure can be deducted into 1 factor. The overall variance elucidated by the factor taken out is 57.91% as Table 4.28 indicates.

Table 4.28: Network Structure Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.633	57.915	57.915	4.633	57.915	57.915
2	0.932	11.656	69.57			
3	0.719	8.989	78.559			
4	0.49	6.12	84.679			
5	0.405	5.06	89.739			
6	0.363	4.54	94.28			
7	0.285	3.56	97.84			
8	0.173	2.16	100			

Extraction Method: Principal Component Analysis.

On Table 4.29, the factor loadings for sub-constructs of structural holes are 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 who affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 4.29: 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.

4.7.3 Descriptive Analysis

The study sought to find out how the enterprises benefit 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 as Figure 4.7 illustrates.

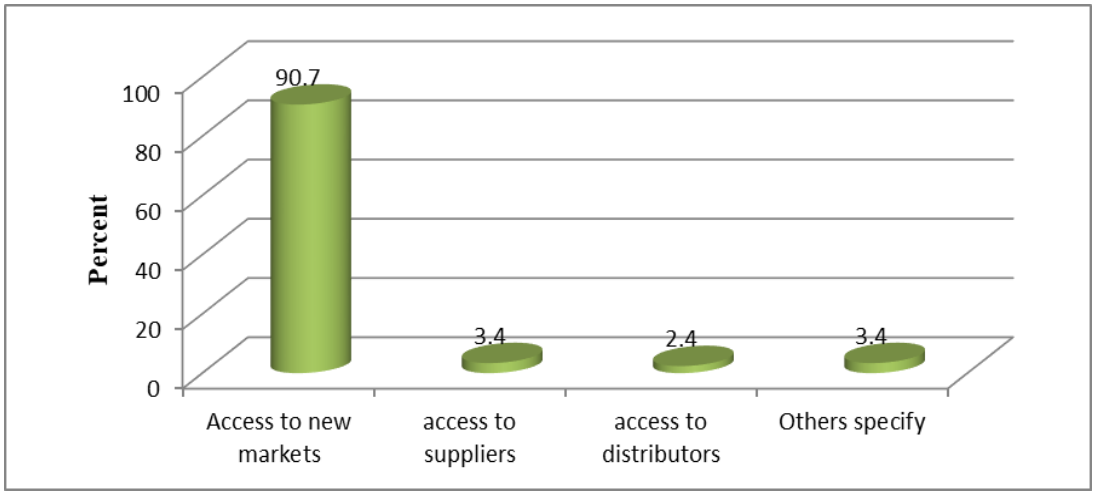

Figure 4.9: Benefits of Network Structure

The results that enterprises benefit from partners in the network structure are 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 (2001) observed that external contacts play a very significant role in procuring the complementary assets as well as identifying entrepreneurial prospects. This is in consistent with the study findings. This implies that partners in the network structure accumulate many benefits to the enterprises for instance access to information, links to customers and provision of goods on credit.

The third 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 do not offer product or service they are seeking. This is represented in Table 4.30.

Table 4.30: 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 are 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's

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 2004).This implies 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 (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 *(*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 comprises 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 Giudici (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 & 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; Bwisa, 2006).Alliances, partnerships, collaborations, or networking will assist the entrepreneur with an access to other individual's 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 do not 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 to join market services and products, share development costs, and for joint procurement and knowledge sharing (Pittaway, 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, and 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 indicates 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.

4.7.4 Network Structure Normality Test

In checking for normality, kurtosis and skewness statistic were adopted for the study as George and Mallerry (2010) recommends. The normal distribution skew value is zero, typically suggesting symmetric distribution, while Kurtosis is the measure of peakness in a distribution. West *et al*. (1996) recommended a reference of important retreat from the normality as the outright skew value > 2, as well as an absolute/outright kurtosis value > 7. However, for this study the recommendation of George and Mallery (2010) who asserted that as a thumb's rule, a variable is rationally adjacent to normal when its kurtosis and skewness have values ranging from -3.0 to + 3.0.

The findings presented in Table 4.31 indicate that network structure had kurtosis coefficient of 0.554, and skewness coefficient of -0.309. Centered on these, structural holes were concluded to be normally distributed because they are usually within the range of ± 3 range as well endorsed by (George & Mallery, 2010).

Table 4.31: Network Structure Normality Test

Network Structure	Statistic	Std. Error
Skewness	-0.309	0.17
Kurtosis	0.554	0.338

4.7.5 Network Structure Linearity Test

Linearity of variables was verified by means of correlation coefficients as Cohen, West and Aiken (2003) suggest. To determine whether there exists a linear relationship, Pearson product of moment's correlation was adopted by the study, and are presented in Table 4.32. The findings designate that the structural holes and the variables, financial performance had a robust positive connection as shown by the correlation coefficient of 0.816, which implied that there existed a positive linear relationship.

The study outcomes show coherence with the research by Barkoczi and Galesic (2016) who did a study on how Social learning strategies amend the influence of network structure on the performance of a group and gained support for the dominance of both poorly connected inefficient, and well-linked-efficient network structures. It was clear that efficient networks outdo inefficient ones when people depend on conventionality by replicating the recurring key among their associates. Yet, inefficient networks prove superior when people imitate their best colleague by copying the one showing the highest payment. Moreover, groups that depend on conformism centered on a minor sample of other members do well in complex responsibilities, while the groups imitating their best performer attain highest performance for minor and simple tasks.

Table 4.32: Network Structure Correlations Coefficients

		Financial performance	Network Structure
Financial performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Network Structure	Pearson Correlation	0.796	1
	Sig. (2-tailed)	0.000	

The scattered plot of financial performance and network structure.is shown on Figure 4.9. The figure reveals that there was a positive relationship between the two

variables. The figure indicates that a positive association exists. Therefore, an increase in the effectiveness of network structure affects performance positively. The outcomes of the study are in agreement with Barkoczi and Galesic (2016) who did a study on the way Social learning strategies adjust the influence of network structure on the performance of a group and found backing for the dominance of both poorly connected inefficient and well-connected efficient network structures. The study showed that efficient networks outdo inefficient ones when people depend on conventionality by replicating the recurrent solution amongst their associates.

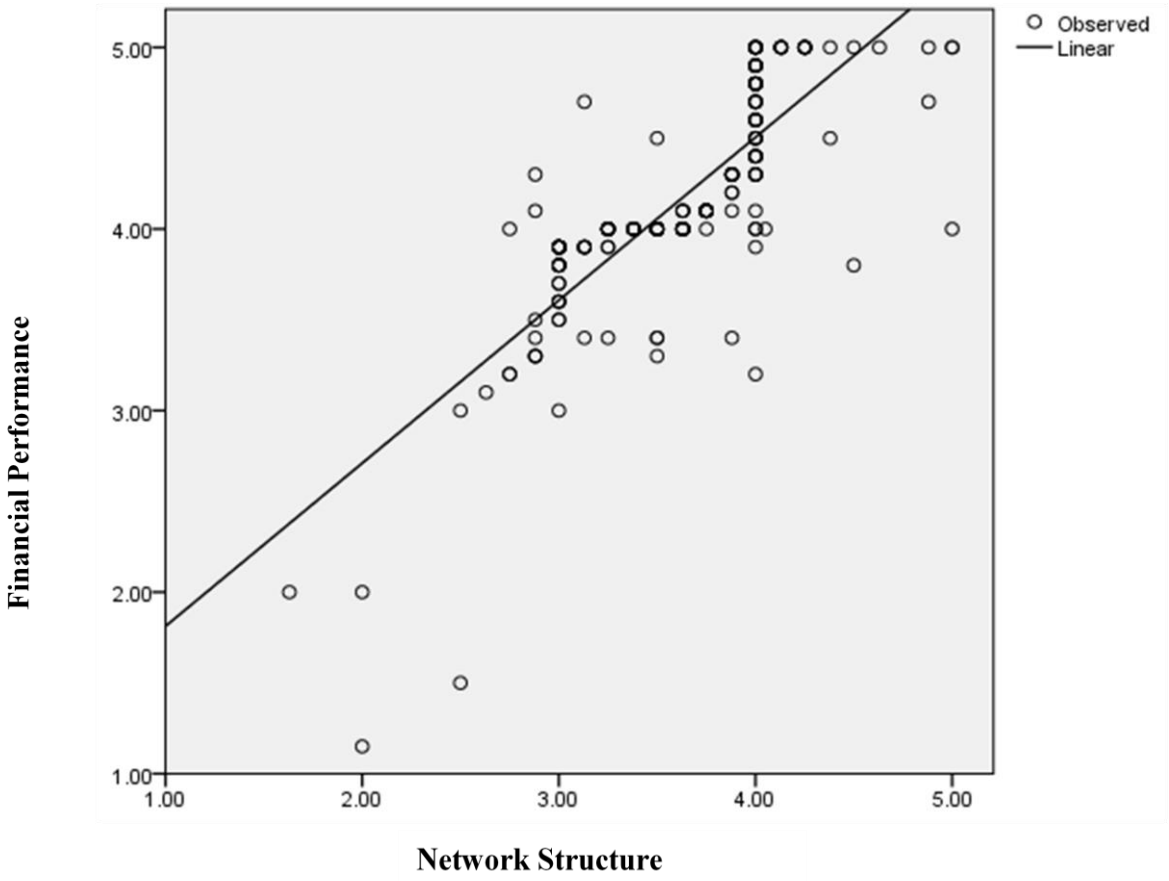

Figure 4.9: Scatter Plot Relationship between Financial Performance and Network Structure

4.7.6 Multi Collinearity

Variance Inflation Factor (VIF) tested multi collinearity in the study. A multi collinearity problem is indicated by a VIF greater than 10 (VIF ≥ 10). According to Montgomery (2001), the cutoff threshold of 10 and above indicates the existence of multi collinearity whereas the tolerance statistic values under 0.1 imply a solemn problem and those values under 0.2 signify a possible problem. The results in Table 4.33 indicate that the VIF value for network structure was established to be 6.59 while its tolerance statistic was reported to be 0.252. Based on these the assumption of no multi collinearity between predictor variables was thus not rejected as the reported VIF and tolerance statistics were within the accepted range.

Table 4.33: Network Structure Multi Collinearity

Collinearity Statistics	
Tolerance	VIF
0.252	6.59

4.7.7 Relationship between Network Structure and Financial Performance

Regression analysis was done in order to empirically find out if network structure were an essential factor of financial performance of the Kenyan-based medium sized enterprises. Table 4.34 regression results signify that the regression's fit alignment for the regression of the network structure alongside the financial performance was satisfactory. A 0.634-squared value of R signifies that 63.4 % of total variations in the financial performance are expounded by the variations in network structure. These results are 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 performance while rise in network

centralism leads to reduced performance. Therefore, it can be deduced that improved network structure can positively influence the financial performance of medium sized enterprises in Kenya.

Table 4.34: 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) Table 4.35 representing the ANOVA test indicates that the essence of F-statistic 0.000 is below 0.05 which implies that null hypothesis has been rejected and thus concludes that there is an important connection between network structure as well as the financial performance of SMEs. The findings imply that network structures were statistically significant towards clarifying more about the financial performance of medium sized enterprises in Kenya.

Table 4.35: 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 structure. The null hypothesis indicates that, β (beta) = 0, (implying a lacking relationship between these variables). Findings regarding the beta coefficient of the resultant model as in Table 4.36 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 was tested at 5% significance level.

This suggests that the null hypothesis $\beta_1=0$ has been rejected while the alternate hypothesis $\beta_1\neq0$ 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 structure contributes importantly to the model because gradient and the constant p-value are below 0.05. These outcomes suggest that a sole positive unit alteration in network structure 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 structure. The following is the fitted equation:

$Y= 0.915 + 0.898X_3+ e$

Table 4.36: 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 are inconsistent 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 stronger with grouping, although it has a negative correlation with network's average degree and network structure.

4.8 Network Ties and Financial Performance

4.8.1 Sampling Adequacy

To scrutinize if the collected data was enough and suitable for inferential statistical tests like regression analysis, factor analysis, and others, two major tests were carried out, namely; Barlett's Sphericity Test, and Kaiser-Meyer-Olkin (KMO). The latter determines sampling adequacy. According to Field (2000), data set is considered appropriate and adequate for statistical analysis when the KMO value is more than 0.5.

The outcomes in Table 4.37 indicate that the value of KMO statistic was 0.913, and thus it was quite high as it was greater than the set critical significance level of 0.5 (Field, 2000). Barlett's Test of Sphericity was used as well, besides the KMO test, and it proved highly critical (Chi-square = 1075.65 and 36 degree of freedom, with p-value at $p < 0.05$). The Barlett's and KMO tests results have been summarized as shown in the Table 4.37. The findings offer an efficient justification for deeper statistical analysis to be done.

Table 4.37: Network Ties KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.913
Bartlett's Chi- Square	1075.65
Bartlett's df	36
Bartlett's Sig.	0

4.8.2 Factor Analysis

Following the successful tests on reliability and validity using Cronbach alpha and KMO coefficient results, factor analysis was done via the Principal Components Method (PCM) method. The factors were extracted after the Kaiser Criterion in which Eigen value of 1 or more signifies an inimitable element. The entire Variance analysis shows that the 10 statements on the network ties have the potential of being factored into 1 component. Table 4.38 indicates that the overall variance elucidated by the factor taken out is 58.84%.

Table 4.38: Network Ties Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.296	58.846	58.846	5.296	58.846	58.846
2	0.804	8.932	67.778			
3	0.694	7.71	75.488			
4	0.574	6.372	81.861			
5	0.48	5.338	87.199			
6	0.388	4.311	91.509			
7	0.315	3.504	95.013			
8	0.286	3.178	98.192			
9	0.163	1.808	100			

Extraction Method: Principal Component Analysis.

The factor loadings for sub-constructs of network ties are presented in Table 4.39. 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 who affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 4.39: Factor Loading Network Ties

Statement	Component
Our enterprise employees consult each other as they work	0.598
Our enterprise encourage personal membership in networks	0.796
Our enterprise operate in knowledge-exhaustive subdivisions which are novelty-driven	0.847
Our enterprise engage with networks that are efficiency-driven	0.895
Linkages to financiers is a benefit of business networks	0.751
Our enterprise use personal networks to access valuable resources for the company	0.758
Our firm has a wide and diverse network	0.777
The network benefit the enterprise by providing professional advice	0.834
Referral to potential customers come through business networks	0.592

Extraction Method: Principal Component Analysis.

4.8.3 Descriptive Analysis

The participants were urged to state the bond between customers and their enterprise, 95% of the respondents indicated strong while 4% indicated weak and only 1% indicated that there was no bond as shown in Figure 4.10.

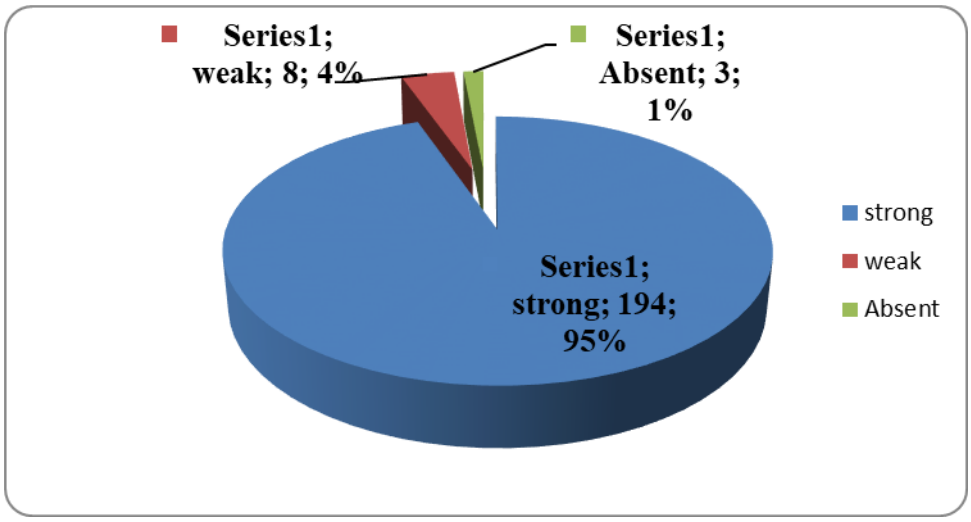

Figure 4.10: Network Bonding among Enterprises

Results are inconsistent with those of Brush (2006) who did a study on a research review on women entrepreneurs and concluded that female and male business networks are meaningfully diverse and that women businesspersons participate in less “weak-tie” networking than men. Moreover, the rules and regulations may have distinctive *positive* influence on female entrepreneurship since it is closely associated with eradicating (or at least relieving) institutional mannerisms that hamper the rights of women, together with their economic rights. It has also been argued by Gathungu, Aiko and Machuki (2014) that a business capacity to directly associate itself to the prospects in the outside setting positively controls the connection between performance and EO, while its capacity to uphold a sequence of solid ties in a network promotes the association between performance and EO. The findings imply that medium sized enterprises had strong network ties with their partners, which would be associated with good relationships and improved financial performance due to the links.

The fourth goal of this study involved finding out if network ties influences the financial performance of medium sized enterprises in Kenya. Using Table 4.40 the study illustrates that 90.7% of the respondents agreed that their enterprise employees consulted each other as they work, 74.7% agreed that their enterprises encouraged personal membership in networks and 79% agreed that their enterprises operated in knowledge-exhaustive segments, which are novelty-driven.

Furthermore, 78.5% of the respondents agreed that their enterprise engaged with networks that are efficiency-driven, 78.1% agreed that linkages to financiers was a benefit of business networks while 79.1% agreed that their enterprise used personal networks to access valuable resources for the company and 81.5% of the respondents agreed that their firm had a wide and diverse network. Of all respondents, 76.6% agreed that the network benefit the enterprise by providing professional advice and 71.7% agreed that referral to potential customers came through business networks. The summary of the results is depicted in Table 4.40.

Table 4.40: Network Descriptive Statistics

Statement	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	Mean
Our enterprise employees consult each other as they work	0.0%	1.5%	7.8%	43.9 %	46.8%	4.36
Our enterprise encourage personal membership in networks	0.5%	3.4%	21.5%	65.9 %	8.8%	3.79
Our enterprise function in knowledge-exhaustive sectors which are novelty-driven	0.0%	2.9%	18.0%	70.2 %	8.8%	3.85
Our enterprise engage with networks that are efficiency-driven	0.0%	1.5%	20.0%	67.8 %	10.7%	3.88
Linkages to financiers is a benefit of business networks	0.0%	2.0%	20.0%	64.9 %	13.2%	3.89
Our enterprise use personal networks to access valuable resources for the company	0.5%	3.4%	17.1%	69.3 %	9.8%	3.84
Our firm has a wide and diverse network	0.0%	1.5%	17.1%	68.3 %	13.2%	3.93
The network benefit the enterprise by providing professional advice	0.5%	2.0%	21.0%	66.8 %	9.8%	3.83
Referral to potential customers come through business networks	0.0%	1.0%	27.3%	60.0 %	11.7%	3.82
Average	0.2%	2.1%	18.9%	64.1 %	14.8%	3.91

The study findings on whether enterprise employees consulted each other, encouraged personal membership and operated in knowledge-intensive sectors that are innovation-driven are consistent with those of a five firms. The survey of 38 work groups was conducted whereby all of them performed complex tasks where the groups were performing relatively complex tasks (Sparrowe, Liden, & Kraimer, 2001). They found out that under a multifaceted assignment, clusters with devolved communication forms did better compared to the ones under centralized patterns of

communication. It was established from the study that there existed some robust negative relations between performance and the team's external ties.

Jack (2008), studying the subtleties of advancement in entrepreneurial networks, asserts that the environmental entrepreneurial knowledge of businesspersons alongside their networks are unified. For example, investors may deliberate on a 'fact', which may have been learnt from amongst their strong-tie relations, and establish their individual view and assess the influences following the deliberation process. Moreover, it has been argued that social relations 'construct' the market and the entrepreneurs employ strong ties in exploiting the knowledge of associates, to acquire in formation from the experiences, and to influence the network understanding to modify the strategic venture direction. Ultimately, Jack (2008) argue that people that are better linked have more access to pertinent information, which agrees with the current study.

Furthermore, Wright (2007) suggest that businesspersons have to launch network connections in order to gain access to suitable learning, knowledge, and resources, to establish 'a positive dais for internationalization'. Moreover, it has been implied that the entrepreneurial networks are vital assets for those venture trying to internationalize their activities (Andersson & Wictor, 2003). Ojala (2009) also suggests that SMEs that are knowledge-intensive create new network relations or exploit the prevailing relations as they spread their market scope to newer far away markets. Lastly, the discussion above recommends a positive link between internationalization and operation in the entrepreneurial networks.

Results on medium sized enterprise engaging with networks that are efficiency-driven linkages to financiers that are beneficial to business networks, enterprises using personal networks to access valuable resources for the company and that their firm possessing a wide and diverse network are in tandem with Rindfleisch and Moorman (2001) who studied the utilization and attainment of material in multiform emergent product coalitions. They argued that strong ties possess two key qualities; deep relational entrenchment and extensive knowledge redundancy. In addition, the findings propose that embeddedness is positively associated with both information

acquisition and utilization while redundancy is negatively associated with information acquisition but positively associated within formation utilization (Rindfleisch & Moorman, 2001).

Moreover, another study by a panel on 500 sophomores indicated that each student's structural network position by the use of ties regarding organizational participation and awareness of other relevant individuals in the university had no correlation with academic excellence (cumulative GPA) but with equivalent satisfaction with courses and university (Trippet, 2005). The mean score, 3.91, for responses in this section indicates that most respondents agreed about the statements concerning the influence of network ties on financial performance of medium sized enterprises in Kenya. The results prove coherence with deeper research that has paid more attention on the circumstances, which determine the introduction of centralized structured pattern of ties. Groups were assigned either as low-stress or as high-stress, and were established that the stressed ones had a tendency to develop centralized communication patterns and vice versa (Argote, Turner, & Fichman, 1989). Miller (2000) whereby half of the studied groups were issued high-complexity task version, and the other half were specified a low-complexity style conducted an experiment. It was established that higher number of centralized patterns was evident in those groups that functioned on low complexity compared to the rest that engaged with high-complexity undertaking.

Of all the respondents, 76.6% settled on the idea that network benefits the enterprise by providing professional advice and 71.7% agreed that referral to potential customers came through business networks. The results are in line with Rutten and Boekema (2007) who confirm that entrenchment in a social context or in networks or permits people to gain from the social principal of that specific context. The stronger the consistency of this social setting (web of social relationships) the stronger the network ties, the vast the influence on business performance and on human conduct.

In checking for normality, kurtosis and skewness statistic were adopted for the study as George and Mallerry (2010) recommends. The normal distribution skew value is zero, typically suggesting symmetric distribution, while Kurtosis is the measure of peakness in a distribution. West (1996) recommended a reference of important

retreat from the normality as the outright skew value > 2, as well as an absolute/outright kurtosis value > 7. However, for this study the recommendation of George and Mallery (2010) who asserted that as a thumb's rule, a variable is rationally adjacent to normal when its kurtosis and skewness have values ranging from -3.0 to + 3.0. The findings presented in Table 4.41 indicate that network ties had kurtosis coefficient of 1.769, and skewness coefficient of -0.666. Centered on these, network ties were concluded to be normally distributed because they are usually within the range of ± 3 range as well endorsed by George and Mallery (2010).

Table 4.41: Network Ties Normality Test

Network Ties	Statistic	Std. Error
Skewness	-0.666	0.17
Kurtosis	1.769	0.338

4.8.5 Network Ties Linearity Test

Linearity of variables was verified by means of correlation coefficients as Cohen, West and Aiken (2003) suggest. To determine whether there exists a linear relationship, Pearson product of moment's correlation was adopted by the study, and are presented in Table 4.42. The findings designate that the structural holes and the variables, financial performance had a robust positive connection as shown by the correlation coefficient of 0.835, which implied that there existed a positive linear relationship.

Results are consistent with those of Peng (2008) who explored the influence of inter-business network ties on business inventive performance is liable to firm's strategic environmental uncertainty and orientation. It was found that strong ties positively influence additional innovation whereas the weak ties positively influence fundamental innovation. In the nurturing of deep-seated innovation, the weak ties prove highly efficient as the enterprise assumes prospector angle.

Table 4.42: Network Ties Correlations Coefficients

		Financial performance	Network Ties
Financial performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Network Ties	Pearson Correlation	0.835	1
	Sig. (2-tailed)	0.000	

The Figure 4.11 shows the scattered plot of financial performance and network ties. The figure reveals that there occurred a positive connection between the variables. The figure indicates that a positive relationship exists. Therefore, increased effectiveness of network ties affects performance positively.

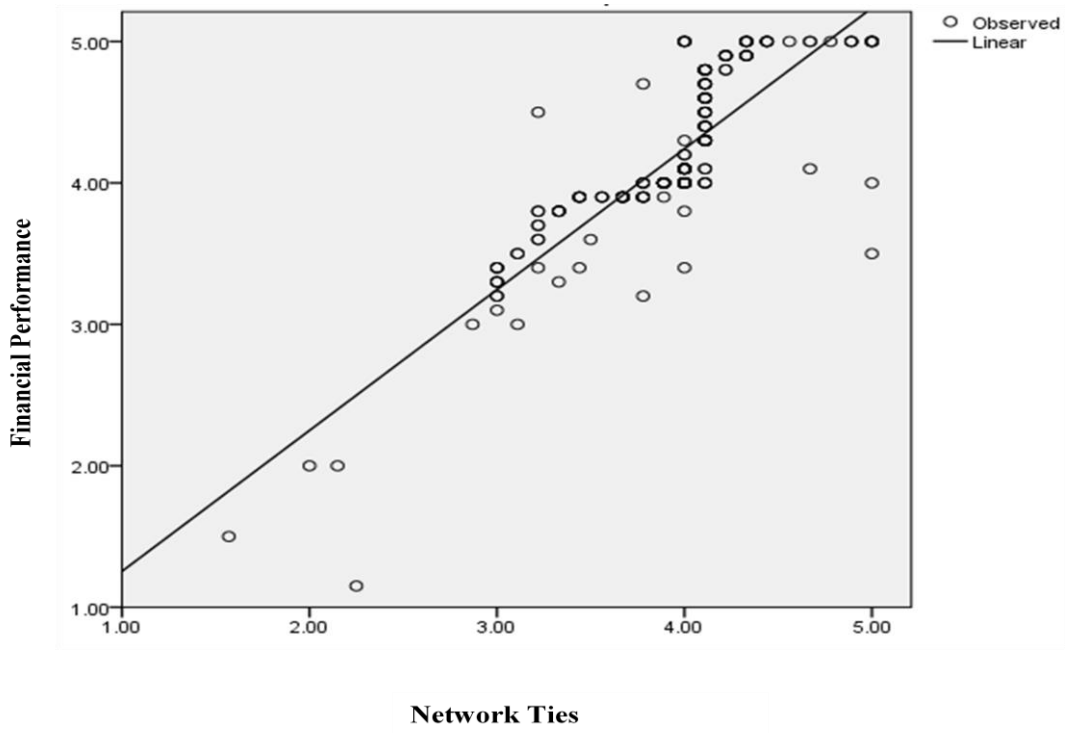

Figure 4.11: Scatter Plot Relationship between Financial Performance and Network Ties

4.8.6 Multi Collinearity

Variance Inflation Factor (VIF) tested multi collinearity in the study. A multi collinearity problem is indicated by a VIF greater than 10 (VIF ≥ 10). According to Montgomery (2001), the cutoff threshold of 10 and above indicates the existence of multicollinearity whereas the tolerance statistic values under 0.1 imply a solemn problem and those values under 0.2 signify a possible problem. The results in Table 4.43 indicate that the VIF value for network ties was established to be 5.632 while its tolerance statistic was reported to be 0.178. Based on these the assumption of no multicollinearity between predictor variables was thus not rejected as the reported VIF and tolerance statistics were within the accepted range.

Table 4.43: Network Ties Multi Collineariy

Collinearity Statistics	
Tolerance	VIF
0.178	5.632

4.8.7 Relationship between Network Ties and Financial Performance

Regression analysis was done in order to empirically find out if network ties were an essential factor of financial performance of the Kenyan-based medium sized enterprises. Table 4.43 regression results signify that the regression's fit alignment for the regression of the network ties alongside the financial performance was satisfactory. A 0.698-squared value of R of signifies that 69.8% of total variations in the financial performance are expounded by the variations in network density. The findings are in tandem with Rindfleisch and Moorman (2001) who studied the utilization and attainment of material in multiform emergent product coalitions. They argued that strong ties possess two key qualities; deep relational entrenchment and extensive knowledge redundancy. In addition, the findings propose that embeddedness is positively associated with both information acquisition and utilization while redundancy is negatively associated with information acquisition

but positively associated with information utilization (Rindfleisch & Moorman, 2001).

Table 4.44: Model Summary for Network Ties

Indicator	Coefficient
R	0.835
R Square	0.698
Adjusted R Square	0.696
Std. Error of the Estimate	0.33579

F-test was established, testing the null hypothesis and it was found that network ties have no significant influence on financial performance of medium sized enterprises in Kenya. Determination of the existence of regression relationship between network ties and financial performance was done via analysis of variance (ANOVA). Table 4.45, represents the ANOVA test, which indicates that the essence of F-statistic 0.000 is below 0.05, which revealed that null hypothesis has been rejected and thus concludes that there is an important connection between network ties as well as the financial performance medium sized enterprises. The findings imply that network ties were statistically significant towards clarifying more about the financial performance of medium sized enterprises in Kenya.

Results are inconsistent with those of Brush (2006) who did a study on a research review on women entrepreneurs and concluded that female and male business networks are meaningfully diverse and that women businesspersons participate in less “weak-tie” networking than paid men. Moreover, the rules and regulations may have distinctive *positive* influence on female entrepreneurship since it is closely associated with eradicating (or at least relieving) institutional mannerisms that hamper the rights of women, together with their economic rights.

Table 4.45: ANOVA for Network Ties

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	52.896	1	52.896	469.121	0.000
Residual	22.889	203	0.113		
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 ties. 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 4.46 indicates that α = 0.258, a constant, is significantly dissimilar from 0, because p- value = 0.000 is below 0.05. The coefficient β = 0.996 is significantly distinct from 0 with a p-value=0.000 and is evidently below 0.05. This was tested at 5% significance level.

This suggests that the null hypothesis $\beta_1=0$ has been rejected while the alternate hypothesis $\beta_1\neq0$ has been held suggesting that the model of, Y= 0.258+0.996 (network ties) + e, is observed as significantly appropriate. The model Firms financial performance= α + β (network ties) is consistent as implied by the above test. The results show that network ties contribute importantly to the model because gradient and the constant p-value is below 0.05. These outcomes propose that a sole positive unit alteration in network ties efficiency contribution to a transformation in financial performance at the 99.6% rate. Therefore, it confirms that there is a positive linear relationship between financial performance and network ties. The following is the fitted equation:

$Y= 0.258 + 0.996X_4+ e$

Table 4.46: Coefficients of Network Ties

Variable	Beta	Std. Error	t	Sig.
Constant	0.258	0.181	1.424	0.156
Network Ties	0.996	0.046	21.659	0.000

The study findings show inconsistency with a field study of 38 work groups, from five firms, which was conducted whereby all of them performed fairly complex tasks where the groups were performing relatively complex tasks (Sparrowe, Liden, & Kraimer, 2001). They found out that under a multifaceted assignment, clusters with devolved communication forms did better compared to the ones under centralized patterns of communication. It was established from the study that there existed a robust negative relations between performance and the team's external ties.

4.9 Network Centrality and Financial Performance

4.9.1 Sampling Adequacy

To scrutinize if the collected data was enough and suitable for inferential statistical tests like regression analysis, factor analysis, and others, two major tests were carried out, namely; Barlett's Sphericity Test, and Kaiser-Meyer-Olkin (KMO). The latter determines sampling adequacy. According to Field (2000), data set is considered appropriate and adequate for statistical analysis when the KMO value is more than 0.5.

Results of the study indicated that KMO's statistic value as 0.892, and it was considerably high; hence, more than the test's significance critical level that is set at 0.5 according to Field (2000). Moreover, the Bartlett Sphericity Test was quite important as well (Chi-square = 1228.03 at 45 degree of freedom, with $p < 0.05$). Summarizes of Barlett's and KMO's test results, offering a perfect justification for deeper statistical analysis is shown in Table 4.47.

Table 4.47: Network Centrality KMO Sampling Adequacy and Bartlett's Sphericity

Kaiser-Meyer-Olkin Measure	0.892
Bartlett's Chi- Square	1228.03
Bartlett's df	45
Bartlett's Sig.	0

4.9.2 Factor Analysis

Following the successful tests on reliability and validity using Cronbach alpha and KMO coefficient results, factor analysis was done via the Principal Components Method (PCM) method. The factors were extracted after the Kaiser Criterion in which Eigen value of 1 or more signifies an inimitable element. The entire Variance analysis shows that the 10 statements on network centrality can be deducted into 1 factor. The overall variance elucidated by the factor taken out is 57.53% as Table 4.48 indicates.

Table 4.48: Centrality Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.754	57.536	57.536	5.754	57.536	57.536
2	0.918	9.185	66.72			
3	0.694	6.942	73.662			
4	0.621	6.208	79.871			
5	0.527	5.273	85.143			
6	0.487	4.868	90.011			
7	0.297	2.971	92.982			
8	0.281	2.807	95.789			
9	0.229	2.295	98.084			
10	0.192	1.916	100			

Extraction Method: Principal Component Analysis.

The factor loadings for sub-constructs of network centrality are presented in Table 4.39. 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 who affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 4.49: Factor Loading Network Centrality

Statement	Component
Our enterprise operate in an environment that are efficiency-driven is always the first to learn about new market conditions	0.599
Our enterprise operate in an environment that offers strategies about competitors	0.75
Partnership opportunity information is available to our enterprise through networks	0.785
Our enterprise is visible to potential resource suppliers	0.817
People are willing to share resources and information with our enterprise	0.841
Our enterprise has relatively quicker access to information	0.786
Networking facilitates sharing of resources	0.776
Pooling resources for social responsibility is made possible through networks	0.792
Flow of information that allows it to keep aware of new developments is through networking	0.787
Our enterprise has greater power and influence over other enterprises in the industry	0.614

Extraction Method: Principal Component Analysis.

4.9.3 Descriptive Analysis

The participants were urged to indicate the other methods that their enterprise previously access information. The results are presented in Table 4.50, which showed that 97.6% of the respondents indicated through the Internet, and the rest indicated through facebook, Twitter and WhatsApp. Results are in line with Shi, Rui and Whinston (2014) who showed that on Twitter, where ties are highly asymmetric, a user is more likely to retweet posts by weak ties (e.g., a tweet from a celebrity who does not follow the user) than to retweet posts by people who also follow him or her.

Levin and Cross (2004) surveyed employees in an organizational information-seeking context and observed that much of the receptiveness of individuals to information from strong ties is attributable to trust. Once trust is controlled, weak ties become more important.

Table 4.50: Access Information

Access Information	Frequency	Percent
Internet	200	97.6
Facebook	1	0.5
Twitter	1	0.5
WhatsApp	2	1
Others specify	1	0.5
Total	205	100

The fifth study objective involved determining whether network centrality has an influence on the financial performance of medium sized enterprises in Kenya. 85.9% of all respondents were in agreement that their enterprises operate in an environment that are efficiency-driven was always the first to learn about new market conditions, 85.4% agreed that their enterprises operated in an environment that offers strategies about competitors and 84.4% agreed that partnership opportunity information was available to their enterprise through networks as shown in Table 4.51.

Ninety two percent of the total participants agreed that their enterprise was visible to potential resource providers, while 88.7% agreed that people can willingly part with resources and information with their enterprise and 88.3% agreed that their enterprises had relatively quicker access to information. In addition, 87.8% of the respondents agreed that networking facilitated sharing of resources, 82% agreed that pooling resources for social responsibility was made possible through networks and 88.8% agreed that flow of information that allows it to keep aware of new developments was through networking.

Finally, 84.4% of the respondents agreed that their enterprises had greater power and influence over other enterprises in the industry. The mean-response-score for this part was 4.08, and it specifies that most of the participants had agreed on the statements about the influence of network centrality on financial performance of medium sized enterprises in Kenya. These results are depicted in Table 4.51.

Table 4.51: Network Centrality Descriptive Statistics

Statement	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	Mean
Our enterprise operate in an environment that are efficiency-driven is always the first to be informed of the latest market conditions	1.5%	2.4%	10.2%	43.9%	42.0%	4.22
Our enterprise operate in an environment that offers strategies about competitors	0.5%	3.4%	10.7%	56.6%	28.8%	4.1
Partnership opportunity information is available to our enterprise through networks	0.5%	3.4%	11.7%	62.4%	22.0%	4.02
Our enterprise is visible to potential resource providers	0.0%	1.5%	6.3%	70.7%	21.5%	4.12
People can willingly part with resources and information	0.0%	2.9%	8.3%	66.3%	22.4%	4.08
Our enterprise has relatively quicker access to information	0.0%	2.4%	9.3%	66.8%	21.5%	4.07
Networking facilitates sharing of resources	0.0%	3.4%	8.8%	68.3%	19.5%	4.04
Pooling resources for social responsibility is made possible through networks	1.0%	3.9%	13.2%	64.4%	17.6%	3.94
Flow of information that allows it to keep aware of new developments is through networking	0.0%	2.9%	8.3%	63.4%	25.4%	4.11
Our enterprise has greater power and influence over other enterprises in the industry	1.0%	2.4%	12.2%	54.6%	29.8%	4.1
Average	0.5%	2.9%	9.9%	61.7%	25.1%	4.08

The outcomes of the study were evidence of the participant's agreement that their enterprises operated in an environment that is efficiency-driven, always learn of

latest market trends first the first, operated in an environment that offers strategies about competitors and that partnership opportunity information was available to their enterprise through networks. The results are agreed with previous studies Kilduff and Tsai, (2003) High network centrality is an indication that entrepreneurs can access various alternative suppliers of significant resources. That kind of privileged access is especially advantageous to highly entrepreneurial enterprises because entrepreneurial orientation establishes a resource-rigorous strategic stance, which encompasses a lot of uncertainty (Wiklund & Shepherd, 2005). Results are in agreement with previous research, which claims that contacts, seminars, trade fairs, external consults, and deliberation with relatives are essential sources for the formation of personal network (Donckels &Lambrecht, 1995) as cited in Premaratne, 2002. Moreover, they studied the influence of the formation of personal network for the development of SME, and the outcomes endorse that the formation of network essentially influenced the growth of SME.

The findings imply that high network centrality, hence, expedites an entrepreneurial orientation due to an increased company's capability to rapidly classify, access, and rally the external resources. The results of the study agreed with over 88% that their enterprise were visible to the potential resource suppliers, people were willing to part with resources and information with their enterprise and that their enterprises had relatively quicker access to information. The study findings show coherence with the ones of Brass, Galaskiewicz, Greve, and Tsai, (2004) who suggested that companies having central network orientation enjoy various benefits that enhance improved performance. Being situated at the convergence of resource flows and information, a central enterprise may become the first to hear of latest market trends, partnership opportunities, and competitors' strategies (Powellet, 1996). The study findings are in agreement with Bono (2013) who examined the role of personality and network centrality in community oriented pro-social behavior. Results indicated that personality traits contributed significantly to the attainment of central network positions directly and indirectly via prior pro-social community activities. This assumes that visibility of medium sized enterprises to potential resource providers is key for it facilitates quicker access to information.

In addition, the respondents agreed that networking facilitated sharing of resources that pooling resources for social responsibility was made possible through networks and that flow of information allows it to keep aware of new developments through networking. High network centrality indicates that entrepreneurs have access to many alternative providers of valuable resources (Kilduff &Tsai, 2003). Similarly, a research by Cho, (2007) on master's students demonstrated that centrality in adversarial ties, communication, and friendship, positively influenced students grades and attitudes. Other researches on graduate students indicated that academic successes were positively correlated to external connectivity levels (beyond university) showing negative correlation to the individual friendship network density (Pilbeam & Denyer, 2009; Secundo & Grippa, 2009).This suggests that sharing of resources, flow of information and pooling of resources for social responsibility among medium sized enterprises is made possible as a result of networking.

Finally, 84.4% of the respondents agreed that their enterprises had greater power and influence over other enterprises in the industry. The mean response score for this subdivision was 4.08, which specifies that most of the participants were in agreement with statements concerning the influence of network centrality on financial performance of Kenyan-based medium sized enterprises. The study outcomes show coherence with a research was done on the pre-sophomore college students and it was found that learners that had central networks, felt more satisfied and were willing to proceed studying at the university (Thomas, 2000). Nonetheless, a more precise analysis outlined the essence of peculiar ties toward the achievement of academic success. The findings also agree with Kalm (2012) research on the effect of networking on the performance of firms in Finland and concluded that trade fairs, trade publications, scientific journals, conferences, and customers are the most significant sources of information. Nevertheless, the absence of importance of the universities and research institutes as sources of information is alarming, particularly since the access to the latest information is among the central advantages of management's network relationships. However, this study outcome present a fascinating disparity to the literature, thus suggesting that companies gain from establishing new and stronger ties with these institutions. This deduces that the

enterprises orientation in the network influences the financial performance of medium enterprises.

4.9.4 Network Centrality Normality Test

In checking for normality, kurtosis and skewness statistic were adopted for the study as George and Mallerry (2010) recommends. The normal distribution skew value is zero, typically suggesting symmetric distribution, while Kurtosis is the measure of peakness in a distribution. West (1996) recommended a reference of important retreat from the normality as the outright skew value > 2, as well as an absolute/outright kurtosis value > 7. However, for this study the recommendation of George and Mallery (2010) who asserted that as a thumb's rule, a variable is rationally adjacent to normal when its kurtosis and skewness have values ranging from -3.0 to + 3.0. The findings presented in Table 4.52 indicate that network centrality had kurtosis coefficient of 1.582, and skewness coefficient of -0.483. Centered on these, network centralities were concluded to be normally distributed because they are usually within the range of ± 3 range as well endorsed by George and Mallery (2010).

Table 4.52: Network Centrality Normality Test

Network Centrality	Statistic	Std. Error
Skewness	-0.483	0.17
Kurtosis	1.582	0.338

4.9.5 Network Centrality Linearity Test

Linearity of variables was verified by means of correlation coefficients as Cohen, West and Aiken (2003) suggest. To determine whether there exists a linear relationship, Pearson product of moment's correlation was adopted by the study, and are presented in Table 4.53. The findings designate that the network centrality and the variables, financial performance had a robust positive connection as shown by the

correlation coefficient of 0.895, which implied that there existed a positive linear relationship.

The study findings agree and are consistent with what Grewal, Lilien, and Mallapragada (2006) claim as they found a positive correlation between the triumph of an open-source venture and the between-ness centrality of its managers in the intra-organizational network. Other studies focusing on the between-ness centrality's role in processes of diffusion engrossed on seeding, indicating that seeding nodes endowed with great between-ness centrality depict a positive influence on overall development (Hinz, 2011; Banerjee, 2013; Mochalova & Nanopoulos, 2014). Nevertheless, it was establishment that the local between-ness of a node negatively affects the extent of whereby content (specially, videos from YouTube) seeded by the node eventually spreads across the network (Yoganarasimhan, 2012).

Table 4.53: Network Centrality Correlations Coefficients

		Financial performance	Network centrality
Financial performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Network centrality	Pearson Correlation	0.895	1
	Sig. (2-tailed)	0.000	

The scatter plot of financial performance and network centrality reveals the existence of a positive relation between these two variables as shown in Table 4.53. This implies that there exists a positive connection between both network centrality and financial performance. Therefore, an increase in the effectiveness of network centrality affects financial performance positively. Results are in support of another research whereby it was established that a positive link exists between an open-source venture success and between-ness (Grewal, Lilien, & Mallapragada, 2006) who found a positive correlation between the success of an open-source project and the between-ness centrality of its managers in the intra-organizational network.

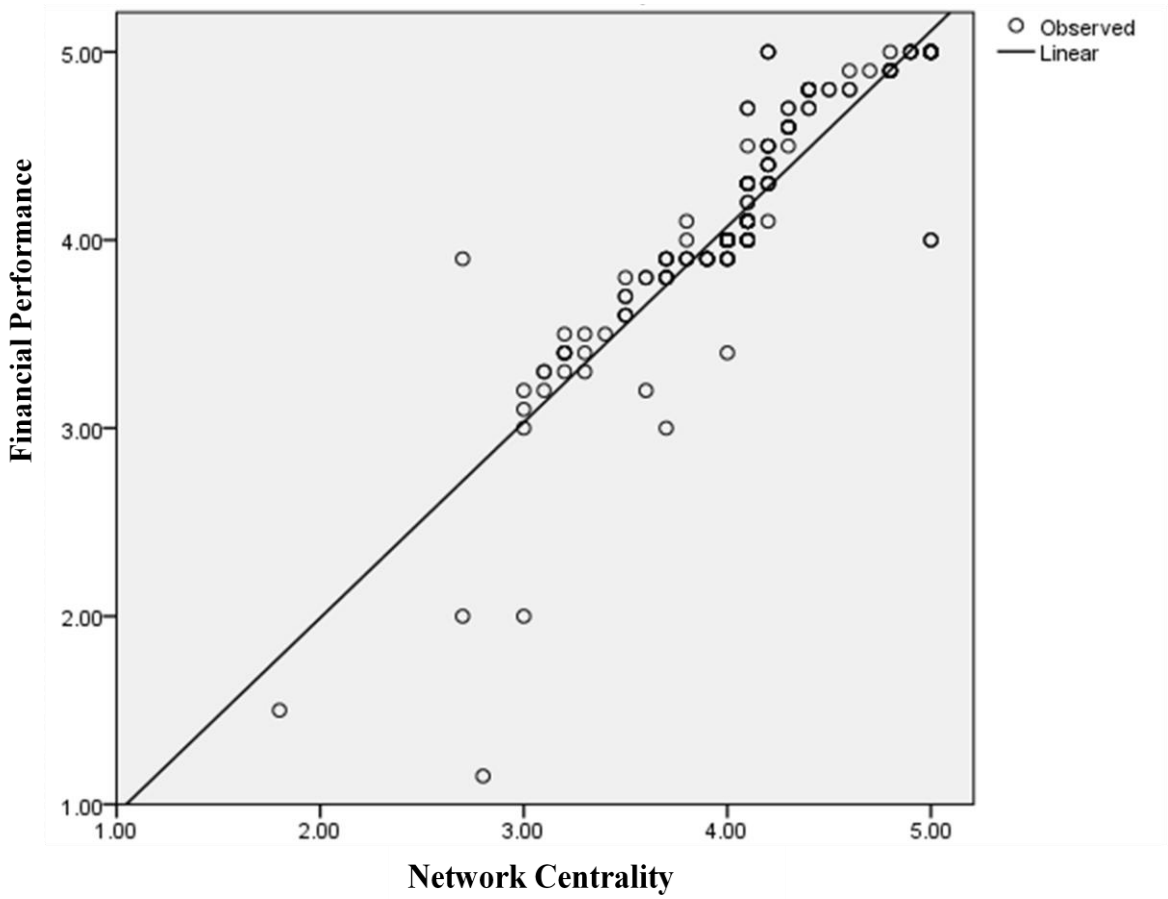

Figure 4.12: Scatter Plot Relationship between Network Centrality and Financial Performance

4.9.6 Multi Collinearity

Variance Inflation Factor (VIF) tested multi collinearity in the study. A multi collinearity problem is indicated by a VIF greater than 10 (VIF ≥ 10). According to Montgomery (2001), the cutoff thresholds of 10 and above indicate the existence of multi collinearity whereas the tolerance statistic values under 0.1 imply a solemn problem and those values under 0.2 signify a possible problem. The results in Table 4.43 indicate that the VIF value for network centrality was established to be 4.455 while its tolerance statistic was reported to be 0.224. Based on these the assumption of no multi collinearity between predictor variables was thus not rejected as the reported VIF and tolerance statistics were within the accepted range.

Table 4.54: Network Centrality Collinearity

Collinearity Statistics	
Tolerance	VIF
0.224	4.455

4.9.7 Relationship between Network Centrality and Financial Performance

Regression analysis was done in order to empirically find out if network centrality were an essential factor of financial performance of the Kenyan-based medium sized enterprises. Table 4.55 regression results signify that the regression's fit alignment for the regression of the network centrality alongside the financial performance was satisfactory. A 0.801-squared value of R signifies that 80.1% of total variations in the financial performance are expounded by the variations in network centrality. The findings are in tandem with those of Mochalova and Nanopoulos (2014) who investigated the connection between closeness centrality of a node and centrality's role towards development, and indicated a relatively weak association between centrality and growth.

Table 4.55: Model Summary for Network Centrality

Indicator	**Coefficient**
R	0.895
R Square	0.801
Adjusted R Square	0.8
Std. Error of the Estimate	0.27244

F-test was utilized, testing the null hypothesis and it was found that network centrality has significant influence on financial performance of medium sized enterprises in Kenya. Determination of the existence of regression relationship between network centrality and financial performance was done via analysis of

variance (ANOVA). Table 4.25, representing the ANOVA test indicates that the essence of F-statistic 0.000 is below 0.05, which implies that null hypothesis has been rejected, and thus concludes that there is an important connection between network centrality as well as the financial performance of medium sized enterprises.

The findings revealed that network centrality influences financial performance of medium sized enterprises in Kenya. Results agree with Klein, Lim, Saltz and Mayer (2001) who examined the role of personality, demographics, and values in social networks. Their results generally supported the notion that individual characteristics play a meaningful contribution in the realization of central network positions. This research has important implications for how we think about organizational networks. For example, if personal characteristics aid individuals in attaining central network positions, then it may be that the correlation between performance and network centrality (or pay, influence, and career advancement) is illusory, due to the effects of personality on both network position and the outcomes associated with network position.

Table 4.56: ANOVA for Network Centrality

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	60.717	1	60.717	818.021	0.000
Residual	15.068	203	0.074		
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 centrality. 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 on Table 4.57 indicates that α = -0.089, a constant, is significantly dissimilar from 0, because p- value = 0.551 is

above 0.05. The coefficient β = 1.04 is significantly distinct from 0 with a p-value=0.000 and is evidently below 0.05. This was tested at 5% significance level.

This suggests that the null hypothesis $\beta_1=0$ has been rejected while the alternate hypothesis $\beta_1\neq0$ has been held suggesting that the model of, Y= -0.089+1.04 (network centrality) + e, is observed as significantly appropriate. The model Firms financial performance= $\alpha + \beta$ (network centrality) is consistent as implied by the above test. The results shows that network centrality contribute importantly to the model because gradient and the constant is the p-value are below 0.05. These outcomes suggest that a sole positive unit alteration in network centrality efficiency contribution to a transformation in financial performance at the 99.6% rate. Therefore, it endorses that there is a positive linear relationship between financial performance and network centrality. The following is the fitted equation:

$Y= -0.089 + 1.04X_5+ e$

Table 4.57: Coefficients of Network Centrality

Variable	Beta	Std. Error	t	Sig.
Constant	-0.089	0.15	-0.597	0.551
Network centrality	1.04	0.036	28.601	0.000

The study findings are in agreement with Bono (2013) who examined the role of personality and network centrality in community oriented pro-social behavior. Results indicated that personality traits contributed significantly to the attainment of central network positions directly and indirectly via prior pro-social community activities. The study contributed to existing literature on personality and social networks by demonstrating that people who are high on extraversion and agreeableness have a high likelihood of engaging in pro-social community activities, in part because of the information, opportunities, and resources that they gain via central positions within their informal social networks.

4.10 Financial Performance

4.10.1 Sampling Adequacy

To scrutinize if the collected data was enough and suitable for inferential statistical tests like regression analysis, factor analysis, and others, two major tests were carried out, namely; Barlett's Sphericity Test, and Kaiser-Meyer-Olkin (KMO). The latter determines sampling adequacy. According to Field (2000), data set is considered appropriate and adequate for statistical analysis when the KMO value is more than 0.5.

Results on Table 4.58 indicated that KMO's statistic value as 0.919, and it was considerably high; hence more than the test's significance critical level that is set at 0.5 according to Field (2000). Moreover, the Bartlett Sphericity Test was quite important as well (Chi-square = 1643.3 at 45 degree of freedom, with $p < 0.05$). Table 4.58 summarizes Barlett's and KMO's test results, offering a perfect justification for deeper statistical analysis that was done.

Table 4.58: Financial Performance KMO Sampling Adequacy and Barrettes Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.919
Bartlett's Chi- Square	1634.3
Bartlett's df	45
Bartlett's Sig.	0

4.10.2 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and Cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an Eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 10 statements on financial

performance can be factored into 1 factor. The total variance explained by the extracted factor is 64.40% as shown in Table 4.59.

Table 4.59: Financial Performance Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.44	64.404	64.404	6.44	64.404	64.404
2	0.926	9.258	73.662			
3	0.68	6.795	80.457			
4	0.463	4.634	85.091			
5	0.428	4.28	89.371			
6	0.293	2.927	92.298			
7	0.254	2.542	94.84			
8	0.23	2.302	97.142			
9	0.172	1.72	98.862			
10	0.114	1.138	100			

Extraction Method: Principal Component Analysis.

The factor loadings for sub-constructs of financial performance are presented on Table 4.60. The overall statements drew coefficients of over 0.5, 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 who affirms that a 0.4 factor loading has viable factor stability and can contribute to acceptable and desirable solutions.

Table 4.60: Factor Loading Financial Performance

Statement	Component
Our enterprise profitability has increased over the last five years	0.733
Our enterprise financial leverage has increased over the last five years	0.874
Our enterprise has experienced an increase in total revenue collected over the last 5 years	0.882
Our enterprise has experienced an increase in assets over the last 5 years	0.857
Our enterprise has a higher market value	0.869
The enterprise is more inclined to decisions that enhance returns on its physical capital .	0.835
We have competitive advantage and superior enterprise performance	0.82
Our enterprise has a positive stock (equity) returns	0.795
Our shareholders are happy with our policy on dividends	0.515
Our enterprise is highly profitable	0.778

Extraction Method: Principal Component Analysis.

4.10.3 Descriptive Analysis

The aim of the study was to determine influence of entrepreneurial networks on financial performance of medium sized enterprise in Kenya. The results indicates that 90.3% of all participants agreed that their enterprises profitability had increased over the last five years, 91.2% agreed that their enterprise financial influence had augmented within the period of five years and 91.7% agreed that their enterprise had experienced an increase in total revenue collected over the last 5 years. Furthermore, 88.7% of the respondents agreed that their enterprise had faced a growth in assets over the past 5 years, 91.7% agreed that their enterprise had a higher market value while another 91.7% agreed on the idea that the enterprise was more disposed to decisions which enhanced revenues on entrepreneurial physical capital and 93.2% agreed that they had competitive advantage and superior enterprise performance. Ninety one point seven percent of the respondents agreed that their enterprise had a positive stock (equity) returns, 57.8% agreed that their shareholders are happy with their policy on dividends and 87.8% agreed that their enterprise was highly

profitable. The response-mean-score for this subsection was 4.17, an indication that most of the participants agreed on statements regarding financial performance of medium sized enterprises in Kenya as Table 4.61 depicts.

Table 4.61: Financial Performance Descriptive Statistics

Statement	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	Mean
Our enterprise profitability has increased over the last five years	1.0%	1.5%	7.3%	49.3%	41.0%	4.28
Our enterprise financial leverage has increased over the last five years	0.5%	2.4%	5.9%	58.5%	32.7%	4.2
Our enterprise has experienced an increase in total revenue collected over the last 5 years	0.5%	0.0%	7.8%	60.5%	31.2%	4.22
Our enterprise has experienced an increase in assets over the last 5 years	0.5%	2.4%	8.3%	58.0%	30.7%	4.16
Our enterprise has a higher market value	0.5%	0.5%	7.3%	61.5%	30.2%	4.2
The enterprise is more inclined to decisions that enhance returns on its physical capital.	0.0%	0.0%	8.3%	63.9%	27.8%	4.2
We have competitive advantage and superior enterprise performance	0.0%	1.0%	5.9%	64.4%	28.8%	4.21
Our enterprise has a positive stock (equity) returns	0.0%	1.0%	7.3%	61.5%	30.2%	4.21
Our shareholders are happy with our policy on dividends	1.0%	12.3%	28.9%	33.8%	24.0%	3.68
Our enterprise is highly profitable	0.5%	1.0%	10.7%	42.9%	44.9%	4.31
Average	0.5%	2.2%	9.8%	55.4%	32.2%	4.17

Results are in support of Smith and Lohrke (2007) who conducted a study on development of entrepreneurial network: Hoping in the process to submit that a

financier's network is able to offer a vital source of social capital that consequently may enhance a new venture's possibility of triumph. The researchers identified that while entrepreneurial research had often evaluated the way such networks grow and assessing the extent, trust had been constantly classified as an important element to the process of building vital networks that aid the entrepreneurial process.

The results agree with Thrikawala (2011) who concluded that there was an effect of association with investors within the same field since by employing their resources management enterprises can promote their financial performance. The analysis of the effect of networking for the SMEs triumph in Sri Lanka indicated that network formation is a significant development component of medium-sized enterprise. Thus, networking is a central factor in the development of medium-sized enterprises. Nevertheless, according to management of SMEs perspective, the formal network relations are time-consuming and experienced-based. The results also agree with Kalm (2014) who concluded that progressively high interaction with network players positively connects growth of small and developing enterprises in the upcoming technological fields in Finland.

The participants were urged to state the percentage change of the financial performance parameters for their enterprises over the last five years. The results indicates that the profits percentage change increased over the years since the year 2011 attracted a mean score of 3.26 and gradually increased to a peak of 3.73 in the year 2015. Sales growth also increased over the span period of the study where 2011 attracted a mean mark 3.3 and increased slightly to the mean mark of 3.93 in the year 2015. In addition, in the year 2011 the returns on investment attracted a mean of 3.15 and increased slightly to 3.28 in the year 2012 and 3.77 in the year 2015. The findings imply that the percentage change increased over the years and further implies improved performance. The market share and assets growth increased slightly over the years from a mean score of 3.25 and 3.02 in the year 2011 respectively to a mean score of 3.71 and 3.48 in the year 2015. The gradual increase of the performance parameters shows an improved financial performance of the medium sized enterprises.

Table 4.62: Performance Parameters Descriptive Statistics

Performance Parameters	0-5%	6-10%	10-15%	15-20%	>20%	Mean
Profit2011	2.4%	25.4%	30.2%	27.3%	14.6%	3.26
Profit2012	2.4%	18.5%	37.1%	28.8%	13.2%	3.32
Profit2013	2.4%	16.1%	31.2%	38.0%	12.2%	3.41
Profit2014	1.0%	10.7%	30.7%	39.0%	18.5%	3.63
Profit2015	2.0%	9.3%	26.3%	38.5%	23.9%	3.73
SalesGrowth2011	2.0%	19.5%	38.0%	27.3%	13.2%	3.3
SalesGrowth2012	2.0%	16.6%	35.1%	31.7%	14.6%	3.4
SalesGrowth2013	0.5%	11.2%	29.8%	39.5%	19.0%	3.65
SalesGrowth2014	0.0%	8.3%	24.4%	41.5%	25.9%	3.85
SalesGrowth2015	0.5%	5.9%	24.9%	38.0%	30.7%	3.93
ROI2011	3.9%	25.4%	34.1%	25.4%	11.2%	3.15
ROI2012	2.4%	18.5%	38.0%	30.2%	10.7%	3.28
ROI2013	1.5%	18.5%	34.1%	32.2%	13.7%	3.38
ROI2014	1.0%	8.3%	33.7%	38.0%	19.0%	3.66
ROI2015	1.0%	5.9%	30.2%	41.5%	21.5%	3.77
Marketshare2011	1.0%	23.9%	35.1%	29.3%	10.7%	3.25
Marketshare2012	0.5%	17.6%	40.5%	32.2%	9.3%	3.32
Marketshare2013	0.0%	18.5%	31.7%	36.6%	13.2%	3.44
Marketshare2014	0.0%	14.1%	30.2%	37.6%	18.0%	3.6
Marketshare2015	0.5%	11.2%	26.3%	41.0%	21.0%	3.71
Assets2011	4.9%	32.2%	30.7%	20.0%	12.2%	3.02
Assets2012	2.4%	30.7%	31.7%	24.9%	10.2%	3.1
Assets2013	2.4%	28.8%	26.3%	30.2%	12.2%	3.21
Assets2014	2.4%	22.4%	25.4%	34.6%	15.1%	3.38
Assets2015	2.0%	19.5%	26.3%	32.7%	19.5%	3.48

4.10.4 Financial Performance Normality Test

In checking for normality, kurtosis and skewness statistic were adopted for the study as George and Mallerry (2010) recommends. The normal distribution skew value is zero, typically suggesting symmetric distribution, while Kurtosis is the measure of peakness in a distribution. West (1996) recommended a reference of important retreat from the normality as the outright skew value > 2, as well as an absolute/outright kurtosis value > 7. However, for this study the recommendation of

George and Mallery (2010) who asserted that as a thumb's rule, a variable is rationally adjacent to normal when its kurtosis and skewness have values ranging from -3.0 to + 3.0. The findings presented in Table 4.63 indicate that financial performance had kurtosis coefficient of 1.954, and skewness coefficient of -0.543. Centered on these, financial performance was concluded to be normally distributed because they are usually within the range of ± 3 range as well endorsed by George and Mallery (2010).

Table 4.63: Financial Performance Normality Test

Financial Performance	Statistic	Std. Error
Skewness	-0.543	0.17
Kurtosis	1.954	0.338

4.11 Relationship between Independent and dependent variables

Regression analysis was done in order to empirically find out the shared causal relations between dependent and independent variables. Regression results on Table 4.64 signify that the regression has fit alignment for the regression of the independent variables and financial performances were satisfactory. A 0.834-squared value of R signifies that 83.4% of total variations in the financial performance of medium sized enterprises are jointly accounted for by variations in structural holes, network density, network structure, network ties as well as network centrality.

Table 4.64: Model Summary for Financial Performance

Indicator	Coefficient
R	0.913
R Square	0.834
Adjusted R Square	0.829
Std. Error of the Estimate	0.25171

The results are in line with critical review of a survey, described as network-centered study in entrepreneurship, established that regarding network content; inter-organizational and interpersonal relations are perceived as the means via which players obtain access to various resources from their co-actors (Hoang& Antonicic, 2003). The study used online survey to gather data. A fundamental advantage of networks for these entrepreneurial processes is that they freely have lots of access to advice and information, therefore the dependence on networks does not face constraints in the start-up level, and entrepreneurs constantly depend on the networks for organizational advice, problem solving, and information, even with other contacts presenting diverse resources.

The outcomes of the study are in agreement with Barkoczi and Galesic (2016) who did a study on the way social learning strategies adjust the influence of network structure on the performance of a group and found backing for the dominance of both poorly connected inefficient and well-connected efficient network structures. The study showed that efficient networks outdo inefficient ones when people depend on conventionality by replicating the recurrent solution amongst their associates. Results correspond with Obura, Abeko and Obere (2010) who studied the contribution and influence of networks on Kenyan-based SMEs sustainability and performance. From the results, it was apparent that via entrepreneurial networking, the entrepreneurs could collect data, search for providers and customers and access the needed resources. Therefore, it shows that the study adopted variables which mutually elucidated a higher percentage of the financial performance differences among the medium sized firms in Kenya and that the unexplained variation is small.

Before approximation of the regression model, the preciseness of fit was done and the findings have been summarized in Table 4.65 in which the outcomes indicate that the entire model is crucial; structural holes, network density, network structure, network ties as well as network centrality are good joint explanatory variables for financial performance of medium sized enterprises in Kenya ($F = 199.43$, p-value<0.05). This was tested at 5% significance level. The results on Table 4.65 indicates that the F-statistic 0.000 significance is below 0.05 for all independent variables implying that null hypothesis has been rejected, thus concludes that there

exists an association between different entrepreneurial networks and financial performance.

Table 4.65: ANOVA for Financial Performance

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.635	5	12.635	199.43	0.000
Residual	63.177	199	0.063		
Total	75.785	204			

The study outcomes show consistency with those of Mulatu (2014) who evaluated the influence of networking on the business performance of medium sized enterprises in Addis Ababa. It was found that networking with financial institutions, business associates, and relationship's quality in the network significantly and positively linked with the business performance of medium sized enterprises. In addition to this, the resource acquisition capability of the network was negatively and significantly related with business performance of medium sized enterprises. The result of that study suggested that networking relationship with different types of supporting institutions and business associations significantly improves the business performance of medium sized enterprises in Addis Ababa. Therefore, the results concur with those of this study carried out in Kenya.

The result confirms the findings of Kalm (2014), who suggested that there exists a positive link between the growth of relevant and new association and the growth of a firm. In addition, the outcomes show that the essence of a player group relies on the type of relationship. Big buyers both from Finland and from overseas are the two major significant actor clusters in research and development relations, where providers are the most crucial actor groups in the manufacturing relations, while distributors remain the most conspicuous actor group in the distribution and marketing relationships. Other conclusions from the study are that constantly high involvement with the network actors positively associates with the rate of firm's growth, gradually high interaction with the network actors contributes to a positive

connection, and thus high growth rate of an enterprise and constantly elevated activity with network players contributes to positive linkage with the exports' share.

The study findings also concur with Mungania, Gakure and Karanja (2017) who concluded that networking is key in performance of firms in the dairy sector. The findings therefore suggest that the total independent variables had been statistically significant while explaining on financial performance of medium sized enterprises in Kenya.

The results of the study indicated that the link between structural holes and financial performance was significant and positive (b_1=0.164, p-value, 0.015) as shown in Table 4.66. Therefore, there is a rise in structural holes efficiency by 1 unit contributes to an increase in financial the performance by 0.164 units. Research findings on network density and financial performance were (b_1= -0.107, p-value, 0.286). It suggest that a decrease in network density contributes to rise in financial performance of medium sized enterprises by 0.286 units. It suggests an inverse relationship between network density and financial performance.

The results more deeply specified that network structure had a significant and positive association with financial performance (b_1=0.18, p value, 0.032), implying that a rise in network structures efficacy by 1 unit contributes to arise in the financial performance of medium sized enterprises by the 0.18 units. The study outcomes also showed that network ties had a significant and positive relationship with the financial performance (b_1=0.162, p-value, 0.048). It suggest that a rise in network structures efficacy by 1 unit contributes to a rise in the financial performance of medium sized enterprises by the 0.162 units. Finally the outcomes showed that network centrality had a significant and positive relationship with financial performance (b_1=0.723, p value, 0.000). It suggest that a rise in network structures efficacy by 1 unit contributes to a rise in the financial performance of medium sized enterprises by the 0.723 units.

Table 4.66: Regression Coefficients

Variable	Beta	Std. Error	T	Sig.
Constant	-0.228	0.143	-1.589	0.114
Structural holes	0.164	0.067	2.442	0.015
Network Density	-0.107	0.1	-1.069	0.286
Network Structure	0.18	0.084	2.156	0.032
Network Ties	0.162	0.082	1.986	0.048
Network centrality	0.723	0.071	10.191	0.000

The study results are in harmonious with Li (2013) conducted a study on the influence of network characteristics towards firm's performance in a mold firm operating in Zhejiang province, China within groups. The study investigated network structure's influence: network relational features and centrality: tie strength, tie quality, and tie stability on the performance firms' performance within cluster ties and extra cluster ties. The study found that the additional-cluster tie significantly affected performance in comparison with in-cluster tie even though in -cluster tie had also positive effect on performance. Elements of network characteristics had weak influence on the association between performance and extra-group ties, while the network characteristics, and network structure including tie strength and tie stability had significant influence on the association between performance and in-cluster ties. .But in general speaking, tie stability positively influences performance, whereas tie quality negative affect.

4.12 Optimal Regression Model for, Structural Holes, Network Structure and Network Ties, Network Centrality and Financial Performance.

Table 4.67: Optimal Summary Model

Indicator	Coefficient
R	0.913
R Square	0.833
Adjusted R Square	0.829
Std. Error of the Estimate	0.2518

Predictors :(constant) structural holes, network structure, network ties, network centrality

The optimal regression model estimated in the study therefore excluded network density as it was found to be insignificant with a p value of 0.286. The results presented in the Table 4.67 indicated that network centrality, structural holes, network structure and network ties explained 82.9% of the variances in financial performance as indicated by squared multiple correlation adjusted (R^2) of 0.829. In order to test the significance of the overall model, analysis of variance was used for this purposes as indicated in Table 4.68

Table 4.68: ANOVA (Optimal Model)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	63.105	4	15.776	248.825	0.000
Residual	12.681	200	0.063		
Total	75.785	204			

Table 4.68 results indicated that the overall model was significant at (F = 248.825; Sig 0.000) with (4, 204) degrees of freedom at the P< 0.05 level of significance. Therefore, structural holes, network structure, network ties and network centrality significantly (P<0.05) explained the variance in financial performance in medium

sized enterprises in Kenya. The findings imply that network centrality, structural holes, network structure and network ties was statistically significant in explaining financial performance of medium sized enterprise in Kenya.

The Regression Coefficients were used in the context of multiple regression analysis to show the amount by which the dependent variable (financial performance) increases when one unit and all other independent variables increase one independent variable are held constant. Table 4.69 of Regression Coefficients (Optimal Model) shows that the coefficient value depends upon the other independent variables.

Table 4.69: Regression Coefficients (Optimal Model)

	Unstandardized Coefficients			
	Beta	**Std. Error**	**T**	**Sig.**
Constant	0.212	0.143	1.491	0.138
Structural holes	0.137	0.062	2.202	0.029
Network structure	0.136	0.073	1.872	0.043
Network ties	0.14	0.079	1.77	0.038
Network centrality	0.706	0.069	10.204	0.000

Table 4.69 indicates that when the independent variables are combined together, they indicate that, structural holes, network structure, network ties and network centrality have significant influence on financial performance with a unstandardized beta of 0.137 and t-value of 2.202 (p=0.029) for SH, unstandardized beta of 0.136 and t-value of 1.872 (p=0.043) for NS, unstandardized beta of 0.14 and t-value of 1.77 (p=0.038) for NT, unstandardized beta of 0.706 and t-value of 10.204 (p=0.000) for NC as compared to unstandardized beta of -0.107 and t-value of -1.069 (p=0.286) for Network Density. This compelled the researcher to drop one of the variables network density since it had the highest chance of multi collinearity.

The regression analysis results further showed that structural holes contribute significantly to the model since the p-value is less than 0.05. The findings imply that

one positive unit change in structural holes led to a change in financial performance at the beta of 0.137,(p value 0.029) This confirms the positive effect of structural holes on financial performance of mid-sized firms in Kenya.

Results further indicated that network structure had a positive and significant relationship with financial performance β_1=0.136, (p value 0.043). This implies that an increase in network structures effectiveness by 1-unit leads to an increase in financial performance of medium sized enterprises by 0.136 units. The study findings also indicated that network ties had a positive and significant relationship with financial performance (β_1=0.14, p value, 0.038). This implies that an increase in network ties effectiveness by 1 unit leads to an increase in financial performance of medium sized enterprises by 0.14 units. Finally, the results indicated that network centrality had a positive and significant relationship with financial performance (β_1=0.706, p value, 0.000). This implies that an increase in network centrality effectiveness by 1 unit leads to an increase in financial performance of medium sized enterprises by 0.706 units.

Moreover, the regression analysis results of the optimal model presented in the Table 4.69 shows the influence of network centrality, structural holes, network structure and network ties on financial performance and the overall regression model was found to be significant at 95 % confidence level.

The fitted equation was as shown below

$$Y=\beta_0+\beta_1 SH+\beta_2+\beta_3 NS+\beta_4 NT+\beta_5 NC+e$$

Therefore, Financial performance =0.212+0.137+0.136+0.14+0.706+e

Correlation Analysis for the linear relationship between entrepreneurial networks and financial performance.

The study used correlation technique to examine the level of relations between these two variables with Pearson Correlation Coefficient R which yield a statistic ranges from -1 to 1. According to Mugenda and Mugenda (2003) the larger the R(absolute value) ,the stronger the relationship between these two variables. When there is a

positive (+ve) correlation coefficient, it means there is a positive relationship between the two variables. A negative association implies that while one variable drops, then the other variable upsurges i.e. converse relationship. A zero R value shows that there exists no relationship between both variables. The assumption of the coefficient is that there exists a linear correlation or relationship between both variables and that they are informally associated; one of them is the dependent while the other is independent. In the study, the independent variable was entrepreneurial networks (Structural Holes, Network Density, Network Structure, Network Ties and Network Centrality) and was each correlated with financial performance, which was the study's dependent variable. This is depicted in Table 4.70, which exhibits the outcomes of correlation test analysis between the (financial performance) dependent variable as well as the independent variables besides the correlation amongst the independent variables. The outcomes indicate that financial performance and structural holes had a strong positive association as shown by the correlation coefficient of 0.770. Results more deeply designated that financial performance and network density had a significant and positive relationship ($r=0.816$, $p<0.000$). Network structure was found to have a positive significant relationship with financial performance ($r=0.796$, $p<0.001$). Finally, network ties and network centrality were found to have a significant and positive correlation with the financial performance as evidenced by Pearson correlation coefficients 0.835 and 0.895 respectively.

Table 4.70: Bivariate Correlation

Variable		Financial performance	Structural holes	Network Density	Network Structure	Network Ties	Network centrality
Financial performance	Pearson Correlation	1					
	Sig. (2-tailed)						
Structural holes	Pearson Correlation	0.77	1				
	Sig. (2-tailed)	0.000					
Network Density	Pearson Correlation	0.816	0.866	1			
	Sig. (2-tailed)	0.000	0.000				
Network Structure	Pearson Correlation	0.796	0.843	0.911	1		
	Sig. (2-tailed)	0.000	0.000	0.000			
Network Ties	Pearson Correlation	0.835	0.764	0.867	0.834	1	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		
Network centrality	Pearson Correlation	0.895	0.75	0.835	0.78	0.862	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	

The study findings are in agreement with Kenny (2009) who studied the effect of networking capacity on the global performance of Ireland medium-sized enterprises. The survey focused on the three independent variables that make up the networking capability namely: networking characteristics, networking operation and networking resources. The networking characteristics comprised of: strong and weak tie form of networking collaboration, relational capability and the trust exist in the relationship .The second independent variable: networking operation composed of learning, coordination, and initiation exist in the network.

The third independent variable networking resources measured with information sharing ability, synergy sensitive resources, and human capital resources of the networking capacity.

It was found that, the strong tie than weak tie, capability in network coordination and firm network human resources were significantly and positively related to the international performance , while the other four which were positively but not significantly related with international performance were synergy sensitive resources, the level of network initiation capability ,trust between partners and strong tie networking. However, the other element of hypothesis namely: information sharing, relational capability of the firm, network learning and weak tie type of collaboration was negatively and insignificantly related with international performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The objective of the study was to examine the influence of entrepreneurial networks on the financial performance of medium sized enterprises in Kenya. The chapter summarizes the main findings according to the study objectives. Moreover, the conclusion of the study has been given, culminating with the suggestions and recommendations of points that would require further research.

5.2 Summary of Findings

The study sought to establish the influence of entrepreneurial networks on financial performance of medium sized enterprises in Kenya. According to the outcomes of this survey, entrepreneurial networks influence the financial performance of medium sized enterprises in Kenya. Entrepreneurial networks relations had a significant and positive association on different measures of the financial performance that the study employed. From the study outcomes, it approved some specific entrepreneurial variables influencing financial performance of medium sized enterprises. Overall, it confirms that medium sized enterprises adopted and embraced entrepreneurial networks and this led to positive influence on financial performance of their enterprises. The improved performance would translate into superior competitive advantage and sustainability. The enterprises performance had improved and the firms were doing really well over the period of the study as a result of entrepreneurial networks. This was illustrated by the degree of agreement with the questionnaire statements, which backed financial performance of medium sized enterprise in Kenya, which had a mean of 4.17. This was also supported by the performance parameters descriptive, which showed gradual increase of profits, sales growth, returns on investment, market share and assets in the years of study (2011-2015). The study findings indicated that the overall performance was positively affected by the various entrepreneurial networks adopted by medium sized enterprises such as well-

laid and efficient structural holes, network structures, network density, network ties and network centrality.

5.2.1 Key Objective 1

To determine the influence of structural holes on the financial performance of medium sized Enterprises Kenya.

The study's first objective was to find out the influence of structural holes on financial performance of medium sized enterprises Kenya. From the study outcomes, it was confirmed that structural holes were a key driver of financial performance of medium sized enterprises in Kenya. This was demonstrated by the respondents' responses who were in agreement that members of their organization belonged to professional network, by being part of the professional network has improved the organization's overall performance, their organization used social media personalities/ brand ambassadors to sell their brands to the internal guidelines and policies and general public and guidelines of their organization are effectively made clear to all employees. Correlation and regression analysis findings demonstrated that there was a significant and positive relationship between financial performance and structural holes. The outcome simply shows that positive change in structural' holes efficiency led to a modification in financial performance at 85.8% rate.

5.2.2 Key objective 2

To examine the influence of network density on financial performance of medium sized Enterprises in Kenya

The second objective of this study was to evaluate the influence of network density on financial performance of in Kenyan-based medium sized enterprises. The study findings indicated that network density influenced financial performance by their organization's contacts giving them access to important networks, the individuals they interact with while networking are generally honest and truthful and providing a platform for their organization to interact with many other firms and individuals in the market. In addition, the study findings indicated that the network members like to spend time together outside work, the firms they interact with tend to deliver on promises and commitments they made and the enterprises connected with the

industry through marketing officers. The respondents also asserted that the enterprises accessed linkages through trade fairs, invitations to attend workshops and conferences, cocktails to learn and interact and the enterprise linkages provided access to other networks that would be difficult to penetrate. Correlation and regression analysis outcomes showed that there existed a significant and positive relationship between network density and financial performance. The outcomes of the study suggest that a single positive unit modification in network density effectiveness contributed to an alteration in financial performance at 91.8% rate.

5.2.3 Key Objective 3

To investigate the influence of network structure on the financial performance of Medium sized enterprises in Kenya.

The third objective of this study was to investigate the influence of network structure on financial performance of the Kenyan-based medium sized enterprises. 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 who agreed 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 do not 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.

5.2.4 Key objective 4

To establish the influence of network ties on the financial performance of medium sized Enterprises in Kenya.

The fourth objective of this study was to find out the influence of network ties on the financial performance of medium sized enterprises in Kenya. The study outcomes specified that network ties are a key determinant of financial performance of medium sized enterprises based in Kenya. Results indicated that the enterprise employees consult each other as they work, the enterprises encouraged personal membership in networks and the enterprises operated in knowledge-exhaustive subdivisions that are novelty-driven. Furthermore, results revealed that the enterprises engaged with networks that are efficiency-driven, linkages to financiers was a benefit of business networks and the enterprises used personal networks to access valuable resources for the company. Correlation and regression analysis outcomes demonstrated indicated that there existed a significant and positive relationship between network ties and financial performance. The results suggest that a sole positive unit alteration in network ties efficacy led to a change in financial performance at 99.6% rate.

5.2.5 Key Objective 5

To determine the influence of network centrality on the financial performance of medium sized enterprises in Kenya.

The fifth objective of this survey was to determine the influence of network centrality on the financial performance of medium sized enterprises in Kenya. The study outcomes illustrated that the firms had greater power and influence over other enterprises in the industry, the enterprises operated in an environment that offered strategies about competitors and partnership opportunity information was available to their enterprise through networks. In furtherance results illustrated that their enterprise were visible to potential resource providers, people were willing to share information and resources with their enterprise and the enterprises had relatively quicker access to information. Regression and correlation analysis results showed that there was a significant and a positive association between financial performance and network centrality. The results suggest that a sole positive unit alteration in the

network centrality efficacy contributed to a modification in financial performance by 1.04 units.

Overall, the multivariate regression results indicated that 83.4% of total variations in the financial performance of medium sized enterprises are jointly accounted for by variations in structural holes, network density, network structure, network ties as well as network centrality. The study findings indicated that structural holes, network structure, network ties as well as network centrality were statistically significant in explaining financial performance of medium sized enterprises. However, network density had no significant influence on financial performance of medium sized enterprises in Kenya.

5.3 Conclusions

The objectives of the study were tested and the results indicated that all the five independent variables that were under study that is structural holes, network density, network structure, network ties and network centrality had a positive significant influence on the financial performance of the medium sized enterprises in Kenya.

First, according to outcomes of the study, there is a possibility of concluding that medium sized enterprises performance variances across enterprises can be expounded, at least partly, by the degree to which companies enjoy auspicious access to external capabilities and resources created by other market players. Since structural holes were a key driver of financial performance of medium sized enterprises in Kenya, the study concludes that structural holes were statistically significant in explaining on the financial performance of medium sized enterprises. The study concludes that a person can be constrained in a network if they have very limited contacts; has associates closely linked with each another; or parts with information indirectly through a main contact. Therefore, firms, which strategically utilize influencers to span structural holes, can generate brand equity more competently.

Secondly, since network density was a key influencer of the financial performance in medium size enterprises, the study comes to a settlement that in expounding on financial performance of medium sized enterprises, network density proved

statistically significant. This implies that having a varied personal network is related to significant health advantages, for instance in information flows and access to resources. Because businesspersons with more varied personal networks have a high likelihood of identifying network density, and innovative opportunities, and therefore more precisely important for developing mid-sized enterprises.

Thirdly from the study it can be 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 structural holes. Alternatively, when enterprises display robust advantage-improving tendency, they are inclined to arouse superior collaborative activities between the network partners and therefore create compact network structure. 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. Nevertheless, the study discovered that such propensities of companies are not comprehensively valuable for all companies. 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 structural holes.

Fourthly, from the study it can be settled that network ties had a significant and positive relationship with the financial performance of medium sized enterprises. The survey finalized that the positive connection that was established to occur between snowballing action in co-active relationships and the rates of growth of companies that backs previous perspectives, which have argued that networking is significant for rapid-growth enterprises. Furthermore, it can be concluded that the enterprises that engaged with networks that are efficiency-driven, linkages to financiers and used personal networks to access valuable resources for the company had improved financial performance.

Lastly, it can be concluded that network centrality was positively associated with financial performance. The outcomes offer backing to social network theory, demonstrating that the more crucial the businessperson is in the network, the deeper it will influence her/his firm performance. Enterprises with sturdy entrepreneurial bearings gain from the industry management status allied with high centrality, since these projects should obtain resources and rally institutional support from various fields to positively commercialize their novelties. Central enterprises hence have the likelihood of pioneering in pointing out the contact for concerned strangers, for them to enjoy better capacities to draw significant resources from varied social circles.

In respect to the dependent variable that is financial performance, the following was concluded: increased enterprise profitability of the medium sized enterprises took the lead followed by financial leverage, then stock equity returns. However, all the other constructs were significant with a mean of above 4.0 except for our shareholders are happy with our policy on dividends which had a mean score of 3.68.The performance parameters used in the study all showed gradual increase, sales increase was top on the list with a mean of 3.3 and a gradual increase to a peak of 3.73 in 2015,second was increased profits with a mean of 3.26 and a gradual increase to a peak of 3.93 in 2015,market share was third with a mean score of 3.25 and a gradual increase to a peak of 3.71 in 2015,fourth was return on investment with a mean score of 3.15 and a gradual increase to a peak of 3.77 in 2015 and finally assets growth which had a mean score of 3.02 and a gradual increase to a peak of 3.48 in 2015.

The findings demonstrate that entrepreneurial networks can be used to mobilize resources, information, relationships, contacts, linkages, interactions, partnership opportunities and professional networks in order to enhance financial performance of medium enterprises in Kenya. Undoubtedly, entrepreneurial networks have contributed toward the financial performance of medium sized enterprises in Kenya. Moreover, the findings enhance the social capital theory, social network theory and structural holes theory by demonstrating that the entrepreneurial networks have significant positive relationship with financial performance. Therefore, the findings lay emphasis on the importance of elements of entrepreneurial networks, which comprises of structural holes, network density, network structure, network ties and

network centrality in influencing financial performance of medium enterprises in Kenya.

5.4 Recommendations

The following recommendations were derived from the results and findings:

1.The study recommends that management of medium sized enterprises in Kenya should encourage managers to participate in dynamic networking with various players outside and within the prevailing networks and particularly with the ones who are pertinent to the firm in which an enterprise and the manager run since it leads to high performance. The enterprises should encourage the executives to generate new dynamic co-effective dealings and preserve the prevailing ones because they are information sources. The reason behind this commendation is dual. Firstly, the evolution of an enterprise generates the essence for new ties and contacts. This essence agrees to an alteration in the firm's situation, as they can be considered as, for example, the essence for emergent contacts within a new venture-market or alteration in the technology, which is utilized by the enterprise. Secondly, executive shave to generate new social capital to substitute the normal drop of the prevailing social capital.

2. The management of medium sized enterprises ought to be encouraged to be more engaged in the operations that provide linkage to their enterprises. For instance through trade fairs, invitations to attend workshops, conferences and cocktails, members can learn and interact and the enterprise linkages provided access to other networks that would be difficult to penetrate. This would be a strategy to bridge the gap. Medium enterprises are supposed to build networks since having a varied personal network is related to significant health paybacks for instance information flows and access to resources. Entrepreneurs enjoying diverse personal networks have a higher likelihood of identifying inventive prospects, network diversity therefore more predominantly important for lesser organizations in developed economies.

3. It is also 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.

4. Since network ties had a significant and positive relation with the financial performance of medium sized enterprises. It is recommended that executives ought to concentrate their networking engagement on players with whom associations can be jointly beneficial. Discussions with network associates to formulate a vision for the sustainability of a business in future are essential approached for identifying forthcoming networking necessities. With time, a connection can expand and turn into a strong tie. Nonetheless, management ought to also identify the impending difficulties of an over-entrenched network; thus, establishing a balance between weak and strong ties is vital.

5.Medium sized enterprises should consider networking with external environment as part of business planning objective and the management or the owner manager of the business should use it as an instrument for accessing marketing information, for acquiring tangible and intangible resources and finally to improve the performance their business. To expand the business within domestic as well as for having international marketing exposure through exporting medium sized enterprises should have networking relationship with supporting institutions extensively.

6. The study recommends that managers ought to prudently build their alliance networks. Enterprises with greater advantage-generating or advantage-improving capacities ought to reassure associates to aggressively cooperate with each another. Alternatively, enterprises without superior abilities should economize their network constructions through their forming non-redundant ties with businesses from far off technological regions, and therefore enhance their potential of identifying new

entrepreneurial prospects. The findings bring out the need for stakeholder engagement. It is recommended that businesses should develop stakeholder engagement strategy on top of the generic corporate strategic plan. The stakeholder engagement strategy will be able to help an organization scan the operating environment and bring out the opportunities for pursing business and collaborations with stakeholders including competitors. Depending on financial strength business leader in various organization are encouraged for establish a stakeholder management function which will help in pursuing business collaborative opportunities.

7. Due to the influence of network ties on business development, business leaders should encourage a working environment that enables managers to pursue new networks that promote business performance. The organizations are encouraged to join relevant business membership organizations where business owners and management can join and participate in various networking forums, which can be a platform for gaining new networks. Business leaders and managers are also encouraged to join business clubs and membership clubs, which have high net worth membership. The membership and investment into such clubs in terms of time and money will yield to new and valuable business for the companies.

8. 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, centrality 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.

5.5 Contribution of the Study to Theory/ Existing Knowledge

The study established a conceptual framework for sustaining future exploration activities on the influence of entrepreneurial networks on the financial performance of Kenyan based medium sized enterprises. The study effectively tested hypothesis

linked to the conceptual framework identified in chapter two. According on the research outcomes, it was established that the five entrepreneurial networks variables greatly influenced the financial performance of medium sized enterprises in Kenya. This research has contributed to the current knowledge stock in the literature of influence of entrepreneurial networks on the financial performance of medium sized enterprises. The study laid emphasis on the extent to which structural holes, network density, network structure, network ties and network centrality influence the financial performance of medium sized enterprises. The study noted that key advantages of networks for the business process is the access they offer to advice and information, therefore the dependence on networks is not inhibited to the initial stage businesspersons continue to depend on networks for problem solving, advice, business information, and advice with some associates availing multiple resources.

The findings of the study may be connected to the Resource based theory .The theory indicates that an organization's competitive advantage and subsequent performance originates from the resources and capabilities it controls. The theory posits that the way for an organization to be competitive is invest in resources. This theory was applicable in this study as it established what resources medium sized enterprises in Kenya require to carry out their day-to-day operations in their network frameworks and its influence on financial performance. This theory informed the general study objectives.

The results of this study can be linked to social network theory in that it portrayed the relevance to the study, it helped to illuminate the process by which entrepreneurs in networking groups increase the amount of referrals they receive and thereby increase firm performance. The study proved connections and relationships among medium sized enterprises in Kenya develop a social structure through networking which determine the financial performance of enterprises and influence on sustainability in the long run. The scrutiny of influence of business network on financial performance revealed that business networking is a crucial aspect in the financial performance of medium sized enterprises in Kenya. However, it was noted that networking and developing relationships are experienced –based and time consuming.

5.6 Policy Recommendations

Programs specifically be designed by the government in conjunction with the private sector for building connections among entrepreneurs from the same sector and linking them to a broader business community. For instance medium-sized enterprises be encouraged to develop policies that bring together firms in similar business in a professional network to enable them share information and support each other. Programs designed to deliver advice, training and consultancy among medium sized enterprises should be tailored in such a way that will build networks and enhance the network density alongside the main service.

Entrepreneurs and owner managers of medium sized enterprises should lobby for support from the government to leverage community partners and communication channels to promote networking among themselves. Stakeholders of medium sized enterprises should develop policies to ensure managers of medium sized enterprises are trained in the specific needs and challenges of different target groups and on how to set clearly defined objectives for entrepreneurial networking depending on their needs.

Entrepreneurial networking and networks have attached resource implications. Networks and entrepreneurial networking have resource implications. Therefore, it is essential to classify and assess the resources, which are important to the SMEs financial performance and as while advance and implement business approaches to build on those assets to improve the probability of greater financial performance. Medium sized enterprises ought to identify means of alleviating or reducing costs engaged in generating network structures.

5.7 Areas for Further Research

The unit of analysis for the survey was within the firm's level but an individual plays a central role. Networking capacity at the personal level can thus be a productive space for deeper research.

The current study used cross sectional methodology yet in the context of entrepreneurial networks as well as its influence on financial performance, time's contribution is critical. Therefore, another study can be carried out using longitudinal methodology and to establish the influence of entrepreneurial networks at each stage of the enterprise.

The study methodology targeted Kenyan-based medium sized enterprises to establish the influence of entrepreneurial networks on financial performance. The study variables were structural holes, network density, network structure, network ties, and network centrality. Representing a future path to research, it necessitates conducting a study on the influence entrepreneurial networks on financial performance but using different variables.

Data collection was done from various forms of enterprises. This makes it problematic to explicitly govern the variables that influence the financial performance of each sector. Further studies per sector can provide more insights of the specific entrepreneurial networks influencing financial performance of each sector. A similar study can also be conducted among specific type of enterprises for instance manufacturing, health, technology and construction in Kenya to find out if the findings will hold true.

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APPENDICES

Appendix I: Letter of Introduction

Date……..

Human Resource Office

P.O Box ……..

Nairobi.

Dear Sir/Madam,

RE: ACADEMIC RESEARCH PROJECT

I' am a PhD student at the University of Jomo Kenyatta and Technology University (JKUAT). I wish to conduct a research entitled "***influence of entrepreneurial networks on financial performance of medium sized enterprises in Kenya".*** A questionnaire has been designed and will be used to gather relevant information to address the research objectives of the study. The purpose of writing to you is to kindly request you to grant me permission to correct information on this important subject from randomly selected members of staff.

Please note that the study will be conducted as an academic research and the information provided will be treated in strict confidence. Strict ethical principles will be observed to ensure confidentiality and the study outcomes and reports will not include reference to any individuals.

Your acceptance will be highly appreciated.

Yours Sincerely

Dorothy Kirimi

Appendix II: Questionnaire

This questionnaire is meant to gather information regarding the effect of entrepreneurial network on financial performance of Medium sized enterprises in Kenya.

CONFIDENTIALITY CLAUSE:

The responses you provide will be used for academic purposes and will be strictly confidential.

PART A: GENERAL INFORMATION

1. Gender

a) Male ( )
b) Female ( )

2. Highest level of education

a) Secondary level ( )
b) College level ( )
c) University level ( )
d) Post graduate level ( )

3. Years worked in the enterprise

a) Less than 2 years ( )
b) 3 to 5 years ( )
c) Over 5 years ( )

4. Type of enterprise

i. Construction ( )
ii. Manufacturing ( )
iii. Hospitality ( )

iv. Health ( )
v. Technology ( )
vi. Service ( )
vii. Others Specify ( )

5. Number of employees in the enterprise

Less than 50 ( ) between 50-100 ( ) Above 100 ( )

6. How long has the organization been in operation (firm age)?

1- 5 years ( ) 6 -10 years ( ) 11 -15 year ( )

Over 15 years ( )

PART B: STRUCTURAL HOLES

Tick the professional body your employees are affiliated to.

Marketing Society of Kenya ( ) Business network international ( )

ICPAK ( )

CPS (K) ( )

Others Specify----------

What causes your enterprise's employees not to subscribe to the professional bodies?

Costs ( ) Not aware about them ( ) Lack of interest ( ) Others specify----------

f) What encourages your enterprise to formulate policies relating to networking?

Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neither agree nor disagree; 4= agree; 5= strongly agree**

No	Statements	SD	D	N	A	SA
1	Members of our organization belong to professional network					
2	By being part of the professional network has improved the organization's overall performance					
3	Our organization pay for its member's annual subscription fee for being members of the professional networks					
4	Our organization uses social media personalities/ brand ambassadors to sell our brands to the general public					
5	Our enterprise formulates policies relating to networking					
6	The internal policies and guidelines of our organization are effectively made clear to all employees					
7	Our organization's management is open to diverse ideas					

Part B: Networks Density

How does the enterprise benefit from these networks?

Access to new markets ( ) access to suppliers ( ) access to distributors ( )

Others specify…….

c) How does your enterprise access linkages? Trade fairs ( ) cocktails ( ) workshops ( ) marketing officers ( ) others specify……..

Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=3=neither Agree nor disagree; 4= agree; 5= strongly agree**

No	Statements	SD	D	N	A	SA
1	Our organization's contacts give us access to important networks					
2	Individuals we interact with while networking are generally honest and truthful					
3	Our organization interacts with many other firms and individuals in the market.					
4	Network members like to spend time together outside work					
5	Firms we interact with tend to deliver on promises and commitments they make					
6	Our enterprises connects with the industry through marketing officers					
7	Our enterprises access linkages through trade fairs					
8	Through our network we get invitations to attend workshops and conferences					
9	Our employees attend cocktails to learn and interact					
10	Our enterprise linkages provide access to other networks that would be difficult to penetrate?					

Part C: Network Structure

4(a) Does your enterprise have partners?

Yes ( ) No ( )

(b)If yes in 4 (a) how does the enterprise benefit from these partners?

Access to information ( ) provides goods on credit ( ) links to markets ( )

Financial support ( ) Others specify……

c) If No 4 (a) give reasons……

Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=3=neither Agree nor disagree; 4= agree; 5= strongly agree**

No	Statements	S D	D	N	A	SA
1	Close interconnections within the network facilitates business operations					
2	Our firm believes in having suitable resource partners					
3	Our firm has a corporate network with other firms in the same industry					
4	Our employees interact freely with colleagues in other firms					
5	Networking activities are well organized in the firm					
6	We get stocks from members of our network in case of a shortage					
7	Our enterprise has links with many other firms in the surrounding					
8	We refer customers to others in case we don't offer product or service they are seeking					

Part D: Network Ties

The bond between customers and our enterprise is:

Strong ( ) Weak ( ) Absent ( )

Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=3=neither Agree nor disagree; 4= agree; 5= strongly agree**

No	Statements	SD	D	N	A	SA
1	Our enterprise employees consult each other as they work					
2	Our enterprise encourage personal membership in networks					
3	Our enterprise operate in knowledge-intensive sectors that are innovation-driven					
4	Our enterprise engage with networks that are efficiency-driven					
5	Linkages to financiers is a benefit of business networks					
6	Our enterprise use personal networks to access valuable resources for the company					
7	Our firm has a wide and diverse network					
8	The network benefit the enterprise by providing professional advice					
9	Referral to potential customers come through business networks					

Part E: Network Centrality

What other methods does your enterprise use to access information?

Internet ( ) Facebbook ( ) Twitter ( ) Whatsapp ( ) Others specify…….

Please indicate your agreement or otherwise with the following statements using the following likert scale.

Key: 1=strongly disagree, 2= disagree; 3=3=neither Agree nor disagree ; 4= agree; 5= strongly agree

No	Statements	SD	D	N	A	SA
1	Our enterprise operate in an environment that are efficiency-driven is always the first to learn about new market conditions					
2	Our enterprise operate in an environment that offers strategies about competitors					
3	Partnership opportunity information is available to our enterprise through networks					
4	Our enterprise is visible to potential resource providers					
5	People are willing to share information and resources with our enterprise					
6	Our enterprise has relatively quicker access to information					
7	Networking facilitates sharing of resources					
8	Pooling resources for social responsibility is made possible through networks					
9	Flow of information that allows it to keep aware of new developments is through networking					
10	Our enterprise has greater power and influence over other enterprises in the industry					

Part G: Financial Performance

Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neither Agree nor disagree; 4= agree; 5= strongly agree**

No	Statements	SD	D	N	A	SA
1	Our enterprise profitability has increased over the last five years					
2	Our enterprise financial leverage has increased over the last five years					
3	Our enterprise has experienced an increase in total revenue collected over the last 5 years					
4	Our enterprise has experienced an increase in assets over the last 5 years					
5	Our enterprise has a higher market value					
6	The enterprise is more inclined to decisions that enhance returns on its physical capital .					
7	We have competitive advantage and superior enterprise performance					
8	Our enterprise has a positive stock (equity) returns					
9	Our shareholders are happy with our policy on dividends					
10	Our enterprise is highly profitable					

Please indicate the percentage change of the parameters list below for the following years. Please use this scale 1= 0-5%; 2= 6-10%; 3= 10-15%; 4= 15-20%; 5= >20%

Year	2011	2012	2013	2014	2015
Profit					
Sales Growth					
Return on Investment					
Market share					
Assets					

Appendix III: List of Top 100 Medium Sized Enterprises

NO.	FIRM	LOCATION
1	Avtech Systems Limited	Mirage Plaza, 2nd floor, Mombasa Road, Nairobi City Telephone Number:020-601924
2	Africa Tea Brokers Ltd	Nyerere Avenue, Ralli House, P.O.Box 81883-80100, Mombasa, Kenya. TEL : +254 41 2312822/ 2312407 / 8 / 10 / 41
3	Alexander Forbes	Nairobi, Kenya Phone number 1: 020 2710757 Phone number 2: 020 4969000 / +254 4969000
4	Alpine Coolers Ltd	Off Enterprise Rd, 48195-00100 GPO, Nairobi, TEL: +254-203534300. +254-202530830.
5	Biselex Kenya Ltd	Enterprise Road, Nairobi, Kenya. P.O Box 18711-00500.
6	Brollo Kenya Ltd	P.O. Box: 90651-80100 Mombasa. TEL: +254-20557415. 0721460450.
7	Capital Colours	P. O. BOX 24081 - 00502, Mombasa Road, Nairobi City
8	Canon Aluminium Fabricators Ltd	Off Mombasa Rd, Behind Liberty Plaza Nairobi. TEL: +254733411208/+254 714 812933.
9	Creative Edge Ltd	Eden Square, Westlands Rd, P.O.BOX 43578-00100 GPO, Nairobi; Telephone Number: +254-

		203744122
10	Creative Design	Nairobi Phone: 0723 110794
11	Chemicals And School Supplies Ltd	P.O. Box 60630-00200 Nairobi Telephone: 020-2390992/4 Mobile: 0722-509288/0770-604366,
12	Chandarana Supermarket	Lenana Road, Nairobi TEL: 254 20 294 2000/254 720 606736
13	Charlestone Travel Ltd	Waiyaki Way, Westlands. P.O Box 11361 – 00100, Nairobi,
14	Chemoquip Limited	Ngara Area P.O.Box 32565, Nairobi. TEL: 020-3746511/3747351.
15	Classic Mouldings	Kellico Complex, Mombasa Road TEL:+254 721 123123
16	Dawa Ltd	Baba Dogo Road, Ruaraka. P.O. Box 16633-00620. Nairobi, Kenya. TEL: +254 (0)20 356 9904.
17	Deepa Industries Ltd	Off Lunga Lunga Rd, P.O. Box: 44804, 00100 Nairobi
18	Desbo Engineering Ltd	Kampala Rd, Off Enterprise Rd Nairobi. TEL: +254703403092/+254202426068.
19	Eegen Joinex Ltd	Road C, Off Enterprise Road; Nairobi; Telephone Number: 536866;
20	Fairview Hotel Ltd	Bishops Rd. Community; Nairobi; TEL:: 0202711321;

21	Furniture Palace International Kenya Ltd	Mombasa Road, Opp. Parkside Towers Nairobi P.O. Box 35476 – 00100 , TEL: 0733 501501
22	Gap Marketing Ltd	Mombasa Road P.O Box 6287900-200 Nairobi TEL: 254-202395601/2/3.
23	Gina Din Corporate Communication	Gitanga Rd, Lavington P.O.Box 42518-00100 Nairobi,TEL:+254722354310
24	General Aluminium	P. O. Box 60447, Nairobi
25	Health Care Direct Kenya Ltd	Mombasa Road, P.O Box 46414 - 00100, Nairobi.
26	Hebatullah Brothers Ltd	Airport North Road, Embakasi. Postal: Po Box 41008-00100 Nairobi, Kenya. Telephone: 0722/0733-786-606.
27	Impala Glass Industries Ltd	Addis Ababa Road, Industrial Area P.O. Box 18003-00500 Nairobi
28	Lantech Africa Ltd	Pension Towers, Nairobi Phone: 020 3316778
29	Madhu Paper Kenya Ltd	Serem Road, Off Lunga Lunga Road, Industrial Area , Nairobi .TEL:: 020-555366
30	Master Power Systems	Parklands Rd, Opp Parklands Police Station, 976-00606 Sarit Centre, Nairobi, Kenya. Phone Number. +254-203757381. +254-203756381. +254-203756280.
31	Makini School	Makindi Road, Off Ngong Road, Nairobi TEL: 020-3874950
32	Muranga Forwarders	Taara Plaza Next to Bandari College, Off Moi Avenue P.O. Box 84208 – 80100,

		Mombasa.
33	Nairobi Java	Uniafric House | CBD TEL: 0722 23311
34	Oil Seals And Bearing Centre Ltd	Dar es Salaam Rd, Nairobi
35	Parapet Cleaning	Wilson Airport, Off Langata road. Nairobi, P.O .Box 10491-00100
36	Pentapharma Ltd	P. O. BOX 785, 20117 Naivasha; Tel: 0711036000;
37	Praful Chandra And Brothers Ltd	Parklands Nairobi TEL:020 3751302/0728 600303:
38	Power Point Systems E.A Ltd	DRS House, Lusaka Road, Nairobi TEL: +254 722 155 534/+254 734 533 211
39	Panesar's Kenya Limited	Mombasa Road, Nairobi Telephone Number: 651511
40	Radar Limited	Opposite Nairobi Baptist Church, Ngong Road · P.O BOX 76690-00508, Nairobi
41	Seasons Restaurants And Hotels	Market Lane, Nairobi Kenya. Telephone Number: 020 2220572/020 2220572.
42	Sai Pharmaceuticals Ltd	Junction of James Gichuru Road and Olengurone Road Lavington Nairobi TEL:0721 243322
43	Sheffield Steel Systems Ltd	Off Old Mombasa Road Near Syokimau Railway Station, Nairobi TEL: 0713 444000
44	Specicom Technologies Ltd	Corner House, Mama Ngina Street, Nairobi TEL: +(254) 0724 244 509

45	Software Technologies	P. O. Box No: 17797 - 00500, Nairobi TEL: 254 709 609000/+254 722 207450. + 254 20 7122991
46	Spice World Ltd	38 Nanyuki Rd, Industrial Area, P.O Box 78008 00507 Nairobi;
47	Skylack Creative Products Ltd	Obote Road - Kisumu. P.O. Box 2740 - 40100, Kisumu, TEL: +254 20 2026007. info@skylarkkenya.com.
48	Tyremasters Ltd	Hola Road, Off Baricho Road: Nairobi TEL: 020-650189
49	Victoria Furniture	Mombasa Road, Nairobi TEL: 0700 707707
50	Waumini Insurance Brokers	Waumini House, 4th Floor New, Waiyaki Way, Nairobi TEL:0780 542498
51	Wines Of The World	Mandera Rd, Nairobi City TEL: 020 7602707

Source: KPMG (2016)

Appendix IV: NACOSTI Permit

THIS IS TO CERTIFY THAT:
MISS. DOROTHY GATWIRI KIRIMI
of JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, 9265-300 Nairobi,has been permitted to conduct research in *All Counties*

on the topic: *INFLUENCE OF ENTREPRENEURIAL NETWORKS ON FINANCIAL PERFORMANCE OF MEDIUM SIZED ENTERPRISES IN KENYA*

for the period ending:
16th May,2020

Permit No : NACOSTI/P/19/86553/30405
Date Of Issue : 17th May,2019
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

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