

**EARLY STAGE FUNDING SOURCES AND PERFORMANCES FOR
INFORMATION TECHNOLOGY STARTUPS IN KENYA**

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DECLARATION

This research project is my own work and has not been presented to any other examination body for the award of any diploma or degree in any university.

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DEDICATION

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LIST OF ABBREVIATIONS AND ACRONYMS

IT	:	Information Technology
SME	:	Small Medium Enterprise
NSE	:	Nairobi Stock Exchange
CMA	:	Capital Market Authority

ABSTRACT

Approximately 70% to 90% of startups fail due to lack of financing. Various funding sources have impacted significantly on performance of IT Startups in Kenya. In Kenya the ICT sector has outperformed all other segments of the economy, growing by 23%. Lack of finance has been cited as a major contributor to SMEs failure in Kenya. The overall objective of this study was thus to establish the relationship between level of early stage funding from various sources and performance of IT Startups in Kenya. The research design adopted was mixed that is descriptive cross-sectional survey and qualitative case study. The design also enabled the researcher to gain a deep understanding of the area. The population of this study comprised of 122 IT Startups currently engaging in the use of different funding options activities, Bootstrapping, Angel Investors, Venture capitalists, Crowdfunding, Family and friends. In the quantitative study 70 IT SME startups responded to the questionnaire administered. In the qualitative study 2 entrepreneurs participated using the interview guide. Data was collected through closed ended survey questionnaire and open ended interview guide. The online and pick and drop system was used to send questionnaires to some IT startups. Personal interviews were conducted on the 2 managers with the open ended guide. Data analysis was carried out using descriptive, regression and content analysis. The questionnaire used descriptive statistics while the interview guide was carried out using content analysis. At the end of the research, triangulation method was used to facilitate the application and combination of the two research methods in the study of the same phenomenon. The findings in this study revealed that the level of funding from the different sources is positively correlated to the performance of IT startups for example Venture capitalists is the best source because they put in more than just funding they bring in networking and business support and there management style is more hands on. Based on the above findings, the following recommendations are proposed: IT startups should be encouraged to use the various forms of finance for economic development, formulation of policy should correlate with the nature of financial guarantees that can be provided to IT SMEs by both the national and county governments. One of the limitations was some of the sampled IT Startup became non-responsive due to internal nondisclosure policies since the financial data sought was regarded as confidential information. The study recommends the use of the different early stage funding sources as one's venture has a better chance of performing as there is positive correlation relationship between the funding sources and performance for Information Technology startups in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Early stage funding is the ability to finance one's startup during the initial stages of the business. The importance of early stage funding to an entrepreneur is that it reduces the risk of failure by having partners who will help the entrepreneur by giving not only capital, but sound advice that is mentoring, provision of business management experience, skills and contacts for the entrepreneur. As an entrepreneur one should be able to know the different sources of funding so as to avoid any financial hindrances in the establishment of businesses. Amati (2010) stated an entrepreneur needs outside investments to grow one's company and reach the intended market quickly. There are 7.5 million SMEs in Kenya that are providing not only employment but also provide income generation opportunities to low income sectors of the economy (CMA, 2009). Scholars have indicated that starting a business is a risky venture and warn that the chances of entrepreneurs operating small and medium enterprises making it past the five-year mark are very slim (Kepha, 2010).

Traditionally, raising capital for a startup company has been one of the most difficult part of getting one's idea off the ground. However, new technologies and platforms have emerged, therefore giving entrepreneurs a plethora of new ways to make it happen. Nowadays, there are more alternatives than ever to get a new company funded. World Bank (2003) states a well-known problem in the financial markets today is the lack of capital for startups. Knowledge on how to overcome the financial gap and deliver proper financial solutions for such startups is also scarce. The theories used in this project will be pecking order theory and entrepreneurship theory. Pecking order theory explains how companies choose their form of financing in a certain order. Entrepreneurship theory expounds more on the entrepreneur ability to raise funds past traditional sources.

According to the World Bank report of 2010 the Information Technology sector in Kenya has grown exponentially over the past decade. Although the Kenyan IT sector still faces scarcity of adequate and appropriate regulation, transparency and technical support, the progress of this

sector in the country has had limitation on the regional to a global ICT-enabled services and financial hub. Startups In Kenya have clinched the mobile industry the likes of Cellulant - a mobile value-added services (VAS) company, Kopo Kopo - a mobile payment platform, Virtual City - a mobile supply chain, knowledge management and CRM company and mobile payments system, M-Pesa.

1.1.1. Early Stage Funding

The European commission of 2003 defined SME funding as the financing of small and medium-sized enterprises (SME) .The major function of a business finance market is to price, supply and acquire. Newton (2001) states capital is provided in the form of overdrafts and bank loans; leasing and hire-purchase equity; venture capital. The earliest forms of funding are seed and early-stage funding. Basu, (2010) (as cited in Funding Savvy 2010), a funding resource website has defined early-stage funding as a startup company's first round of substantial funding. The difference between the early stage funding and seed funding is the former allows additional operational flexibility while the latter allows a startup to not only develop a prototype product but also produce enough investor interest for several funding rounds.

The sources of early stage funding may comprise of the founders' personal savings and investments from friends and family. Banks usually do not lend to startup enterprises due to the high risks involved, nonetheless, a startup entrepreneur may have more potential success with angel investors, private equity funds, Venture capitalists, Crowd funding, accelerators, bootstrapping, friends and family. Basu (2010) businesses require funds to maintain operations, such as marketing, product development and administration.

1.1.2. Small Medium Enterprises and Financing needs

There are three criteria by which the Government of Kenya defines the word Small Medium Enterprise (SME)? Government of Kenya (2005), the first criterion, based on the number of employees, defines SMEs as those enterprises below a certain number of workers (i.e. can range from less than 10 to less than 50 employees).The second standard defines the SMEs as the degree of legal formality and has been used to distinguish between the formal and informal sectors. The third condition defines SMEs as based on the limited amounts of capital and skills per worker. The definition varies from one country to another (depending on the economic

structure); the regulatory and institutional framework for the Kenya's SMEs has been based on the number of employees and the company's annual turnover (MSMEs Act, 2012).

Larger firms differ from small business in terms of capital structure decisions. Their dependence on private markets limits the source of funding they can acquire. This together with the small firms' initial use of internal source capital forms a unique opportunity in which capital structure decisions are made. It is widely accepted that small businesses have various optimal capital structures and are funded by different sources at different stages of their firm's lives (Berger and Udell 1988). It has been suggested that many startup firms depend on initial insider financing trade credits and angel financing (Wetzel Jr. 1994).

1.1.3. Early Stage Funding and Small Medium Enterprise performance

Business growth is defined as the process of upgrading the success of an enterprise. It can be achieved by boosting revenue of the venture with greater product sales income or by increasing profitability of the operation by minimizing costs. Growth in SMEs have received considerable attention from researchers and policymakers all over the world for reasons identified by Turok (1991) as follows: First there is considerable interest within the field of small firms policy and research in the identification of features that distinguish firms which grow from those that fail. This is important if more selective small firm's policies are to be developed. Second, the ability to identify unique features of more and less successful firms may provide insights into the factors influencing small firm development and hence improving and being able to understand the growth process. Thirdly it has become, common among scholars to view SME growth as a series of phases or stages of development through which the business may pass in an enterprise life-cycle.

According to McDermott (2012) companies that have their initial funding from an outside source, have done better than other companies. He also stated that firms with at the initial stage of funding experienced 5 times the growth company norm. These companies were able to come up with the initial capital and later produced revenues 30% to 75% greater than the average growth company.

1.1.4. Information Technology Sector in Kenya

In 2010 World Bank report recognized the expanding ICT sector and its influence on other sectors as key to this new period of development. The ICT market is growing however it is still quite small, with the notable exception of mobile money, which has brought about an uprising in the access to financial services for Kenyan citizens. The potential for rapid economic growth still exists, with strong indications that the foundations of the national development and growth strategy that is in "Vision 2030", are now in place.

Since 2000, Kenya's ICT sector has outperformed all other segments of the economy, growing by 23% during the decade to 2011. The ICT sector is dominated by the success of mobile phone penetration and affiliated innovative new services driven by this, especially that of mobile money and mobile apps, for which Kenya has a strong reputation. The IT sector is less well developed; it is led by international companies rather than domestic players, and is much smaller in terms of revenue and influence on the economy. The ICT sector is ruled by the success of mobile phones, mobile money and to a certain degree, the development of apps. The Communication Commission of Kenya which is the industry regulator has been able to register substantial growth and recognition to competition introduced in the Kenya ICT market.

Wangari (2015) reported Kenya number has increased in terms of ideas and start-up competitions. These competitions are either new concepts or a localization of internationally competitions. There is an increase in the number of tech firms in Kenya compared to others countries in Africa especially in the mobile applications and web solutions. Otuki (2013) notes universities such as Kenyatta University, The University of Nairobi and Strathmore University are innovation centers. Here, promising entrepreneurs are given support to kick-start their projects.

In IHub (is a community of creatives and technologists bound together by a common theme: innovation) we find that they have been able to come up with innovative technology that has been able to change people lives. We find that their members Jepchumba launched African Digital Art's first event, a website that has transformed the digital art space in Africa by giving thousands of artists a platform to showcase their work on. Other great examples of companies

started, include mFarm (a mobile agricultural information tool), Rupu (a Groupon clone for Kenya) and investors found for Eatout.co.ke, are amid others.

1.2 Research Problem

According to Castelli et al (2011) early stage funding is important to the success of startup because when you fund your business from angel investors or venture capitalists, there is an expectation that you will create a liquidity event for your investors within the next 5 to 7 years. Although Berger and Udell (1988) stated that small business have different optimal capital structure and are financed by various sources at different stages of their organizational lives. There are many sources in which SME can get funding from he went on to suggest that venture capitalist, angel investors , accelerators, crowd funding and many more (Amati,2010). The entrepreneur needs outside investments to grow one's company and reach the intended market quickly. McDermott (2012) found out that companies that got their initial funding from outside sources have done statistically better than companies that have not gotten funding. This companies that have outside funding tend to have better revenues and their survival rate is raise to almost five times the growth company norm.

Though many studies have been done regionally, few if any focus on this early stage funding in the SME sector in Kenya. This research brings out clear understanding of the various forms of early stage funding and the impact of the funds. Kenya SMEs tend to suffer from problems that eventually hinder their growth (Kasekende and Opondo, 2003). Beck and Demirgüç-Kunt (2006) suggested that access to finance for SMEs is an important factor in order for a company to experience continuous growth. Numerous studies have recognized that the SMEs owner savings, as well as the assets of friends and family, are often the base of seed capital Roberts (1991). In their very early stages of development many SMEs are forced to seek external investment capital (Oakey, 1984). Firms which seek external capital most vigorously tend to be growth-oriented companies

Schiffer and Weder (2001) pointed out the fact that small firms consistently report higher growth obstacles than medium-sized or large firms. Beck et al (2005) related study indicated, similar to Schiffer and Weder (2001), that small firms are consistently the most adversely affected by external obstacles in pursuance of growth. Muteti (2005) stated unavailability of finances is one

of the major problems that contribute to slow development and also high mortality rates of small companies in Kenya. In 2003 the World Bank reported that SMEs in emerging countries experience difficulties in obtaining funding. The risky nature of many SMEs is borne out by a statistic quoted by Karungu (2002) claimed all jobs created in the SME sector 75% are lost within the year. The study thus proposes the following research question: "what is the nature of relationship between sources and impact of early stage funding for the IT Startups in Kenya?"

1.3 Research Objectives

The main objective was to explore the different early stage funding option available to entrepreneurs in the IT SME sector and their impact on SME performance.

- I. To identify IT startups SME funding sources in Kenya
- II. To establish the level of IT SME funding
- III. To establish the relationship between level of early stage funding and IT SME performance.

1.4 Value of the study

This study of early stage funding will contribute to a learning paradigm in the IT SME sector in Kenya. The significance of this study lies in its contribution to the field of funding by providing an overview of how different funds helps IT entrepreneurs develop self-efficacy to create successful ventures in entrepreneurship. The present study's findings may also include valuable information for entrepreneurs to improve entrepreneurial knowledge and self-efficacy.

This current study adds to the entrepreneurial literature by providing an understanding of how different early stage funding will help build successful business experiences, self-efficacy, and outcomes for IT entrepreneurs. Furthermore, the findings from the present study may compel other researchers to explore the phenomenon of entrepreneurial funding for all SME sectors in Kenya.

The study will be of importance to the management of the Nairobi Securities Exchange (NSE) and the Capital Markets Authority (CMA) by providing guidelines on how the funding option influences growth of SMEs with the view of informing future policy changes. The government

will benefit in formulating entrepreneurial policies that involve early stage funding for entrepreneurs, through formulation of appropriate policy for the growth of IT sector in Kenya. Ideal networking forums will be created to identify and nurture talent for the growth of entrepreneurship through creation of good business models.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The purpose of this chapter is to explore theoretical and empirical underpinning with the objective of finding what other scholars have researched on regarding early stage funding, the sources and performance of the IT startups. The chapter develops a conceptual framework, which forms the basis of comparison of data analysis and theories. The chapter is structured as follows: Early stage funding, the level of funding and uptake, early stage funding and IT SME performance, theoretical background, empirical studies and the conceptual framework.

2.2. Theoretical Foundation of the study

Van Ryn and Heaney (1992) defined a theory as a set of interconnected concepts, definitions, and propositions that present a systematic view of events by identifying relations among variables, in order to predict and explain the events. Theoretical literature is primarily concerned with theories rather than the practical application. It begins with a formal model that seeks to explain participation patterns in terms of basic theory (Heilbrun & Gray, 1993).

Although most research on capital structure has focused on public, nonfinancial corporations with access to international capital markets (Myers, 2001), a delayed realization of the importance of SMEs to national economies has resulted in a burgeoning policy and scholarly literature on the subject of SME financing in the past two decades. The theories that will be used are Pecking Order Theory and Entrepreneurship Theory.

2.2.1 Pecking Order Theory

The loyalty of SMEs to the pecking order of finance is reliant on the sources of finance accessible at the time of the investment decision, which is dependent on the stage of development of the venture. Myers (1984) proposed the Pecking Order Theory based on a number of studies have provided empirical backing for the Pecking Order Theory in enlightening capital structure in SMEs include Holmes and Kent (1991), Zoppa and McMahon (2002), Watson and Wilson (2002) and Berggren et al. (2000). The primary factor of SMEs to the Pecking Order Theory of funding is the need of the owner to maintain control and independence of the firm (Jordan et al., 1998). The Pecking Order Theory is not only reliant on demand-side

preferences, but also on the availability of the preferred source of funding. Sources of internal equity for start-up firms comprises of personal funds of the firm owner and funding from friends and family (Ang, 1992). The pecking order framework shows how companies choose their form of financing in a certain order.

Pecking order may be used to explain that companies do tend to manage financing using the easiest source, for them. It does not necessarily mean that one mode of financing is inherently superior to the other. For instance; depending on the circumstances of a business, the entrepreneur must weigh all the options, and then choose the one that is most likely to produce the result that is in the best interests of the venture over the long-term, rather than simply going with what appears to be the easiest solution.

2.2.2 Entrepreneurship Theory

Shane and Venkataraman (2000) suggested that the entrepreneurial function is the discovery, assessment and exploitation of opportunities, in other words, new products or services; new strategies and organizational forms and new markets for products and inputs that did not previously exist. Entrepreneurial opportunities exist because different agents have differing ideas on the relative value. The theory focuses on the heterogeneity of beliefs about the value of resources (Alvarez and Busenitz, 2001). Reynolds (2005) states entrepreneurship can be theorized as the discovery of opportunities and the subsequent creation of new economic activity, often via the creation of a new organization.

According to Miller (1983) funding is essential that is it aids in the setting up and expansion of their operations, create new products and invest in new staff. Several startups begin as ideas from a number of people, who bring in their funds and at times, turn to family and friends for financial help in return for a share in the venture. If SMEs cannot find the funding they need, brilliant ideas may fall by the curb and this signifies a loss in potential growth for the economy. Thorne (1989) suggested that an entrepreneur's ability to raise capital past traditional sources of funds pinpoints the entrepreneurial character of the business owner. The aim of this theory is to be able to show the difference between a business man and an entrepreneur that is an entrepreneurial mind will think outside the box in terms of funding he/she will go beyond the traditional source of finance to finance the venture.

2.3. Sources of Early Stage Funding and support

One of the most difficult problems in the new venture creation is obtaining finances. There are several sources of financing that can be considered, some of the sources tend to come with additional help such as mentorship, management consultation and exit plans. The following are a list of funding options Bootstrapping, Angel Investors, Crowd funding, Venture Capitalist, Friends and Family.

2.3.1. Bootstrapping as an early stage fund

Lam (2010) stated that bootstrapping is the method used in meeting the needs for resources without relying on long-term external finance from debts holders or new owners, which includes taking advantage of supplier credits using personal funding and sharing investments with other entrepreneurs. Bootstrapping includes the attainment of funding and the management of firm finances, such as credits extended to customers or from suppliers, implying the importance of social capital in the successful handling of financial needs (Ebben, 2008; Ebben & Johnson; Winborg & Landström, 2001). Empirical research has shown the importance of financial bootstrapping methods for the financing of SME (Van Auken 2005; Brush et al. 2006). Patel et al (2007) stated that new businesses that use financial bootstrapping for securing resources will reduce their dependence on stakeholders such as external financiers.

It offers a number of advantages to startups: responding to environmental and competitive change (George 2005), overcoming information asymmetries (Bhide 1992), encouraging efficient use of resources (Timmons 1999) and introducing discipline. Brush et al. (2006) entrepreneurs who use their "capital raising ingenuity" are in better position to develop their ventures. Bootstrappers are better equipped to gain acceptability from potential funders (Freear, Sohl, and Wetzel 1991). Bootstrapping is vital to the success of entrepreneurs involved in the initial stages of business creation when they are faced with scarcity of resources (Huyghebaert and Van de Gucht 2007). Firms which participate in bootstrapping tend to respond more efficiently to their customers (Carter et al. 2003; Brush et al. 2006).

2.3.2 Angel Investors as an early stage fund

Angel investors are wealthy individuals who offer capital to firms that are not listed and have no family ties with them. These days it is widely acknowledged that angel investors play a vital role

in the growth and development of new ventures; in terms of both personal networks and the financial capital (Mason 2006; Kelly 2007). Many start-up companies need external funding to grow (Tyebjee & Bruno, 1984; Hisrich & Jankowicz, 1990). Start-ups expect quick and aggressive growth; they turn to angel investors for capital. Angel investors fund more firms than any other source of funding (Freear, SSohl, & Wetzel, 1992). Research has shown that the typical angel investor is a middle aged male who invests quite a large sum of his personal wealth, in startup technology-oriented firms (Mason, Harrison, and Chaloner 1991; Duxbury, Haines, and Riding 1996; Hindle and Wenban 1999; Tashiro 1999; Reitan and Sørheim 2000; Hindle and Lee 2002; Stedler and Peters 2003).

Present research has also pointed out that angel investors tend to work closely with their portfolio firms as a means of both protecting and promoting their interests. Even if angel investors are a varied population (Stevenson and Coveney 1996) there seem to be some secure generalities among many of them. In their research they found the advantage of angel investors are often successful entrepreneurs in their own right who can bring experience, expertise and a network of contacts to the business. Although both angel groups and venture capitalists have experienced entrepreneurs in their organizations, angel investment tends to come earlier and in smaller amounts. Angel funding tends to originate from individual investors versus venture capital, which is considered institutional money.

2.3.3. Crowdfunding as an early stage fund

Crowdfunding is used to describe a creative form of financing for young innovative business, making use of the media and the Internet with a true universal outreach (Belleflamme, Lambert, and Schwienbacher 2013; Lehner 2013, 2014). As an alternative of traditional sources, entrepreneurs present their ideas to a global public on multimedia enabled, web-based stand. This alternative has become important because outdated sources of risk finance are running low, the consequence of the global financial crises that still holds a firm grip on banks around the world. On contingent the legitimacy of the venture, the members of a highly dispersed and heterogeneous crowd may provide small financial pledges, adding up to large amounts, sometimes in the millions (Lehner 2013; Mitra 2012; Stemler 2013). The individual

contributions are relatively small compared to traditional investment forms, the risk for the investors remain low (Lehner 2013; Schwienbacher and Larralde 2010).

Few articles have addressed the phenomenon and only recently do we see an emerging interest from scholars coming from a different range of disciplines (Belleflamme, Lambert, and Schwienbacher 2013). The rise of crowdfunding, which offers little opportunity for due diligence and involves not only dedicated venture capitalists funds or friends and family (Harrison 2013), but also many outsiders from near and far remains astounding. Media attention helps the founders look to create strong investment signals and helps gain momentum (Lambert, Leuz, and Verrecchia 2012). The benefits of crowdfunding in Fundable (2015) are it tends to be more efficient than traditional fundraising, creates traction, social proof and validation, an opportunity for crowdsourced brainstorming to refine one's idea, one is able to gain early adopters and loyal advocates and finally it doubles up as marketing and media exposure.

2.3.4. Venture Capitalists as an early stage fund

Amissah (2009) suggest that venture capital assists investors to access equity capital to finance expansion of business while maintaining control. The expertise and extensive relationships of the venture capitalist through its network add value to the company and increase credibility with customers, and finally, the company gain access to the venture capitalist knowledge in accounting, budgeting, computer systems, and back-office operations. In venture capital financing agreement the venture capital firm will provide financing to enable a business to undertake a project and in return the venture capital company gets an ownership stake in the business (Boateng, 2010).

Venture capital is actually a very common phenomenon in Africa, and most of today's successful businesses have had some form of outside individual investment at some point during their growth (as cited in The Finance Mail Vol 9 no.6, 2003). Gikomo (2010) found the effect of venture capital on growth of SME is real and practical. Increased venture capital funding was also found to improve marketing and distribution networks while also improving technical and management expertise, thereby enhancing growth in these firms. Good management and technical expertise, enables firms to make good use of available information and resources to present well-crafted business growth strategies thereby reducing risk to the business. The study

recommends that SMEs ought to acknowledge the possible advantages of seeking external equity funding from corporate sources. White (2009) stated Venture capitalist assists SMEs in the provision of funds and in the internal operations of the business particularly in policy formulation.

2.3.5. Friends and families as an early stage fund

According to Roberts (1991) the owner's savings, assets of family and friends, are regularly the base of seed capital. Mason and Harrison (1994) stated for the majority of SMEs internal equity and profits are insufficient to meet the high capital requirements. While they are in the early stages of development most SMEs are forced to look for external investment capital. The firms that seek external capital tend to be vigorously growth-oriented companies (Oakey, 1984). Many business owners look to borrow money from family or friends in order to start their new business. This can be one of the best sources of funds because if those individuals that you approach respect and trust you, the approval is almost guaranteed and approval times are usually very short.

According to Oakey (1984) the advantage is you do not need to sign complicated contracts and you are not required to come up with a sophisticated business plan. There is no need to hire a lawyer when dealing with friends and family. All that is required is a handshake or a hug. Your father is not likely to force you into bankruptcy by calling in a loan. Friends and family are understanding and flexible. This flexibility is reflected when one's venture temporarily runs into trouble.

2.3.6. Accelerators, Incubation and Scientific Parks

Startup accelerators are becoming more popular. Approximately 200 accelerators exist around the world attracting applicants whose number has exploded over the past few years. Miller and Bound (2010) found that accelerators provide tailored mentoring and support to the selected teams while incubators provide access to space and discounted services. Brown (2010) defined 'Incubation' as a collection of techniques that can be used to prove an idea, develop a team and de-risk ventures for later-stage investors. According to the United Kingdom Science Park Association (UKSPA), a science park is not only a business support but also a technology transfer initiative that tends to encourage, support the start-up and incubation of innovation-led, high-growth, knowledge-based businesses. The ICT sectors; investments require smaller

amounts of initial capital than more outdated technology sectors. These firms have been labeled "lean start-ups" as they allow more rapid testing, adjustment of business models, greater capital efficiency (Ries, 2011).

Experience from these initiatives is indicating that a more focused approach and facilitating access to highly relevant networks play a key role in the successful growth of start-ups. In the OECD report of 2008 it was stated that accelerators, incubation and scientific parks do not provide funding but provide workstations for start-up firms to benefit not only through shared facilities and but also through a range of business support services on special and flexible terms that would be unavailable through markets. Such backing is time-limited and tends to support young firms during the most vulnerable stages of their development.

2.4. Levels of early stage funding and uptake

At start-up level, the generally held view is that firms have difficulty accessing external finance due to information opacity (Huyghebaert and Van de Gucht 2007). The most commonly used sources of funding at this stage are personal savings of the business owner and finance from friends and family members (Ullah and Taylor 2007).

Venture capitalists usually expect a 20-50% annual return on their investment at the time they are bought out. A typical investments range from \$500,000 to \$5 million and management experience is a one of the consideration in valuing financing prospects. Cummings (2013) states Venture capitalist tends to give large sums of money to a business in return for equity and they give a minimum of £2M. Panday (2003) conventional financiers support proven technologies with established market. However high technology is not a necessary condition for venture funding. Angel investors assign a maximum of 20% of their entire capital usually not more than five hundred thousand euros, to investments in unlisted companies. Their portfolio investments are spread between one and five companies. These companies are either at the seed or early stage phase. Angel Investors when they are investing in an individual they tend to give them £25000-75000 (Cumming, 2013). In crowdfunding we find that there are no limits on the amount of funding, it depends with the entrepreneur (Lehner et al, 2015).

2.5. Early stage funding and IT SME performance

According to Ngahu (2009), SMEs are evidently incapable of sourcing, evaluating and adapting technologies effectively. The degree of fulfilling the requirement of a job and it is measured in terms of results. The word performance is an elusive concept and may be interpreted differently by different people. Performance can also be defined as the ability to perform and achieve desired results (Langdon, 2000). McDermott (2012) found out that companies that got their initial funding from outside sources, like venture capital firm, tend to do better, statistically, compare to other firms. The growth company norm of companies involved with outside investors that received early stage funding at the survival stage, was found to rise almost five times. These firms out-produced their peers by 30% in current revenues. Knight (2012) stated businesses with marketable products or services are more likely to fail due to insufficient initial capital funding that cannot support operations through their formative periods.

Research conducted globally shows that between 70% and 90% start-ups fail but the intervention of venture capitalists and angel investors reduced the failure rate down to 15% to 25% (Lindner & Liden, 2007). The capital structure of SMEs has greatly contributed to the reduced failure. It is not only the viability of business that determines whether they will fund a venture but management has to be improved and a step-by-step funding procedure followed. They tend to provide capital and management support. When the product is developed and the technical know-how of the founding management team becomes redundant, investors may prefer to replace the some of the management with experienced professional managers (Sahlman, 1990). The founders typically may be academics spinning out from a university oriented entrepreneurs with little management and industry expertise

2.6. Empirical studies

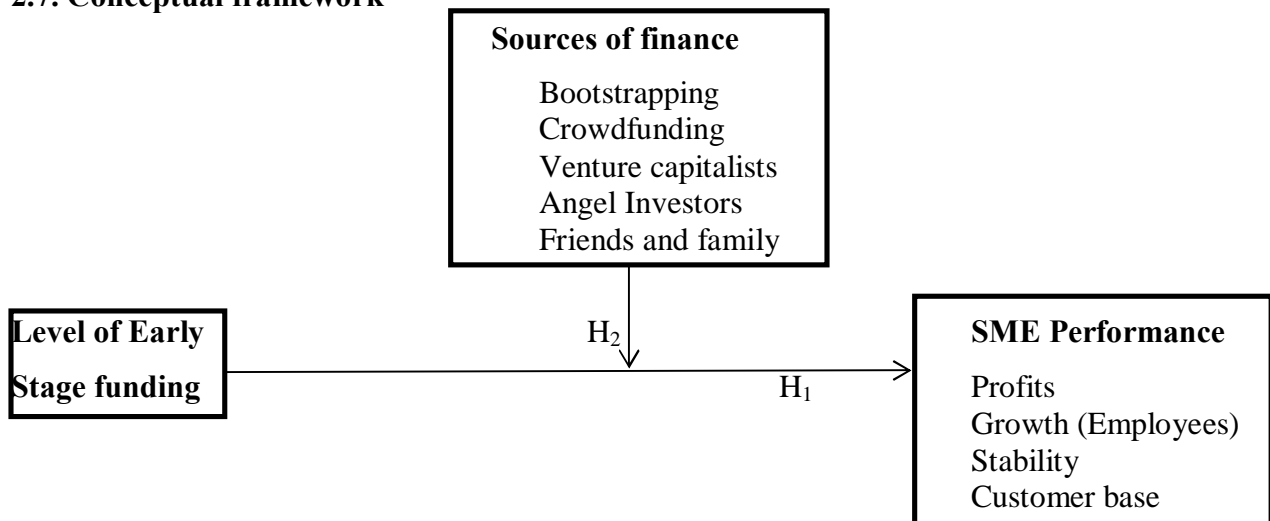
Current literature on SMEs indicates that lack of capital is a strong limit to growth (National Baseline Surveys, 1993; 1995; 1999; Stone, Levy and Paredes, 1992). According to these studies, most SMEs rely mainly on their personal savings and reinvested profits to finance their business. Mboniyane and Ladzani (2011) stated factors that hinder the growth of SMEs in South Africa, to create awareness of these factors and to develop guidelines for SMEs owners to promote successful enterprises. The study found that slow growth rate can be accredited partly to the lack of support that SMEs receive from institutions particularly their own internal

weaknesses. The finding revealed that the most common causes impeding business growth was lack of legal knowledge, a lack of funding and a general lack of business acumen.

The major difficulty SMEs come across is the issue of access to finance. SMEs, especially in developing countries, suffer from lack of access to funds from both the money and capital markets. (Oteh, 2010). According to a survey in Kenya of the top 100 SMEs, most SMEs rely heavily on savings or bank loans for expansion (KPMG, 2011). Such challenges are not unique to Ghana and Kenya but also they are rampant across the Southern African region member countries. The three main challenges that Small to medium size business owners face are financial support, business opportunities to be able to grow, businesses diversification and good business practices. Without enough and sustainable financial capital SME will not realize full growth (SME-RC, 2012).

Memba et al., (2012) discovered venture capitalists not only provide funds but also add value to SME. According to Memba (2011) study investors have an impact on performance of SMEs they fund. Upon use of investors average profits doubled value of assets improved as funds were available for expansion. Sales and employment doubled in the business. Simiyu (2012) showed that SMEs practice pecking order theory with sleekness towards cheaper funds, which is internal equity and donations, friends contribution. The reasons found ranged from high interest rates presented by financial institutions to default procedures employed by the institutions.

2.7. Conceptual framework



From the conceptual framework, the reader is able to rapidly grasp the projected relationship and therefore its usage in this study. The independent variable in this study is level of early stage funding whereas the dependent variable is the performance of IT SMEs which is prone to change as independent variable changes. The indicators of performance were growth and survival. The moderating variable will be the source of finance as we find out that different sources come with different advantages for example angel investors tend to come with not only financial needs but also mentorship.

The Research hypotheses are:

H₀₁: The amount of early stage funding is not related to SME performance

H₀₂: Sources of funds do not influence relationships between level of early stage funding and SME performance

2.8. Summary of the literature review

In this chapter we have reviewed the different sources of funding which are Bootstrapping, Crowdfunding, Angel Investors, Venture capitalist, Friends and family, Accelerators, Incubators and Scientific parks, empirical studies and Theoretical studies which are pecking order theory and entrepreneurship theory. This study sought to establish the nature of relationship between the choice of capital funding option and impact of SMEs in the IT startups in Kenya. The key outcome is IT startups that have initial funding from outside sources tend to do better statistically (McDermott, 2012). Another outcome is that by having different sources in which SMEs can get funding from tends to grow ones market and reach the intended market quickly (Amati, 2010). The conceptual framework will help one be able to establish the relationship between different variable.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods that were adopted in investigating the sources and impact of early stage funding for the IT SME startups in Kenya. It also explains the research instruments that will be used in conducting the study. It is thus organized under the following sub sections: Research design, population of the study, sample, Data collection and Data analysis.

3.2 Research Design

The research design was mixed that is descriptive cross-sectional survey and qualitative case studies. According to Kombo and Tromp (2006), descriptive studies are not only restricted to fact findings but may often result in the formulation of important principles of knowledge and solution to significant problems. They involve measurement, classification, analysis, comparison and interpretation of data. The aim of using this tool was to examine the sources and impact of early stage funding of IT SME startups in Kenya.

Next two case studies were selected from the sample, one a successful one the other one will be poor performance. According to Young (1960), a case study is a comprehensive study of a social unit that is a person, a social institution or a community. It is basically an intensive investigation of a particular unit under consideration. This research design enabled the researcher to carry out in-depth investigation to bring us to an understanding to strengthen quantitative findings. It emphasized on detailed contextual analysis of a limited number of conditions and their relationships.

3.3 Population of the study

The study area was in Kenya and the unit of analysis was the IT startups operating in Kenya. The target population for this study will consist of 122 IT startups as listed in IHub, Lakehub, Swahilibox and MadeinNairobi (Appendix 1). Population is defined as "population from which we would want to collect data if we were conducting a complete census rather than a sample survey (Greenm, Camilli & Elmore, 2006). The population of this study is composed of IT startups using different sources of early stage funding classified into 5 major subsectors namely: Bootstrapping, Crowdfunding, Venture capitalists, Angel Investors, Friends and Family.

3.4. Sampling

Moore and McCabe (2006) defined simple random sampling as a size n consisting of n individuals from a population chosen in such a way that every set of n individuals has an equal chance to be the sample actually selected. This method is unique as it gives an equal chance of selecting each unit from the population being studied when creating your sample. The sample size will be 85 IT startups, and the formula used to come up with the sample size: where Population Size = N | Margin of error = e | z-score = z

$$\text{Sample Size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

Source: <https://www.surveymonkey.com/mp/sample-size-calculator/>

3.5 Data Collection.

The data was collected out a cross-sectional survey of the entire population. A Cross sectional survey comprises of a sample population at one point element or entire population at one point in time (Cooper and Schindler, 2011). Data collection will be done in two parts. The first tool that was used was a closed ended survey questionnaire (Appendix 1). The questionnaire will consist of three sections. Section one sougheed out funding options for IT startups. Section Two comprised of the level of SME funding while section three measured IT SME performance. The method that was used to distribute the questionnaires was online and pick and drop.

The data collection instrument consisted of interviews with participants using a modified, previously published open-ended interview guide (Kram, 1985). The interview guide (Appendix 2) was open ended and focused on the background, content and the prospects. The owners of the IT startups will be the participants. Personal interviews tend to provide deep insights into the entrepreneurs thoughts regarding their perceptions of funding and its usefulness to them (Qu & Dumar, 2011).

3.6 Data Analysis

The data was analyzed using descriptive, regression and content analysis. The questionnaires data was analyzed using descriptive statistics which includes frequencies distribution,

percentages and measures of central tendency. The analyzed data was used to summarize findings and describe the population sample involved. Section A and B of the questionnaire used descriptive statistics while Section C used the linear regression model.

The study used multiple linear regression models to establish the relationship between early stage funding and the performance of the IT SME startups.

The following model will be used in conducting regression analysis:

$$Y_i = \beta_0 + \beta_1 F + e$$

Where,

Y_i = Firms performance and the different funding option

β_0 = Constant or intercept- defines value of asset without inclusion of predictor variables

$\beta_1 F$ = Regression coefficients; that is the rate of change of dependent variable as a function of changes in the independent variable.

e = The error term reflecting other factors that influence performance.

The Interview guide was analyzed using contents analysis which is the systematic qualitative description of the composition of the objects of the study. It involves observation and detailed description of objects, items or things that comprise of the sample (Mugenda, 2003). This method enabled the researcher to categorize the statements from respondents to describe the logical structure and pattern of decision which help to ascertain in an association to the statements.

3.7 Summary of research methodology

The research design of the project was descriptive cross-sectional survey and qualitative case study this research design enabled the researcher to carry out in-depth investigation therefore strengthened the findings. The data was analyzed using descriptive, regression and content analysis therefore triangulation method was used so as to facilitate the application of the research.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1. Introduction

This chapter provides an analysis of data collected from the sampled IT startups in Kenya. The study used descriptive, regression and content analysis.

A total of 85 questionnaires were given out, out of which 70 responded. It gives vivid characteristics of IT startups respondent firms in Kenya and no efforts were spared to boost the response rate of the questionnaire and interview. In the questionnaire graphs and percentages were adopted as the main statistical techniques for the interpretation of data. Interviews were conducted, which consisted of open-ended questions and prompting statements.

4.2. Preliminary Descriptive Analysis

The study has revealed that 6% started their startup 3yrs ,44% started 2yrs ago, 20% started their startup 1yr ago, 20% started 6months and 10% started 3months ago (Fig. 4.1.). The most recent firm was 3 years since establishment. These findings imply that a firm could be in business for more than 3 years but still remains in the category of small business due to lack of finance to expand its operations. The findings also indicate that despite the age of an SME, venture capitalists and Angel investors are still willing to give funds if only an IT startup can meet the stringent requirements. Duchesneau and Gartner (1990) affirm that SMEs that had remained small for many years needed the attention of venture capitalist and Angel Investors.

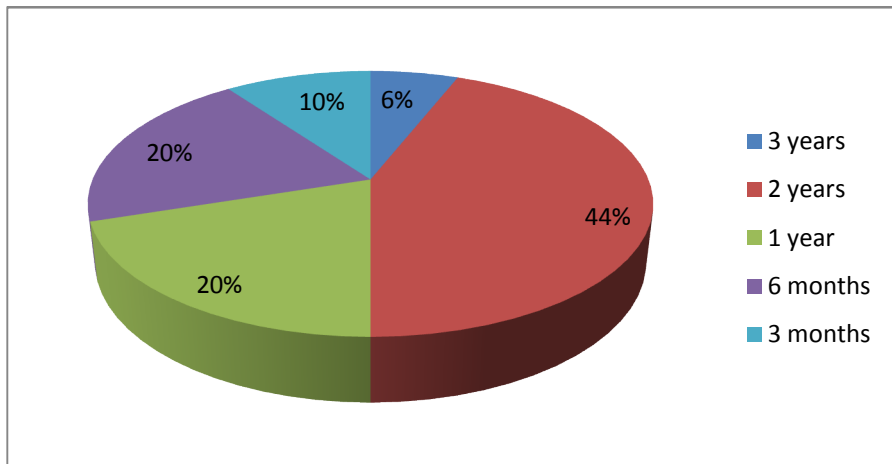


Figure 4.1 Age of the business

Among the IT startups respondents 60% are partnership, 10% are sole trader, 25% are limited liability and 5% are others (Fig. 4.2). The findings indicate that IT startups have realized the advantage of starting a business that is of partnership than sole trader. Firms that are registered as partnership have advantage of not paying corporation tax that is paid by every limited liability companies (Hellmann & Puri, 2002).

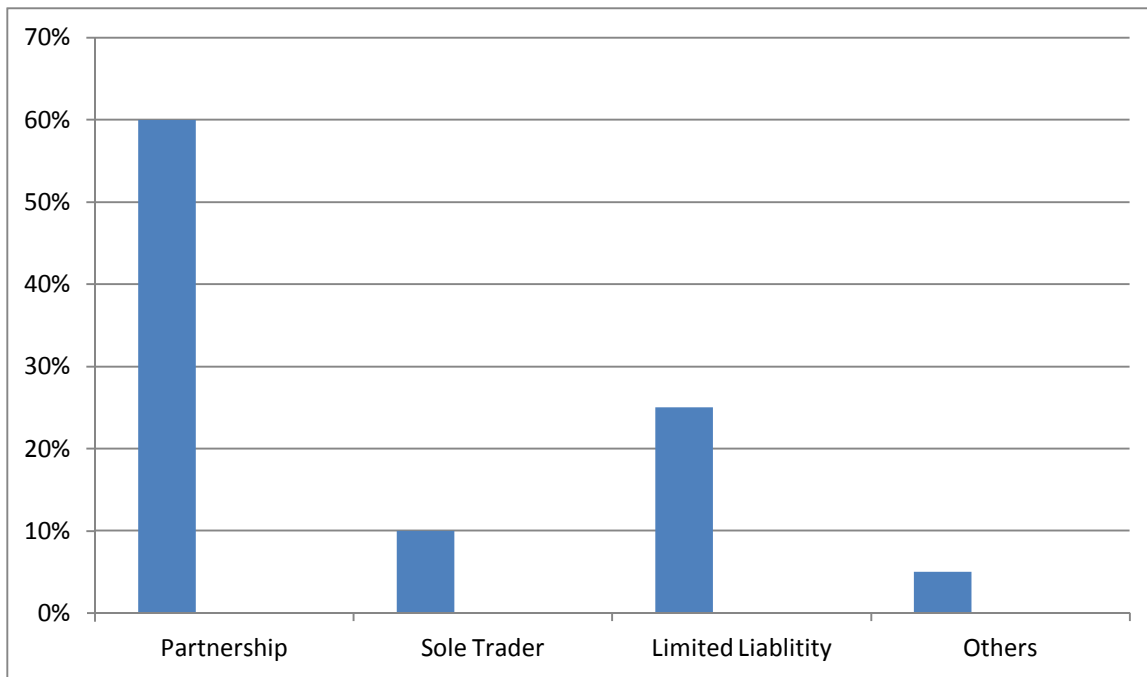


Figure 4.2 Business Ownership

4.3. IT Startups SME funding sources

The MAIN source of finance for the IT startups were Angel Investors, Venture capitalist and bootstrapping each was 23%, friends and family followed 20% while crowdfunding was 11% (Fig. 4.3.). On the question on the other sources of finance that the IT startups have used one discovers that 71% used other sources while the remaining 29% relied entirely on the MAIN source of funding. The other source of funding venture capital, friends and family and bootstrapping each have 24%, Angel investors was 16% while crowd funding 12% (Fig. 4.3.). The significance is that entrepreneurs have realized the essential of funding as it aids in the setting up and expansion of their operations, creation of new products and investment of new staff (Miller, 1983).It also shows that the ability of the entrepreneur to raise capital past traditional sources of funds (Thorne, 1989).

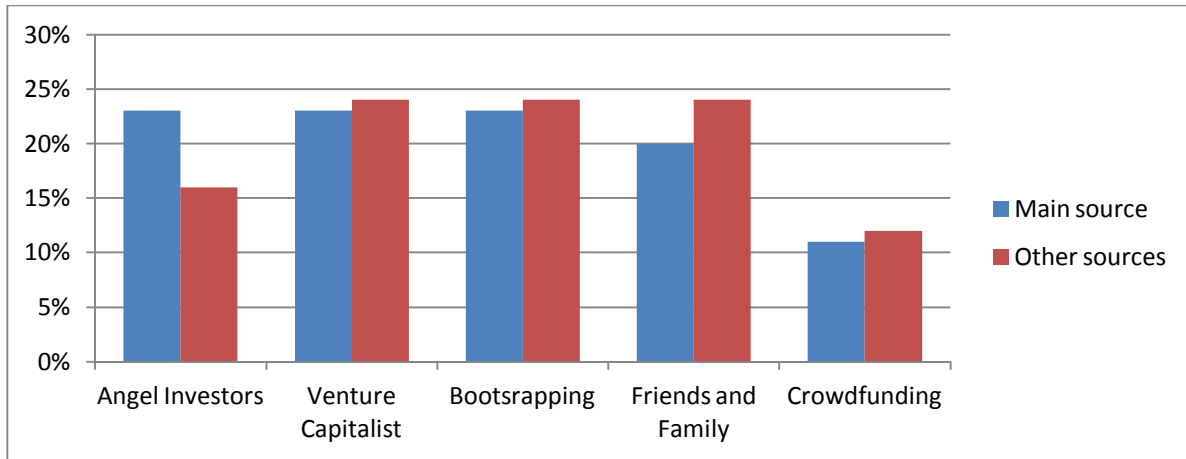


Figure 4.3 MAIN and other sources of Finance for IT Startups

In Figure 4.4 90% said that some sources tend to have more advantage than others examples they gave were Angel investors and Venture capitalist the remaining 10% felt they did not see the advantage any of the sources bring apart from the fund itself. The significance of this is to emphasize the usefulness of venture capital and Angel Investors in firms and observed that they are well connected to specific industry, they help to recruit key personnel, they negotiate with suppliers and customers, and they are even involved in day to day running of the businesses (Florida and Kenny,1988). Venture capitalists and Angel Investors can often leverage their network to help the company hire the right people (Typjee & Bruno, 1981).

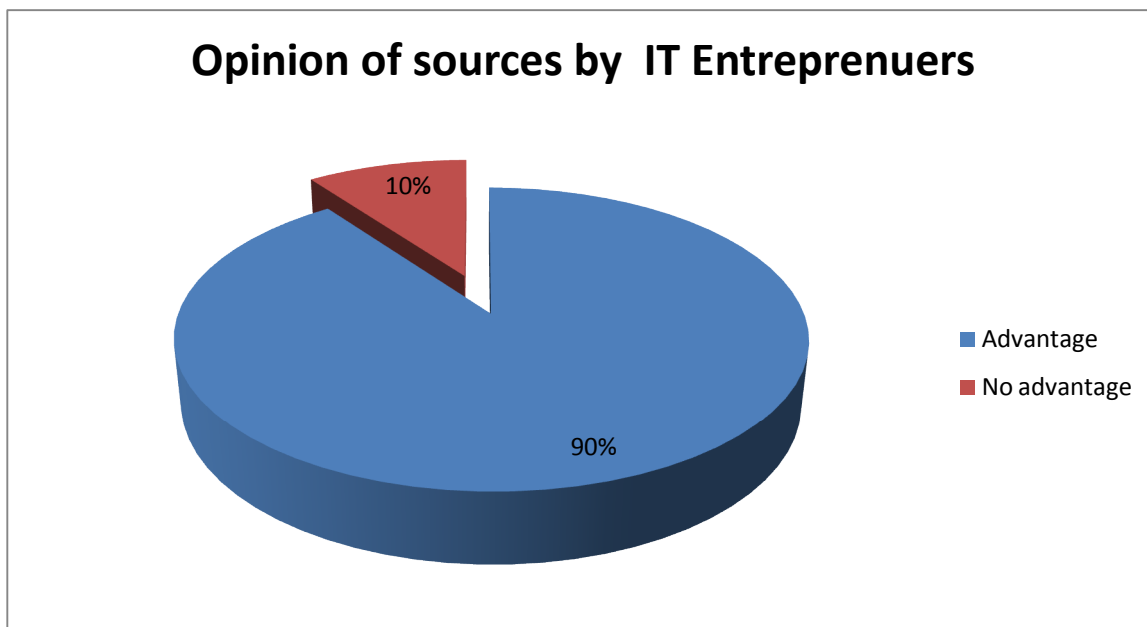


Figure 4.4 Opinion of sources by IT entrepreneur

4.4. Level of funding

The average amount of funding IT startups were given by the different sources ranged from Ksh 50000-25000000 (Fig 4.5). The significance is to show Angel Investors and Venture capitalists tend to give more funding than other sources.

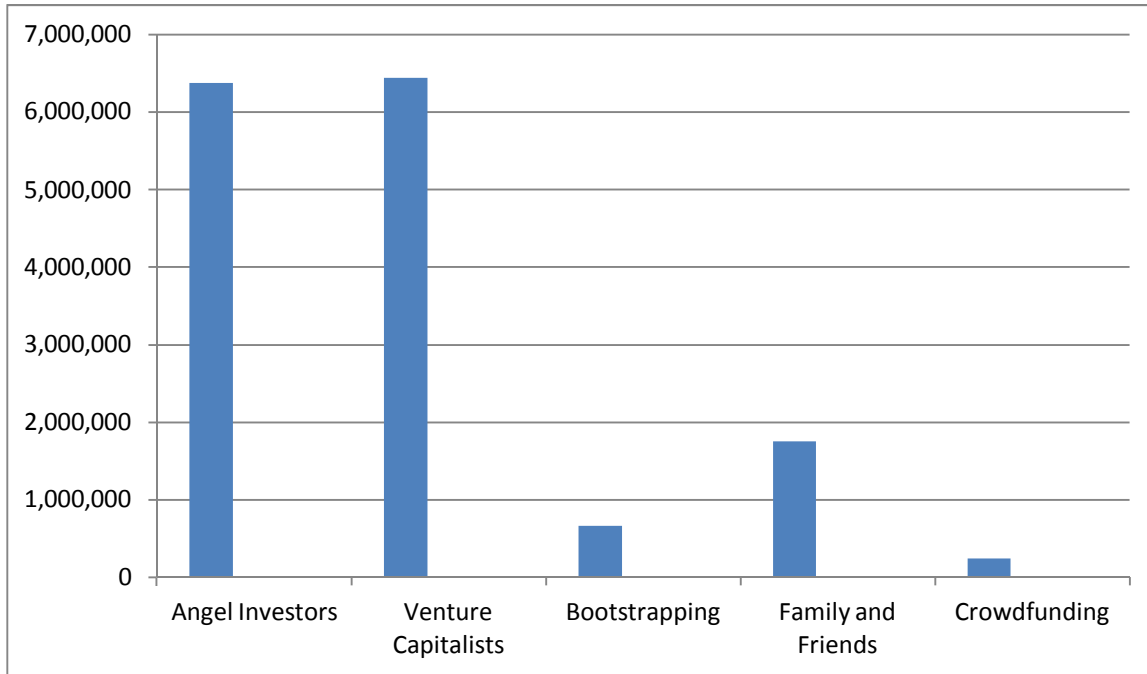


Figure 4.5 Average amount of fund given to the IT startup

For the ones who used Angel Investors they got three quarters of the requested amount while Venture capitalists they got half of the amount they requested for, for the ones who bootstrapped they got a quarter of the amount, crowdfunding they got a tenth of the requested amount and family and friend they got half of the amount (Fig 4.6).

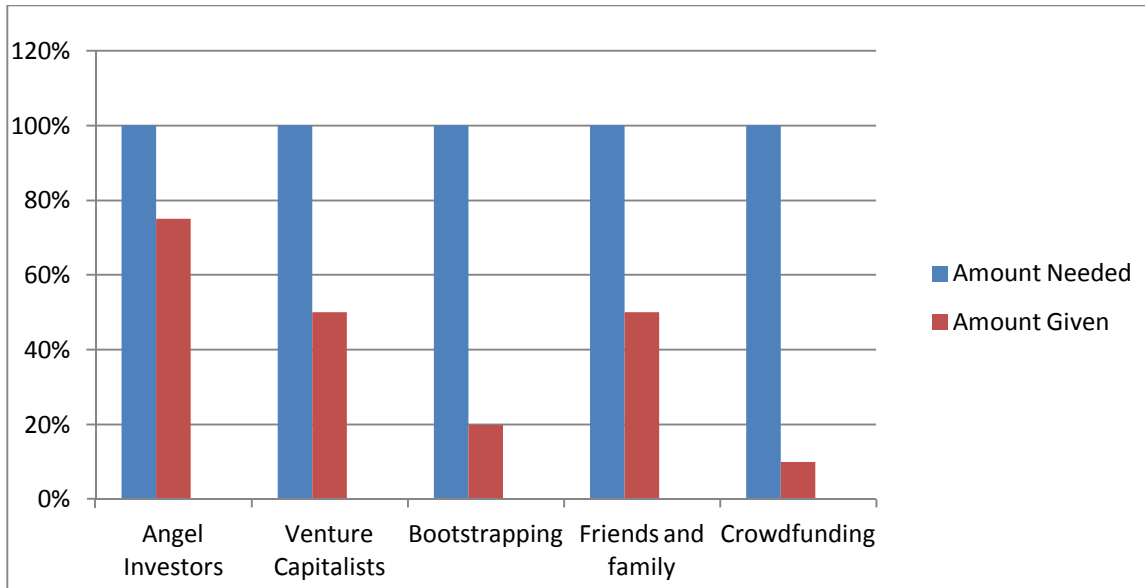


Figure 4.6 Proportion given to the IT startup instead of the requested amount

4.5. Relationship between early stage funding and IT SME performance

Regression analysis was used to measure the relationship between the independent variable which is level of early stage funding and the dependent variable that is IT SME performances. The regression analysis was of the form:

$$Y_i = \beta_0 + \beta_1 F + e$$

Whereby Y_i is the firm's performance and the different funding options, β_0 is the constant variable, $\beta_1 F$ is the regression coefficient and e is the model error term.

Upon receiving of funds from the various sources, IT startups performed. However, those who used crowdfunding, bootstrapping and family and friends did not perform as exceptionally as their counterparts. However each IT startup has shown growth upon use of venture capital indicating that venture capital has an influence on performance of SMEs.

4.5.1. Performance and Summary Output for Angel Investors

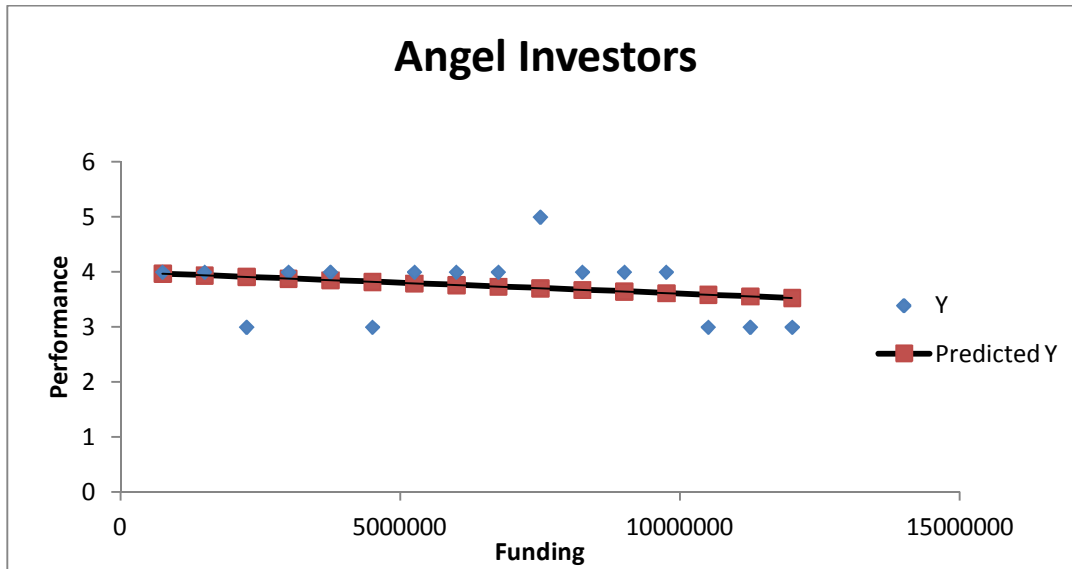


Fig 4.7 Performance of IT Startup against funding for Angel Investors

Regression Statistics	
Multiple R	0.242535625
R Square	0.058823529
Adjusted R Square	-0.008403361
Standard Error	0.579771036
Observations	16

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.294117647	0.294118	0.875	0.365430339
Residual	14	4.705882353	0.336134		
Total	15	5			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 90.0%	Upper 90.0%
Intercept	4	0.304034496	13.1564	2.8469E-09	3.34791086	4.652089	3.46450096	4.53549904
X Variable 1	-3.92157E-08	4.19233E-08	-0.93541	0.365430339	-1.29132E-07	5.07E-08	-1.13056E-07	3.46243E-08

Table 4.1: Summary output of Angel Investors as an early stage fund

$$Y_{AI} = 4 - 3.92(10^{-8})x$$

The P value for Intercept is 2.847×10^{-9} which means it is less than 0.05 hence it is significant. The X coefficient is >0.05 therefore it is not significant. Y is equivalent to 4; R^2 is 0.059, F is 0.365 therefore it is not significant. The slope of the performance of the IT startup against funding is flat with a slightly downward trend. The slope is not significant and has a low R^2 therefore not a strong model.

4.5.2. Performance and Summary Output for Venture Capitalists

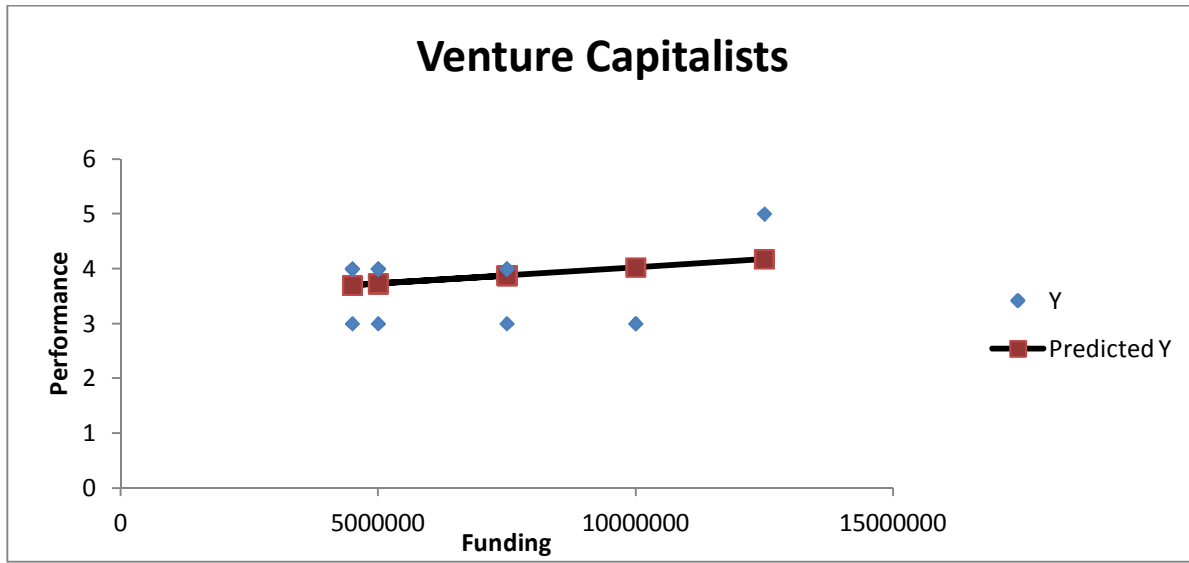


Fig 4.8 Performance of IT Startup against funding for Venture Capitalists

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.254725414							
R Square	0.064885037							
Adjusted R Square	-0.001908889							
Standard Error	0.544424509							
Observations	16							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.287927	0.287927	0.971421	0.341054205			
Residual	14	4.149573	0.296398					
Total	15	4.4375						
	<i>Coefficients</i>	<i>Standard Err</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 90.0%</i>	<i>Upper 90.0%</i>
Intercept	3.427350427	0.413798	8.282656	9.12E-07	2.539840976	4.314859879	2.698522987	4.156177868
X Variable 1	5.98291E-08	6.07E-08	0.985607	0.341054	-7.03654E-08	1.90024E-07	-4.70873E-08	1.66745E-07

Table 4.2: Summary output for Venture capitalists as an early stage fund

$$Y_{VC} = 3.43 + 5.98(10^{-8}) x$$

The P value for Intercept is 9.127×10^{-7} which means it is less than 0.05 hence it is significant. The X coefficient is >0.05 therefore it is not significant. Y is equivalent to 3.43; R^2 is 0.065, F is 0.341 therefore it is significant. The slope of the performance of the IT startup against funding is has a slightly upward trend. The slope is not significant and has a low R^2 therefore not a strong model.

4.5.3. Performance and Summary Output for Bootstrapping

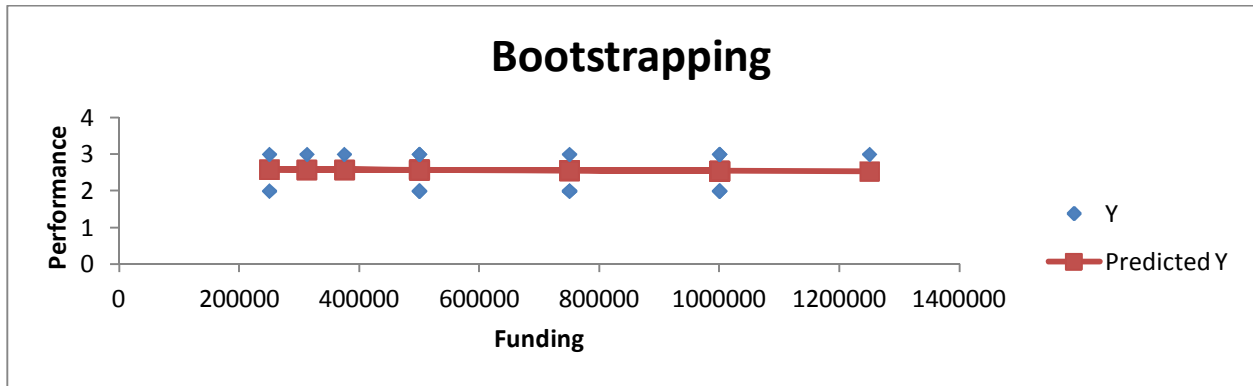


Fig 4.9 Performance of IT Startup against funding for Bootstrapping

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.030803553							
R Square	0.000948859							
Adjusted R Square	-0.070411937							
Standard Error	0.530078422							
Observations	16							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.003736	0.003736	0.013297	0.909836158			
Residual	14	3.933764	0.280983					
Total	15	3.9375						
	<i>Coefficients</i>	<i>Standard Err</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 90.0%</i>	<i>Upper 90.0%</i>
Intercept	2.596125186	0.320304	8.1052	1.18E-06	1.90914215	3.283108223	2.031971095	3.160279278
X Variable 1	-5.03395E-08	4.37E-07	-0.11531	0.909836	-9.86654E-07	8.85975E-07	-8.19246E-07	7.18567E-07

Table 4.3: Summary output of Bootstrapping as an early stage fund

$$Y_{BS} = 2.6 - 5(10^{-8})x$$

The P value for Intercept is 1.18×10^{-6} which means it is less than 0.05 hence it is significant. The X coefficient is >0.05 therefore it is not significant. Y is equivalent to 2.6; R^2 is 0.0009, F is 0.91 therefore it is significant. The slope of the performance of the IT startup against funding is flat with no upward or downward trend. The slope is not significant and has a low R^2 therefore not a strong model.

4.5.4. Performance and Summary Output for Family and Friends

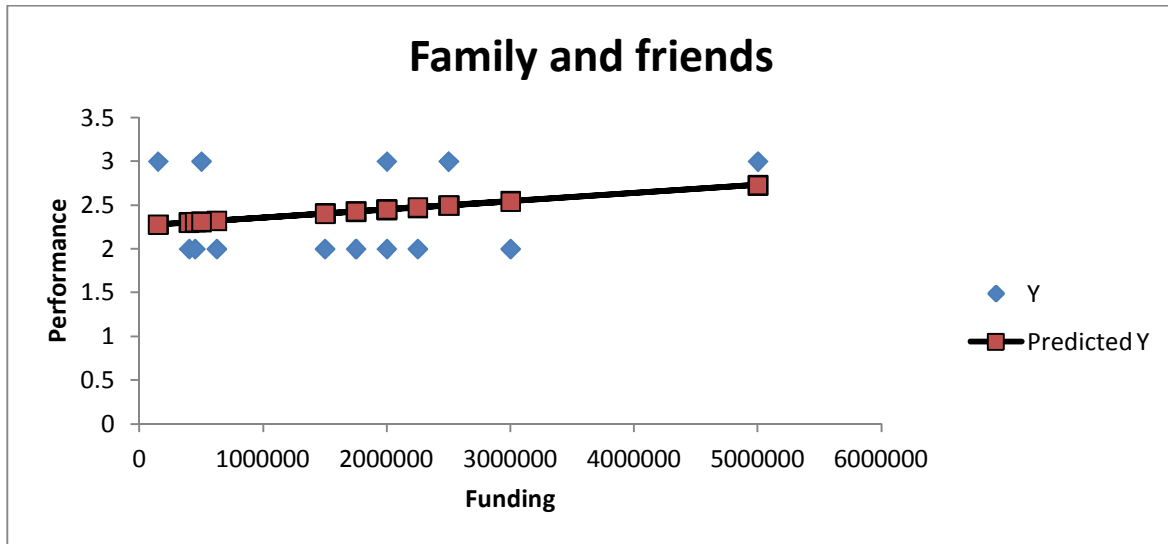


Fig 5.0 Performance of IT Startup against funding for Family and friends

Regression Statistics								
Multiple R	0.238228715							
R Square	0.05675292							
Adjusted R Square	-0.021851003							
Standard Error	0.51913309							
Observations	14							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0.194581441	0.194581	0.722011	0.412117115			
Residual	12	3.233989987	0.269499					
Total	13	3.428571429						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 90.0%	Upper 90.0%
Intercept	2.265315279	0.236990043	9.558694	5.82E-07	1.748958333	2.781672225	1.842930875	2.687699683
X Variable 1	9.28157E-08	1.09232E-07	0.849712	0.412117	-1.4518E-07	3.30811E-07	-1.01867E-07	2.87498E-07

Table 4.4: Summary output of Family and Friends as an early stage fund

$$Y_{FF} = 2.27 + 9.28(10^{-8})x$$

The P value for Intercept is 5.82×10^{-7} which means it is less than 0.05 hence it is significant. The X coefficient is >0.05 therefore it is not significant. Y is equivalent to 2.27; R^2 is 0.057, F is 0.412 therefore it is significant. The slope of the performance of the IT startup against funding is has a slightly upward trend. The slope is not significant and has a low R^2 therefore not a strong model.

4.5.5. Performance and Summary Output for Crowdfunding

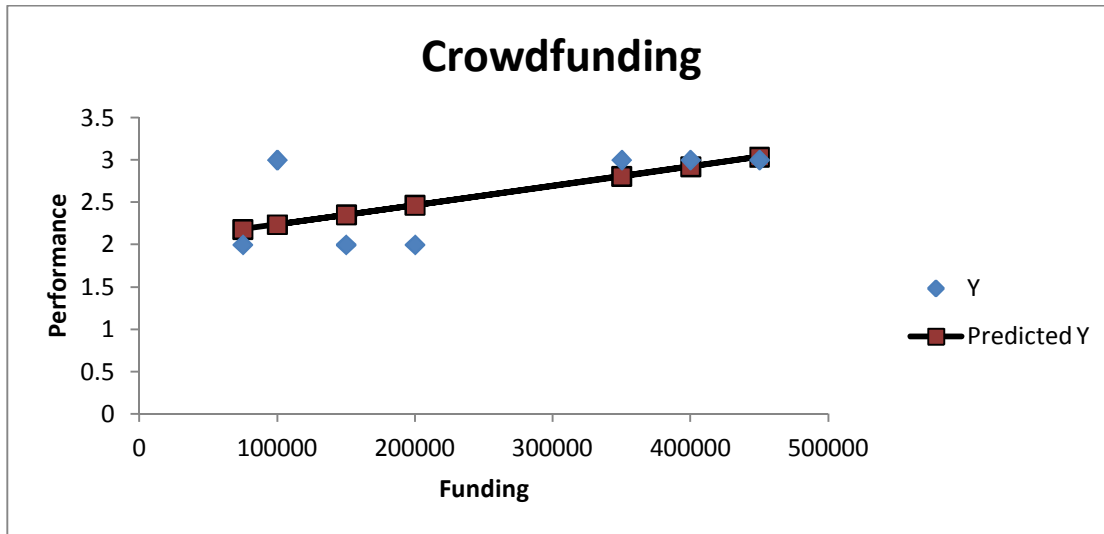


Fig 5.1 Performance of IT Startup against funding for Crowdfunding

Regression Statistics								
Multiple R	0.646081498							
R Square	0.417421302							
Adjusted R Square	0.300905563							
Standard Error	0.44692423							
Observations	7							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0.715579375	0.715579	3.582531	0.116945307			
Residual	5	0.998706339	0.199741					
Total	6	1.714285714						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 90.0%	Upper 90.0%
Intercept	2.010349288	0.341186275	5.892234	0.002002	1.133302049	2.887396528	1.322842441	2.697856136
X Variable 1	2.27684E-06	1.20292E-06	1.892758	0.116945	-8.15371E-07	5.36906E-06	-1.47106E-07	4.70079E-06

Table 4.5: Summary output of Crowdfunding as an early stage fund

$$Y_{CF} = 2.01 + 2.277(10^{-6}) x$$

The P value for Intercept is 0.002 which means it is less than 0.05 hence it is significant. The X coefficient is <0.05 therefore it is significant. Y is equivalent to 2.01; R² is 0.417, F is 0.117 therefore it is significant. The slope of the performance of the IT startup against funding is flat with an upward trend. The slope is significant and has a sizable R² therefore a good model.

4.5.6. IT Startup Performance and Summary Output for all sources

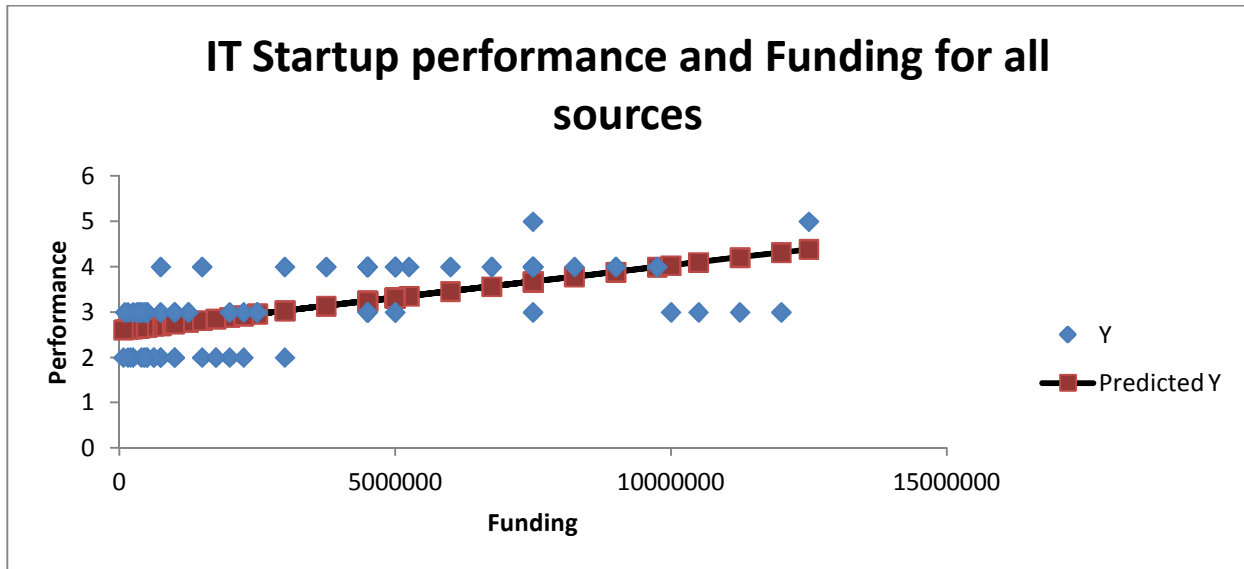


Fig 5.2 Average Performance of IT Startup against funding for all the sources

Regression Statistics								
Multiple R	0.597615811							
R Square	0.357144658							
Adjusted R Square	0.347549802							
Standard Error	0.66644166							
Observations	69							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	16.53217446	16.53217446	37.22251	5.91514E-08			
Residual	67	29.75768061	0.444144487					
Total	68	46.28985507						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 90.0%	Upper 90.0%
Intercept	2.60064045	0.114782354	22.65714501	4.01E-33	2.371533911	2.829747	2.409193111	2.792087788
X Variable 1	1.4277E-07	2.34011E-08	6.101025667	5.92E-08	9.60618E-08	1.89E-07	1.03739E-07	1.81801E-07

Table 4.6: Summary output for the IT startup performance and funding for all sources

$$Y_T = 2.6 + 1.423(10^{-7})x$$

The P value for Intercept is 4.01×10^{-33} which means it is less than 0.05 hence it is significant. The X coefficient is < 0.05 therefore it is significant. Y is equivalent to 2.6; R^2 is 0.357, F is 5.915×10^{-8} therefore it is significant. The slope of the performance of the IT startup against funding is on an upward trend. The slope is significant and has a sizable R^2 therefore a good model. The result indicates that there is a significant relationship between the average performance and the funding for all the sources.

4.6. Qualitative Data Analysis

The interview guide ensured that the participants were asked the same questions during the interview. The interviews examined the participants' background, content and prospects of their IT startup. The interviews captured full, rich descriptions of each of the 2 IT startups in Kenya. One IT company that was interviewed was performing well while the other was failing but they did agree in most questions. Pseudonyms were used throughout the document to protect the participants' identity. The data were organized using the Moustakas (2004) phenomenological method, which included bracketing the researcher's experience; collecting significant statements and grouping them into larger units; capturing textual and structural descriptions of the participants' experiences and developing a composite description to convey the overall essence of -what- and -how- the participants experienced events during their journey of starting their business.

This method enabled the researcher to categorize the statement from the respondents to describe the logical structure and pattern of decision which helped to ascertain in an association to the statements. Participants of the study felt the need of having a partner when you own a business. They both agreed that when one starts an IT startup it is optimal one has a business partner rather than go in for sole trade. Manager Company A stated

“When starting my business I just had IT skills therefore I knew for me to get ahead of the game I needed partners who understood what I did not which is the business side. I researched on multimillion dollar companies and I found out that all of them grew because they had partners to help them through the journey of starting the business therefore I too went out to sought partners. At the end of the day it was worth it because I discovered that I rather own a share in a multimillion dollar company than own 100% of a failing company”.

The participants agreed that when one is funded by a venture capitalists and angel investor work tends to be a little easy because you have more than just a funding partner but a mentor who knows what one is going through and their work is to make you not make the same mistakes they made, when they were starting their business. Manager Company B stated

“Venture capitalist and angel investors they bring in more than the capital to fund or support your business they bring in business support, mentorship and network. When they come to your business they stop being investors and they became part of the family because they bring in their experience to the table. Yes, they have invested in your company and their ulterior motive is to get money out of the

business, but they too invested in your company because they believed in your business. They too want to be associated with a wealth maximization company therefore they work to not only get back there investment but to be linked to a well performing company.”

The participants agreed that when one is funded by venture capitalist or angel investors the performance of the company improves because one gets capital boost. Manager Company A stated

“My firm’s performance improved immediately, because the Investors gave me the capital and the advice on where I should use my money. Therefore there were a lot of places I was advised to place the money which was quality of the service and marketing by the time we beefed this up, our customer base increased exponentially and profits became better.”

4.7. Additional Observation

Further observation was made, that is young entrepreneurs from school used venture capitalists and angel investors rather than bootstrapping, family and friends and crowdfunding. The reason as to this is because when they leave school they don’t get employment so they don’t have money to fund their venture. Some have HELB loans to pay and their family cannot spare funds because of their low income therefore they have to seek venture capitalists and angel investors. For the once lucky to get employment after school they tend to save up and use their savings to start their venture rather than going for outside investors.

4.8. Discussion of Findings

This study was set up to find out that IT entrepreneurs have a variety of sources in which they can get funding. Figure (4.3) indicates that each source is been used to fund the IT startup regardless if it’s a main or other source. Wetzel (1994) suggested that startups firms depend on initial insider financing, Angel investors, Venture capitalists, crowdfunding The entrepreneurs are not conformed to the traditional ways of getting funding, therefore earning the right to be called entrepreneurs. Thorne (1989) described an entrepreneur as one who discovers opportunity by having the ability to raise capital past traditional sources of funding. Entrepreneurs are shying away from bank loans because none of them indicated the use of bank loans to fund their business. When interviewing the business owners they too advised entrepreneurs on the ability to discover and exploit the new and different sources so as to get funding. Therefore after this finding, it is confirmed that entrepreneurs of today have earned the right to be called

entrepreneurs and not business owners because they are discovering new ways of getting funding by the use of the different sources.

In the level of early stage funding and uptake results have shown venture capitalists and angel investors tend to fund more than their counterparts (Fig 4.5). It is also found that they are the highest fund givers (Fig 4.6). Venture capitalists tend to give large sums of money to a business in return for equity. Angel investors when investing they tend to give \$25000- 75000 (Cumming, 2013). Ullah and Taylor (2007) suggested that the most commonly used source of funding for startups are personal saving of the business owner and finance from friends and family. In qualitative findings the business owner says that Venture capitalists do tend to give more funding but they require equity as he was given a substantial amount of money. Results of this project have however contradicted Ullah and Taylor (2007) as we find that the most commonly used source of funding is Angel Investors and Venture capitalists.

It was found that the performance of IT SME improved when funded by Venture capitalists (Fig 4.8) therefore indicating the relationship between Venture capitalist and the performance to the IT startup is positively related. McDermott (2012) suggested that companies that got early funding from outside sources like venture capitalists tend to do better, statistically, compared to other firms. It is also discovered that in the total performance against funding of the different sources there was a positive correlation. One business owner admitted that his firm's performance improved when he was funded by venture capitalists. Venture capitalists do bring in more than just funding but also networking and business mentorship for the business and that's why the performance of the startup improves. In all the objectives the quantitative and qualitative studies do relate to each other. Venture capitalists tend to perform better than Angel Investors because they tend to fund more therefore their style of management is more hands on while angel investors their management style is more of a friendly nature.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introductions

This chapter summarizes the main findings, conclusion and recommendations emanating from the results of this study. This present study used both quantitative and qualitative methods to explore entrepreneurial mind, personal lived experiences, retrospectively as new entrepreneurs during the creation of their own IT start-up.

To examine the impact of various sources on performance of SMEs the variables used were growth in employees, profitability, Liquidity, Business stability, Customer base, Quality of products/services, Public relations and Customer services.

5.2 Summary of the study findings

The purpose of this quantitative and qualitative study, was to identify the different IT SME funding sources, the level of funding and uptake of the sources and finally to establish the relationship between level of early stage funding and IT SME performance.

It further, explored the different sources which IT startups should look at before embarking on the journey to starting one's venture. As one looks at the results that have been discovered, a similarity is seen between the different analyses. Most type of business ownership is partnership and limited liability therefore entrepreneurs know the importance of combining one's skills to get the best out of a business.

It is also seen that angel investors and venture capitalists are important both the descriptive and contextual analysis both agree that the two sources bring in more than just funding they bring in business support, networking and mentorship. As one can see most IT startup are going to investors because of the advantages.

One discovers that the firm performance improves when investors fund your startup therefore increasing your chance of survival. In the interview guide we find that when uses bootstrapping, family and friends and crowdfunding chances of survival might not be as high as one would want

to in fact the odds are against you therefore one not only works smart but works hard to achieve the greatness of their counterparts who have investors.

The findings revealed that entrepreneurs main source of finance for the IT startups were Angel Investors, Venture capitalist and bootstrapping which was 23%, friends and family was 20% while crowdfunding was 11%. The study also revealed that 71% of entrepreneurs used other sources while the remaining 29% relied entirely on the main source of funding. In the other sources of finding venture capital, friends and family and bootstrapping each have 24%, Angel investors was 16% while crowd funding 12%. The qualitative study agrees with the quantitative study where many entrepreneurs prefer venture capitalist and angel investors as they bring in more than just funding but networking and business mentorship.

The study revealed that angel investors and venture capitalists tend to fund more than their counterparts that is, the average amount funded by the different sources was venture capitalists funded Ksh 6,500,000; Angel Investors funded Ksh 6,400,000; Bootstrapping Ksh 500,000; Family and friends Ksh 1,800,000 and Crowdfunding Ksh 200,000. Business owners interviewed agreed with the above statistics that is Venture capitalists remove a substantial amount of money when they are investing.

It is revealed that there is a positive correlation between funding and IT SME performance. But it also reveals that Venture capitalists tend to have the highest positive correlation value the reason as to this is because of the extra advantage they bring to the table from business support, networking and mentorship. Business owners concurred with the quantitative study that is funding one's company performance with any source will improve the IT startup but venture capitalists tends to show more improvement than other sources.

5.3. Conclusion of the study

The impact of different sources on performance of IT SME startups is real and practical as established by this study. The IT Startups under study experienced growth in the financial and non-financial areas. Investment in IT SME startup has facilitated wealth creation in ways that people's lives have been improved. This study reaffirms the relationship between level of funding and IT Startups performance. A considerable contribution to economic growth has been

logically witnessed. The study has demonstrated that use of different funding sources can be profitable in Kenya.

The performance of IT SME startups has been realized by SMEs in growth, profitability, customer base, business stability and other resources. The social impact from the creation of IT SME startups include the employment opportunities created which has improved people's lives and alleviated poverty among the employees. The increased profits imply revenue collection for government expenditure through collection of tax. This research has brought out the fact that the type of funding matters for example venture capitalists and angel investors do not just provide funds but add value to SMEs, that is, they are not only involved in financing but also spur entrepreneurs who are responsible for economic growth. Venture capital and angel investors involvement has demonstrated that the partnership implicit in equity capital is as important as the finance and that these two aspects of the relationship are mutually reinforcing.

Venture capital and Angel Investors not only assist SMEs in the provision of funds but also in the internal operations of the business especially in policy formulation. Therefore both have demonstrated the business case for IT SMEs investment. They nurture IT SMEs startups at crucial junctures in their development and lay the foundation for an emerging generation of locally owned large enterprises. Each source has the potential to assist Kenya realize Vision 2030 which advocates for strengthening of IT SMEs to become key industries of tomorrow.

Finally, the study concurs with findings by Oakey (1984) that SMEs which are still in the very early stages of development are forced to seek external investment capital and such firms which seek external capital most vigorously tend to be growth-oriented companies. It also contradicted Ullah & Taylor (2007) in terms of sources where they suggested that entrepreneurs tend to use personal saving and family and friends. The research found out because of age the younger generations would rather go for outside investments as they have no money when they leave school.

5.4. Recommendation of the study

This study has provided meaningful data showing that IT SME startups excelled in businesses when in partnership with venture capitalists and angel investors, SMEs in Kenya should be

encouraged to partner with venture capitalists and Angel Investors for greater successes. The partnership is healthy and there is proof that investors exit smoothly at the expiry of the contract period. However the government should level the playing field for IT SMEs in the economy. Small businesses are often disadvantaged when it comes to accessing finance or lobbying the government to incorporate their views with regard to taxation. SMEs using the different funding sources should be given tax concession to attract other IT SMEs to use the variable funding options. This study has shown that the performance of the different sources has been seen and felt and so more businesses should be encouraged to use the several of funding for economic development. This fund if fully used by IT entrepreneurs is capable of creating and employing one in ten of the required jobs in Kenya.

The study concluded that IT SME startups that use the various funding source options experience improved growth and thus more SMEs should be encouraged to use these forms of finance if the country has to achieve its vision 2030. The government ought to formulate a policy to define nature of financial guarantees that can be provided to IT SMEs by both the national and county governments.

5.5. Limitation of the study

The study was limited to IT SMEs startups using the different funding sources namely: Venture capitalists, Angel Investors, Bootstrapping, Crowdfunding and Family and friends. The selection of these five sources was purposive and hence limiting considering that the IT sector is rather expansive beyond the five sectors.

The sampling frame comprised of IT SME startups that are registered with their respective associations hence a number of startups could have not registered due to not meeting particular criteria. The data for the study was very limited because some funding options that is crowdfunding have not been researched on in Kenya. The financing options were also limited to the few listed in the data sheet in the appendix. Finally, some of the sampled IT startups became non-responsive due to internal nondisclosure policies since the financial data sought was regarded as confidential information.

5.6. Suggestions for further research

Based on the findings in the present study, there are areas which require further research. A study needs to be carried out on sustainability of economic growth of the firms financed by the various sources. How lasting is the growth that they have experienced? Growth comes with a number of challenges and hence a study needs to be done on the environmental impact of various funding options on IT SME startups. A comparative study needs to be done on the economic contribution of government based on the different funding sources. Empirical studies should be carried out on age of the entrepreneur as it seems to be an important factor to the type of source that the entrepreneur will choose to fund their venture.

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APPENDICES 1: QUESTIONNAIRE

SECTION 1: BACKGROUND INFORMATION

1. Name of the business? _____ (Optional)

2. How long have you been in business? _____

3. What is the type of your business ownership? (Tick where applicable)

Sole trader Limited liability

Partnership Other (specify)

4. What is your **MAIN** source of finance? (Tick only one where applicable)

Bootstrapping Crowdfunding

Families and friends Venture capitalists

Angel Investors Bank Loans

5. What are your other sources of finance? (Tick where applicable)

Bootstrapping Crowdfunding

Families and friends Venture capitalists

Angel Investors Others (Specify)

6. Would you say some sources come with added advantages other than funding?

Yes No

7. If yes which sources are they and why do you think they have an advantage over other sources? _____

SECTION II: LEVEL OF FUNDING

1. How much did your IT Startup need? Kindly give the actual or approximate amount. Ksh _____

2. How much funding did you receive from each source? (In terms of amount or proportion)

Source	Amount /%
Bootstrapping (The use of personal funds)	Ksh _____ % _____
Crowdfunding (Financing through internet or media)	Ksh _____ % _____
Family and friends (Funding from Family and friends)	Ksh _____ % _____
Venture Capitalist (Money provided by equity investors to startup firms with perceived long-term growth potential.)	Ksh _____ % _____
Angel Investors (An individual investor who provides financial backing for startups for a share of ownership)	Ksh _____ % _____
Bank Loans	Ksh _____ % _____
Others (Specify)	Ksh _____ % _____

3. Was the amount funded enough for your business?

- Above the requested amount
 Amount was sufficient
 Below the requested amount

SECTION III: THE PERFORMANCE OF THE BUSINESS

1. Rate your business performance from when you received funding

Indicators	Poor (1)	Moderate (2)	Good (3)	Very Good (4)	Excellent (5)
Growth in employees					
Profitability					
Liquidity					
Business Stability					
Customer Base					
Quality of product/services					
Public Relations					
Customer Service					

2. In your view what are the future prospects for the firm?

Indicators	Poor (1)	Moderate (2)	Good (3)	Very Good (4)	Excellent (5)
Growth in employees					
Profitability					
Liquidity					
Business Stability					
Customer Base					
Quality of product/services					
Public Relations					
Customer Service					

APPENDIX 2: INTERVIEW GUIDE FOR CASE STUDY

1. Tell me the background of the firm.
2. What is your current position of the firm?
3. Where you funded when starting your firm? What were the advantages and disadvantages of been funded?
4. Which source/s of funding did you go for?
5. How was the company performance when you were funded?
5. What advice would you give entrepreneurs who are looking for funding?
6. What prospects do you have for your firm? In terms of employees, profitability, customer base, business stability etc.
7. If you were given an opportunity to start all over again would you go for the same source of funding? If Yes why? If No why?

APPENDICES 3: IT STARTUPS IN KENYA AS AT 22ND JUNE 2015.

Brck	Wabeeh
Totohealth	M-Farm
Akirachix	Card Planet
Eneza Education	Medic Mobile
GearBox	MobiDev
Olive Tree Media	eLimu
Kijicho App	Kopo Kopo
Ma3route	Angani
Ushahidi	SaniCMS
Gigwapi	Pamoja Media East Africa Limited
Creative Minds Agency	SpaceBridge Ventures
The Archangel Interactive	Java Pals
Media Life Group	Instasave
Keja Hunt	Intel
Henga Systems	Scipio Systems and Services Ltd.
Maramoja Transport	FlashCast
Alkira Africa Limited	Weddings Kenya
Bantu Leather Fashions	GetMpango
IdeaHutch	WapiGo
Buni.tv	Fortis Innovation
Ongair	Technology Options
Sprout Digital	Watu Technology
Extreme Wilderness Challenge	Jabavu Comparative Services
M-Duara Technologies	Africastalking.com
MyTaxi Kenya	NairoBits Trust
Solutech Limited	Mdada
Isamado Homecare Limited	Nairobi Computer Store
AttachMe	arifTechnologies
Yellow Interactive Media	Yellow Agency
Nami Africa	Acrion Designs
Mobu Limited	Uhasibu
MiniERP	Safari
Venorm Technologies/Corporation	Slash Air
M-Changa	Scrinarts Studios
My Movie Guy	Restless Solutions
Ari Limited	Makao Bora INC
Ujirani	Web Tribe Limited/JamboPay
Deveint Limited	MagicBox
Magari Poa	EatOut Kenya
Tenderpreneur.net	Cloud 9 Kenya
archiDATUM	Muva Studios
Distinctive Media	Apptuned Limited
Afrodata Intelligence Limited	Sanergy
Pika	DigipadStudios
Briglobe	Twenty Four Interactive
ACE RFID Solutions Ltd.	Taskwetu
Outside The Box Africa Ltd.	iHub
Delisasa	Warefab

Opuula	Spatial Collective
Teke Teke	Kenya Apps Network
Lipisha	CladLight
Steamaco	Synacor Consortium
Urban Kreative	Spire Education
Shield	P-Code
VituMob	MoringaSchool
SOFT BOOKS	mSurvey
Ifuate GPS Tracking and Fleet Mngmnt	TONCEL SY
Matatu.mobi	Plain Talk
Vizz Post	Djuaji
Utafitini	mLab East Africa
Sumuni	Refunite

Source: Madeinnairobi, Swahilibox, LakeHub, IHub (2015)