IMPACT OF INVESTMENT BY ANGEL INVESTORS IN TECHNOLOGY STARTUPS IN KENYA.

BY:

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A PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF BUSINESS ADMINISTRATION (MBA) DEGREE OF THE UNIVERSITY OF NAIROBI

DECLARATION

I hereby declare that this project is my own work and effort and that it has not been
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DEDICATION

To my loving wife Makena Karema, for her support, encouragement, patience and most of all love throughout the entire period of my study, to my God for this great gift of life.

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Thirdly, the data of analysis was got from Sinapis Capital, iHub and from the World Bank websites. It would not have been possible to conduct an analysis and extract out the relevant finding if the data was not provided in the first place. I wish to acknowledge the staff of the firms who provided the responses to the interviews to enable me to conduct this research.

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ABSTRACT

Investment in startup businesses has been recognized as an important resource for Economic growth and, therefore, economic development. However, most startup businesses find that in order to grow and scale they need external financing as well as advice. The main sources of funding for businesses in Sub-Saharan Africa as personal/family loans followed by private equity, bank debt, government funding, venture capital, angel and seed funding and other sources respectively (Omidyar Network and Monitor Group 2012). The objective of this study was to establish the impact of investment by angel investor on technology startups in Kenya. The study was done using primary data from technology startup owners who have received investment from angel investors from 2012 to 2014.

The study had convertible debt, equity and a mixture of debt and equity as the dependent variable and increased chance of startup survival, higher chances of getting secondary financing, faster scalability for the business, access to secondary markets, rapid prototyping and go to market strategies, better structures within the business, better financing terms compared to local commercial banks as the independent variables. The results show that 30% of startups received debt investment and 15% received equity investment. This reveals that for most early stage businesses most investors were not confident about the revenue forcasts and so they preferred to give debt since they can get security for their financing. The other startups had either personal financing or grants.

From the study it is clear that there is an emergence of new sources of financing from angel investors. This investment is meeting the challenges that startup founders face mainly in form of financing and improving the skills of the entrepreneurs and their teams. The motivation for the angel investors is mainly social impact and high returns if the business thrives. It is clear that tech startup with angel investment will continue to lead in the technology field by having higher chances of survival, growth rate, job creation and higher revenues compared to startups that do not have angel investment. As more young and innovative individuals begin their entrepreneurial journeys there will be stiffer competition for the limited opportunities to get funding, This will influence the quality of innovations, the number of filed patents and the overall impact of ICT to the economy of Kenya.

LIST OF ABBREVIATIONS

CAGR Compound Annual Growth Rate

IDC International Data corporation

ICT Information Communication Technology

ITES IT-enabled services

FDI Foreign Direct Investment

OLI Ownership, Location, and Internalization

MNE Multinational Enterprise

OECD Organization for Economic Co-operation and Development

PARE Price-Adjusted Rate of Exchange

R&D research and development

UN United Nations

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Program

US United States (of America)

WTO World Trade Organization

CHAPTER ONE: INTRODUCTION

1.1 Background

Flows of capital from one nation to another nation in exchange for significant ownership stakes in domestic companies are referred to as foreign investment. FDI has risen in Kenya from the 1990s due to the liberalization of the economy. It is mainly concentrated in the manufacturing sector and is mainly Greenfield in nature (Kinuthia, 2010). Investors take different approaches in investing in local companies. There are investors that are specifically interested in idea or initial stage companies and these are referred to as angel investors. An angel investor is an affluent individual who provides capital for a business start-up, usually exchange for debt or ownership equity. A small but increasing number of angel investors organize themselves into angel groups or angel networks to share research and pool their investment capital, as well as to provide advice to their portfolio companies. There are various financing structures that angel investors use when investing in startups in Kenya. A startup is a business venture that is formed mostly based on an innovative and disruptive idea to search for a repeatable and scalable business model. These include giving away equity stake in the business, revenue share agreement, taking in debt or having convertible debt. According to an angel investor's directory there is \$2.2 million dollars investment by angel investment firms and individuals currently in Nairobi. Most of these investments have been made in technology based companies and usually involve ownership equity given in exchange for funds which average \$20,000 per investment. "ICT has assumed an increasingly strategic role in Kenya's economy in the recent years. Between 2000 and 2012, the country's wider transport and communication sector, of which ICT is a part, grew at a CAGR of 7.7% outperforming all other sectors of the national economy." (GSMA, 2014).

The growing ICT sector and the potential growth of innovative technology startups has created an appetite for angel investors, mostly foreigners to invest in Kenyan startups. A recent World Bank report on the Kenyan economy noted the rapid uptake and transformative impact of the surging ICT sector in the country, identifying the country as being on the verge of a sustained period of rapid growth. These investments are made based on businesses in their infancy and the risk for these

businesses is usually too high for venture capital and financial institutions to invest. Angel investors are therefore the only hope for hundreds of young innovators with a passion to move their idea into a business. The investments by angel investors are mostly not only financial but they also involve advisory roles and entrepreneur's training. The startup business owners are required to meet certain criterion that is set by different angel investors, once they have fulfilled this criterion they then have to compete with others in order to win limited opportunities to access the seed capital.

Seed capital is sought by startups in order for them to conduct different activities which include market research, legal requirements, staffing costs, equipment purchases and working capital. This initial investment is usually provided in phases and is associated with specific milestones for each phase. Angel investors often invest the seed capital based on the innovative nature of the business and the character of the entrepreneur. There is a high risk of failure of the businesses they invest in but also there is a chance that if the business succeeds they will own a sizable part of the success for a little investment.

Most of the seed capital comes from foreign angel investors and this presents its own set of unique challenges as some of the angel investors have little experience running businesses in Kenya. The impact of foreign investment in form of seed capital by angel investors in Kenya's technology startups is both positive and negative.

1.1.1 International Business Management

International business consists of those activities private and public enterprises that involve the movement across national boundaries of goods and services, resources, knowledge or skills. These transactions that are devised and carried out to satisfy the objectives of individuals and organizations.

International Management is defined as a process of accomplishing the global objectives of a firm by effectively coordinating the procurement, allocation, and utilization of the human, financial, intellectual, and physical resources of the firm within and across national boundaries and effectively charting the path toward the desired organizational goals by navigating the firm through a global environment that is not only dynamic but often very hostile to the firm's very survival.

International business takes the form of international trade when a firm exports goods or services to consumers in another country and foreign direct investment when a firm invests resources in business activities outside its home country.

1.1.2 Angel Investors

An angel is a high net-worth individual who invests his or her own money in start-up companies in exchange for an equity share of the businesses. Many angels are former entrepreneurs themselves. They make investments in order to gain a return on their money, to participate in the entrepreneurial process, and often to give back to their communities by catalyzing economic growth. Angels make a return on their investment when the entrepreneur successfully grows the business and exits it, generally through a sale or merger.

According to Dr. Tom McKaskill, An introduction to angel investing (2009), Angel investment is normally the first round of external independent investment. Angels normally invest in early stage ventures where the founding team has exhausted their personal savings and sources of funding from family and friends. These ventures are not sufficiently developed to stand on their own, or sufficiently attractive to gain venture capital funding. These ventures exist in a halfway state, often between possible failure and take-off. Typically the management team lacks experience in a

growth venture and the business needs not only the additional funding, but also mentoring to take it to the next stage of development.

In Kenya most angel investors get to learn about new startups that are investor worthy through accelerator programs, business plan competitions and boot camps. According to a report titled 'Digital Entrepreneurship in Kenya 2014', there are various challenges that technology startups in Kenya face including lack of funding, lack of mentorship and a support structure. The lack of funding is a key concern, 60% of entrepreneurs studied in 2014 were found to be self-funded, meaning that they used their own financial resources to start and run the business. Less than 10% of the total entrepreneurs were found to have access to any seed capital.

A Harvard report by William R. Kerr, Josh Lerner, and Antoinette Schoar provides evidence that angel-funded startup companies have historically been less likely to fail than companies that rely on other forms of initial financing.

1.1.3 ICT Industry

According to the ICT Authority, Kenya's ICT sector is set to contribute up to 8 per cent to the country's GDP through ITES and create 180,000 jobs by 2017. There has been a lot of interest generated by the new and innovative ideas by a number of technology startups here in Kenya. This interest has been fuelled by the growth in internet usage, smartphone penetration and mobile connectivity. The major highlight to Kenya's innovativeness has been the award winning Mpesa technology that has enabled millions of people to send and receive billions of shillings annually.

According to iHub, Mobile connectivity has unlocked an opportunity to rapidly scale mobile enabled services by connecting billions of people. At the end of 2013 there were 3.4 billion unique mobile subscribers worldwide. By 2020, the developing world will add another 880 million. Moreover, mobile broadband connections currently at 2.4 billion globally will nearly double to 4.1 billion by 2020. Rising connectivity across the globe is fuelling the growth of Internet platforms such as Google, Yahoo, and Facebook. Small and medium size enterprises have also benefited with some emerging as competition to existing Internet platforms, for example Twitter and Instagram.

For entrepreneurs and innovating businesses in the developing world, the ubiquity of mobile technology provides a tremendous opportunity to fundamentally change the business landscape and the lives of the underserved.

1.1.4 Accelerator programs for technology startups

An accelerator program is designed to help emerging entrepreneurs build a company and launch a product. Early-stage companies participate in "cohorts" and be exposed to a program to learn from experienced local and high value and reputable mentors that have built global technology brands that are also very hands on as would be expected by angel investors. According to a report by iHub, a startups research hub, there are very few investors funding idea and prototype stages. The investment range is broad, from several thousand to \$25,000, with average deal size of \$13,000 for idea and \$18,000 for prototype. Funding needs as stated by startups at idea stage was just above this range (\$27,000), but prototype stage startups were seeking significantly higher investments (\$70,000). There are currently 18 accelerators in Nairobi that offer entrepreneur training as well as access to seed capital in exchange for equity stake in the business, or as a loan or as a revenue share agreement (GSMA, 2014).

The accelerators invest in various industries including agriculture, technology, education, transport and entertainment. Equity stake as voting stock is usually 10% or above and this qualifies as foreign direct investment. FDI generally refers to an investment made to acquire a lasting management interest (normally 10% of voting stock) in a business enterprise in a country other than that of the investor defined according to residency (World Bank, 1996). Ownership of less than 10% is regarded as portfolio investment.

32Innovators in these industries present a draft of their business which could be in idea stage or already running and the accelerator owners select the businesses that they feel have the most potential to scale and will appeal to their pool of investors. The accelerator programs are mainly operated by foreign firms like Sinapis capital, Growth Hub, 88mph and the accelerators are also present in countries like Nigeria and Ghana.

1.2 Research Problem

There are investors that are specifically interested in idea or initial stage companies and these are referred to as angel investors. An angel investor is an affluent individual who provides capital for a business start-up, usually in exchange for debt or ownership equity. A small but increasing number of angel investors organize themselves into angel groups or angel networks to share research and pool their investment capital, as well as to provide advice to their portfolio companies.

There are a growing number of startup enterprises being formed and most of these enterprises are offering technology solutions to many existing challenges thereby causing a disruption in various industries. The startups face a host of many challenges including lack of capital, lack of mentorship, non-existent business model, office space. From entrepreneurs' perspective, accessing finance is difficult. Investors view Africa as a high risk market resulting in fierce competition for very few funds. The existing financial institutions are less likely to fund entrepreneurs since most of the entrepreneurs have little security to use as leverage and also their businesses may be at conceptual stage and therefore not having any revenues. The entrepreneurs then have to finance their startup enterprises from their savings and family members which are not a sustainable source as there are many costs involved in setting up the enterprises.

The lack of local financial assistance to startups has created an opportunity for foreign investment firms to bridge the financing gap. From the investor perspective, finding investible opportunities is challenging. Many startups lack proper team structure, track records, and skills necessary to run a business. Accelerators serve to prepare the startup founders to be investor ready by enabling them to create a business model, test the model and also have the right fit in terms of staff members. The investors and the accelerators may each get a stake in the startups that get the financial investment and this often alters the ownership structure of the startup as well as the voting rights in the enterprise.

The result of this is that sometimes the startup may take a different route from that envisioned by its founders and the founders may get overwhelmed by the many demands by the new owners of the enterprise. Bearing in mind that most of the investors are not stationed in Kenya they often have different perceptions about the

business environment in Kenya and may not fully understand the challenges faced by the businesses that they invest in.

Several studies have been undertaken locally in the subject area of foreign direct investment. Wamugi (2012) in her part emphasized that the importance of investment flows to a country cannot be overstated. If a country is to continue on the journey of strengthening their industries so as to become globally competitive and improve their export capacity, then they need to attract investment that will be both sustainable and enable them to achieve this goal. Iseme (2008)researched on an empirical study of location determinants of foreign direct investment in Kenya and found out that there exist a strong relationship of around 72% between a location of a country and the foreign direct investment in that country. Dinga (2009) undertook a study of the impact of foreign direct investment on economic growth in Kenya and found out that foreign direct investment provides a source of new technologies, capital, processes, products, organizational technologies and management skills, and as such can provide a strong impetus to economic development. On the basis of the above studies, it is evident that there has been no study that has been done on the impact of investment by angel investors on technology startups in Kenya. This therefore leads to the following research question; what factors influence the licensing process in attracting foreign direct investment in Kenya?

1.3 Research objective

1.3.1 Main Objective

To measure the impact of investment by angel investors in technology startups in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study will include;

- I. To assess the impact of debt by angel investors on Kenya's technology startups.
- II. To measure the impact of equity investment by angel investors on Kenya's technology startups.
- III. To measure the impact of a mixture of debt and equity investment by angel investors on kenya's technology startups.

1.4 Value of the study

The study will enable the government and local investment institutions to determine the best way to have great impact on local entrepreneurs and also create an enabling environment for technology startups to thrive. The study will also serve to guide new entrepreneurs on the best way to engage angel investors for the good of their enterprise and their vision.

The study will enable accelerator programs to measure the impact of their activities, identify weaknesses of their approach and enable them to come up with ways to improve of the return of investment as well as the relation between the entrepreneurs and the angel investors.

The study will also enable a better understanding of the changing landscape of foreign direct investment. The study will analyze the trend of angel investment to promising startups and identify best practices in this field.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter introduces the concepts of the study and the background of the problem and helps to clearly define the problem or area of interest. It intends to make an extensive coverage of the general literature on the subject and give a critical review of major issues such as foreign direct investment practices, problems faced by entrepreneurs, the opportunity in technology startups in Kenya and the valuation criteria for startup businesses.

2.2 Theoretical Review

The main purpose of this literature review is to identify and examine what has been done by other scholars and researchers in relation to startup companies funding. This review also assists the researcher to limit the research problem to define it better. A detailed knowledge of what has been done helps the researcher to avoid unnecessary and unintentional duplication of the projects, demonstrates familiarity with the existing body of knowledge, form a framework within which the research findings are to be interpreted and finally to overcome limitations of previous studies.

2.3 Theories of Foreign Direct Investment

There is some evidence to support the idea that FDI promote the competitiveness of local firms. Blomstrom (1994) finds positive evidence in Mexico and Indonesia, while Smarzynska (2002) found that local suppliers in Lithuania benefited spill over from supplying foreign customers. Caves (1996) considers that the efforts made by various countries in attracting foreign direct investments are due to the potential positive effects that this would have on economy. FDI would increase productivity, technology transfer, managerial skills, know- how, international production networks, reducing unemployment, and access to external markets.

Borensztein (1998) supports these ideas, considering FDI as ways of achieving technology spillovers, with greater contribution to the economic growth than would have European Journal of Interdisciplinary Studies 105 national investments. The importance of technology transfer is highlighted also by Findlay who believes that FDI leads to a spillover of advanced technologies to local firms (Findlay, 1978).

On the other hand, FDI may crowd out local enterprises and have a negative impact on economic development. Hanson (2001) considers that positive effects are very few, and Greenwood (2002) argues that most effects would be negative. Lipsey (2002) concludes that there are positive effects, but there is not a consistent relationship between FDI stock and economic growth. The potential positive or negative effects on the economy may also depend on the nature of the sector in which investment takes place, according to Hirschman (1958) that stated the positive effects of agriculture and mining are limited. When multinational corporations enter different foreign markets it is market failures that attract FDI and give them the advantage in those markets. Foreign investors consider that their superior technology and knowledge will give them the opportunity to obtain market share.

Despite the fact that many researchers have tried to explain the phenomenon of FDI, we cannot say there is a general theory accepted. But, according to Kindleberger (1969) everyone agrees on one point, in a world characterized by perfect competition, foreign direct investment would no longer exist. Thus, if markets work effectively and there are no barriers in terms of trade or competition, international trade is the only way to participate to the international market. There must be a form of distortion that determines the realization of direct investment, and Hymer was the first who noticed this. He believes that always local firms will be better informed about local economic environment, and for foreign direct investments to take place, two conditions are necessary: foreign firms must possess certain advantages that allow them that such an investment to be viable; the market of these benefits has to be imperfect (Kindleberger, 1969).

From a macroeconomic point of view, FDI is a particular form of capital flows across borders, from countries of origin to host countries, which are found in the balance of payments. The variable of interest is: capital flows and stocks, revenues obtained from investments.

2.3.1 The Eclectic Paradigm of Dunning

The eclectic theory developed by professor Dunning is a mix of three different theories of direct foreign investments (O-L-I): 1) "O" from Ownership advantages: OLI" stands for Ownership, Location, and Internalization, three potential sources of advantage that may underlie a firm's decision to become a multinational. Ownership

advantages address the question of why some firms but not others go abroad, and suggest that a successful MNE has some firm-specific advantages which allow it to overcome the costs of operating in a foreign country. Location advantages focus on the question of where an MNE chooses to locate. Finally, internalization advantages influence how a firm chooses to operate in a foreign country, trading off the savings in transactions, holdup and monitoring costs of a wholly-owned subsidiary, against the advantages of other entry modes such as exports, licensing, or joint venture.

This refer to intangible assets, which are, at least for a while exclusive possesses of the company and may be transferred within transnational companies at low costs, leading either to higher incomes or reduced costs. But transnational corporation's operations performed in different countries face some additional costs. Thereby to successfully enter a foreign market, a company must have certain characteristics that would triumph over operating costs on a foreign market. These advantages are the property competences or the specific benefits of the company. The firm has a monopoly over its own specific advantages and using them abroad leads to higher marginal profitability or lower marginal cost than other competitors. (Dunning, 1973, 1980, 1988).

There are three types of specific advantages; monopoly advantages in the form of privileged access to markets through ownership of natural limited resources, patents, trademarks; technology, knowledge broadly defined so as to contain all forms of innovation activities, economies of large size such as economies of learning, economies of scale and scope, greater access to financial capital;

"L" from Location: When the first condition is fulfilled, it must be more advantageous for the company that owns them to use them itself rather than sell them or rent them to foreign firms. Location advantages of different countries are de key factors to determining who will become host countries for the activities of the transnational corporations.

The specific advantages of each country can be divided into three categories; the economic benefits consist of quantitative and qualitative factors of production, costs of transport, telecommunications, market size etc. political advantages: common and specific government policies that affect FDI flows, social advantages: includes

distance between the home and home countries, cultural diversity, attitude towards strangers etc.

"I" from Internalization: Supposing the first two conditions are met, it must be profitable for the company the use of these advantages, in collaboration with at least some factors outside the country of origin (Dunning, 1973, 1980, 1988). This third characteristic of the eclectic paradigm OLI offers a framework for assessing different ways in which the company will exploit its powers from the sale of goods and services to various agreements that might be signed between the companies.

As cross-border market Internalisation benefits is higher the more the firm will want to engage in foreign production rather than offering this right under license, franchise. Eclectic paradigm OLI shows that OLI parameters are different from company to company and depend on context and reflect the economic, political, social characteristics of the host country. Therefore the objectives and strategies of the firms and pattern of production will depend on the challenges and opportunities offered by different types of countries.

2.4 Start funding approaches

There are various financing structures that angel investors use when investing in startups in Kenya. These include giving away equity stake in the business, revenue share agreement, taking in debt or having convertible debt.

For angel investors there are several things that they will often want to see in order to better understand the business. These include the business plan and the financial projections of the startup. The business plan outlines the business' short and long term objectives, the strategic advantages, the risks and risk mitigation strategies that will be employed. The financial projections indicate the expected revenues, profits and the financial needs that the startup has. Entrepreneurs tend to exaggerate. They exaggerate the success of their business when talking to startup investors. They exaggerate the market potential of their products to find distribution partners. Funding your business without exaggerating isn't easy, but there's a clear line between optimistic exaggeration and outright fabrication.

2.4.1 Equity

Issuing stock in your company is the route most entrepreneurs pursue, especially for early stage businesses where cash flow is difficult to predict, hence making it tough to forecast repaying debts. Equity is typically secured from angel investors. A typical Series A (first institutional round) investor is looking for 25% to 35% of the company, in exchange for its investment. Most professional investors will be seeking equity in the form of preferred stock, not common stock, where they get a 10% interest and a liquidation preference of one times their money back before the common shareholders begin to participate in any sale proceeds for the business.

The security for the investment includes fixed assets and movable assets that are purchased using the seed fund, some form of anti-dilution protection for the investor, typically a weighted-average rachet in the event of a subsequent financing at a lower valuation. The angel investor will also be looking for protective provisions, in terms of their rights as a shareholder to block certain major actions (e.g. change of control, modification of the board size, changing the charter so as to adversely affect their security, etc).

The advantages of equity approach include; The investment does not have to be repaid, like debt does. Gives certainty of valuation for your company which can also be a disadvantage if the value is too low (for diluting founders' stake) or too high (which can impact interest from next round investors who do not like to price downrounds from the round before, to avoid legal risks from diluted shareholders). The disadvantage is that equity is the most complex to structure (highest legal bills, longest time to close). Usually involves giving some level of board control to investors.

2.4.2 Convertible Debt

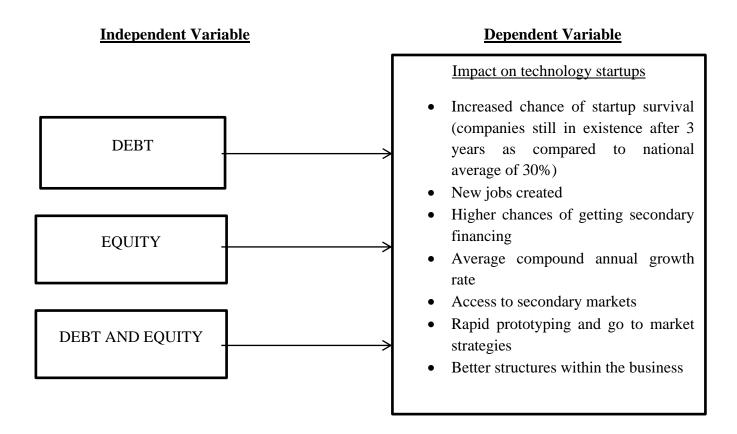
For some entrepreneurs they may not want to set an equity valuation, or you simply want the option of potentially paying back the cash, for a period of time prior to taking in permanent equity capital, a convertible note is the way to go. A convertible note is a hybrid, part debt and part equity, where it functions as debt, until some point in the future, when it may convert to equity at some predefined terms.

The advantages of convertible debt include; much quicker and cheaper than issuing equity, both for legal fees and ownership dilution. It leaves valuation flexible in order to meet the needs of subsequent investors. Interest payments do not typically need to be paid in cash each month. The disadvantage is that you have a limited time frame before it needs to be repaid, or convert into equity.

2.4.3 Venture Debt

For startups with an existing product/track record or existing or future assets to secure a loan, venture debt is another option to consider. However for most technology startups they do not have a track record and so they are not able to secure investment by venture beat.

2.5 Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the methodology that was used to complete the research study. It highlights on the areas of the research design, the method for collecting the data and finally the ways of analyzing the collected data.

3.2 Research design

This study incorporated a descriptive research approach using surveys. A descriptive research is a study designed to depict the participants in an accurate way. There are three ways a researcher can go about doing a descriptive research project, and they are: observational, defined as a method of viewing and recording the participants, case study, defined as an in-depth study of an individual or group of individuals and survey, defined as a brief interview or discussion with an individual about a specific topic

The descriptive survey is a process of collecting data in order to answer questions regarding the current status of the subjects in the study (Mugenda and Mugenda, 1999). They have defined it as an attempt to collect data from members of the population with respect to one or more variables. According to Cooper and Schindler (2003), descriptive design discovers and measures the cause and effect of relationships between variables. The study used a descriptive design because it enabled the researcher to collect a large quantity of in-depth information about the population being studied.

A descriptive research design enables the researcher to test and measure the population needed for quantitative experimentation since it gives valuable pointers as to what variables are worth testing quantitatively. The descriptive survey was adopted for it is appropriate for this study. The study was done on fifteen startups in Nairobi including Idea Hutch, Usalama Innovative Systems Ltd and Buildmart Solutions Ltd to determine the impact of angel investment by Sinapis capital on the three startups.

3.3 Population of the study

To determine if angel investors make a difference in the companies they invest in, the researcher looked at an angel investment group called Sinapis Capital based in Nairobi, Kenya because it uses a formal process to choose startups to invest in. The

researcher analyzed the startups that got funded and compare with the startups that missed getting funds. The researcher assessed the success of the startups that got funding and their current status and compare with the status of those that were not funded. Cooper and Schindler (2003) define a population element as the subject on which the measurement is being taken and is the unit of study.

3.4 Data Collection

Primary data was collected by way of an interview guide. Cooper and Schindler (2003) and Sekeran (1992) noted that personal interviews obtain in depth information as the researcher can adapt the questions as necessary, clarify doubts and ensure that the responses are properly understood by the repeating or rephrasing the questions thus improving the quality of the information received.

Additionally, the researcher can probe with additional question, gather supplemental information as well as pick nonverbal cues from the respondent through observation. The interview guide was administered to the entrepreneurs who are the founders of the enterprises. This approach will enable the researcher to collect as much information as possible on the topic of study.

3.5 Data Analysis

Organization of data from interview transcripts and observation notes was the first step in the analysis process. The study employed content analysis method. Since the data collected was qualitative in nature, the researcher studied theoretical statements emerging from the interview, by pairing down the data to represent major themes and categories that describe the impact of the angel investors in the startup businesses as well as the challenges experienced during the period of the investment.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis, results and discussion of the data collected from the owners of technology startups selected from the Sinapis capital pool. The interview guide was addressing the business owners and co-founders.

4.1.2 Profile of Sinapis Capital

Sinapis is an accelerator program for early stage to mid-stage entrepreneurs that provides intensive training at the advanced MBA level in partnership with Acton School of Business in Austin, TX as well as top notch consulting and mentorship support and the opportunity to compete for seed capital. Sinapis is also committed to building Kingdom businesses around the world, so 25% of our curriculum is focused on Kingdom business principles that help our entrepreneurs relate their faith to their business.

The roots of Sinapis date back to December of 2008 when two Harvard graduate students, Courtney Rountree Mills and Karibu Nyaggah, met during a student trip to east Africa. Courtney was a graduate student at Harvard Kennedy School and Karibu was a graduate student at Harvard Business School. Karibu was leading the student trip to his home country of Kenya. Courtney and Karibu became fast friends during the trip, and soon Courtney revealed her vision of setting up an accelerator program for start-up stage entrepreneurs in Kenya. Later that year, Courtney embarked upon her thesis where she received the opportunity to work with the Ministry of Finance in Kenya to help them look at bottlenecks in the private sector, particularly with regards to entrepreneurship. Courtney received funds from Harvard to do research on the subject the summer of 2009. Courtney invited long time friend and fellow Harvard Kennedy School graduate, Matt Stolhandske, to come to Kenya and help her diligence the viability of an early stage accelerator program in Nairobi. Matt and Courtney interviewed over 100 professionals from the for-profit, non-profit and government sectors on the entrepreneurship space. When Matt and Courtney came back, they had the first version of their business plan complete for the accelerator program. As Courtney, Karibu and Matt continued to plan how to launch the accelerator, they felt

increasingly called to think about how this accelerator program could directly glorify God's kingdom and increase His presence in Kenya in a practical way. Thus, they decided to make the Sinapis program centered on Kingdom business principles that help entrepreneurs integrate their faith with their business. They named the organization Sinapis, the latin name for the mustard seed found in the mustard seed parable of the New Testament, to reflect this vision

Sinapis seeks to support entrepreneurs with innovative, scalable business ideas by providing the business training and financing to help them succeed and exposing them to Christ-centered business principles to help them develop the spiritual strength to triumph over ethical challenges. Once these entrepreneurs become successful in business, they will not only create sustainable jobs and help alleviate poverty but also gain societal influence as business leaders. With this societal influence, our hope is that they will transform the business culture and society around them and mentor more young entrepreneurs to do the same. (http://www.sinapis.org)

4.2 Angel Investment

Sinapis has an investment arm called Sinapis Capital. Through Sinapis capital angel investors are able to channel their investments to the most promising startups that are in early stage of their development. The startups interviewed had to go through a six months intensive training and shortlisting program whereby from the hundreds of business owners that applied only fifteen startups were selected to begin the training. The fifteen businesses were from different sectors and each business had an innovative way to solve an existing problem and create value for its shareholders. In the course of the six months there were reviews conducted after every two months whereby some of the business that seemed to have made the least progress were eliminated. The goal was to remain with only three out of the fifteen businesses to compete for investment either as debt, equity or a combination of debt and equity. The business owners would face potential investors and present their business plans, financial projections and a compelling presentation detailing their financial requirements and their terms. The team of angel investors would review each presentation and ask necessary questions as well as ascertain how their investment would be utilized as well as how they could recoup their investment.

diligence and legal status of the business was conducted by Sinapis Capital and the investment would be managed by Sinapis Capital.

4.3 Profile of Startups

60% of the startups under study were founded post 2012. 80% of the startups were founded by a team of two. 80% of the respondents we involved in setting up the startups whereas the 20% were managing startups founded by others. 70% of the startups under the study were owner managed whereas 30% had a board of directors. The average size of the board was four members and they met twice a year. 50% of the respondents are in financial services sector while 50% were in the e learning sector.

According to 100% of the respondents in order to have a startup the founders first conducted research on different problems affecting their target market. After this research they began looking at existing solutions to those problems. When they were able to create a new faster, cheaper and better solution to the problem they then began working on the solution and the startup began.

4.4 Angel Investment

According to Dr. Tom McKaskill, An introduction to angel investing (2009), Angel investment is normally the first round of external independent investment. Angels normally invest in early stage ventures where the founding team has exhausted their personal savings and sources of funding from family and friends. These ventures are not sufficiently developed to stand on their own, or sufficiently attractive to gain venture capital funding. These ventures exist in a halfway state, often between possible failure and take-off. Typically the management team lacks experience in a growth venture and the business needs not only the additional funding, but also mentoring to take it to the next stage of development. To the question on the type of investors that have invested in the technology startups 20% of the businesses had received investment from angel investors. The angel investors were all foreign and the investment was channeled through Sinapis Capital. The startups that had angel investors had 10% of the startups receiving debt, 15% received equity investment, 20% received a mixture of debt and equity while 55% used personal finances and grants. According to 100% of the respondents the investors that have invested in their

startups are foreign nationals mostly from the United States of America. The startups that had angel investors had 10% of the startups receiving debt, 15% received equity investment, 20% received a mixture of debt and equity while 55% used personal finances and grants. According to 100% of the business owners the process of securing initial investment was competitive and that process gave them validation regarding their business idea. 70% of them felt that the competitive process was fairly conducted and the best startups received the funding. 60% of the total business owners would participate in future competitions after winning the initial investment.

33% of those who received investment felt that the investment was adequate for the short terms needs of their startup but they would require additional capital as they sort to scale their enterprises. They intended on building a relationship with the investors so as to facilitate future access to capital and additional support. According to 100% of the business owners who received investment, prototype development and revenue targets were the most important metric used to measure their progress at the start. As the startup grew the important metrics for measuring the progress were new jobs created and revenue targets.

The business owners were required to give periodic updates of their business based on these metrics and they would set quarterly milestones which they would share with their respective investors. The milestones would then be discussed and agreed upon by both parties. Deviation from the set milestones was not allowed without communication with the investors. 25% filled that access to advisory services by professional in various fields was facilitated by the investors and this lead to creation of better structures for the businesses as well as better skills for the teams working in each of the startups.

To the question on the impact of how effective is the input of the angel investors is, the business owners indicated that frequent interactions with the investors and sharing input regarding the progress of the business empowered them and so they viewed the input as very effective. According to the respondents 100% of the respondents received professional advice from consultants as a result of the investment that they received while 50% of the respondents also received sales leads to new markets from the participation of their investors. To the question on the impact of how effective is the input of the angel investors is, 56% of the respondents indicated that the investor participation was very effective, 30% of the respondents indicated that the investor

participation was effective, 9% of the respondents indicated that the investor participation was neutral, 5% of the respondents indicated that the investor participation was not effective while 0% of the respondents indicated that the investor participation was very ineffective.

4.5 Impact of Angel Investment

In order to determine if angel investment makes a difference in the startups that they fund the respondents offered insights into the various indicators of the impact. The impact is in comparison to those startups that were not fortunate to get angel investment. According to 100% of the respondents, there is increased chance of startup survival (companies still in existence after 3 years as compared to national average of 30%). According to the respondents there is dramatic impact to those startups that received angel investment like the probability of survival was 25% higher than for the companies that did not receive funding. There was also a possibility of 11% that the startup would be acquired by a larger enterprise.

According to the respondents the probability of growing 40 at least 3 employees was about 16% higher than for startups that did not receive investment from the angel investors. 50% of the respondents also had at least one part time employee also working in the startup. 75% of the respondents indicated that they would have a better chance of securing additional investment either from their current investors, other investors or commercial banks since they had the necessary systems in place. 50% of the respondents had participated in competitions for additional investment in form of grants and 100% of them had secured at least \$5000 in grants.

According to 100% of the respondents, there is an average compound annual growth rate of 50% for their startups that received angel investment. According to 45% of the respondents, angel investment provided them with the necessary funds to create cutting edge sales materials and this led to an improved web traffic over non funded counterparts. This exposure led to sales leads from other markets other than their target market. 75% of the respondents indicated that through the frequent interactions with the investors and the access to experienced consultants the startups had a faster turnover when it came to developing a minimal viable product and iterating the product based on the response of the market. According to 70% of the respondents, the angel investors introduced the startup owners to entrepreneurship material that

enabled them to formalize their startups and ensure that roles and responsibilities were better defined.

4.6 Discussion

According to the findings angel investors have drastically increased the chances of business survival and therefore contributes to the economic growth of Kenya. Angels normally invest in early stage ventures where the founding team has exhausted their personal savings and sources of funding from family and friends. These ventures are not sufficiently developed to stand on their own, or sufficiently attractive to gain venture capital funding. These ventures exist in a halfway state, often between possible failure and take-off. Typically the management team lacks experience in a growth venture and the business needs not only the additional funding, but also mentoring to take it to the next stage of development.

Angel investors rick losing their investment since most startups are in their initial stage but this also means that they get a very low valuation of the startup and so they can easily get a controlling stake in the startup. In addition to funding the study also revealed that other needs such as organizational structures, marketing advice and leadership skills are offered to the majority of startups that receive investment and this leads to personal development of the startup owners.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn are in quest of addressing the research question or achieving at the research objective which is measure the impact of investment by angel investors in Kenya's technology startups.

5.2 Summary of findings

These are the findings that the researcher found while he was doing the study. The findings are in line with the objectives of the study that were to establish the impact of investment by angel investors in Kenya's technology startups.

5.2.1 Angel Investment in Technology in Kenya

According to a report by iHub, a startups research hub, there are very few investors funding idea and prototype stages. The investment range is broad, from several thousand to \$25,000, with average deal size of \$13,000 for idea and \$18,000 for prototype. Funding needs as stated by startups at idea stage was just above this range (\$27,000), but prototype stage startups were seeking significantly higher investments (\$70,000). There are currently 18 accelerators in Nairobi that offer entrepreneur training as well as access to seed capital in exchange for equity stake in the business, or as a loan or as a revenue share agreement (GSMA, 2014).

The accelerators invest in various industries including agriculture, technology, education, transport and entertainment. Equity stake as voting stock is usually 10% or above and this qualifies as foreign direct investment. FDI generally refers to an investment made to acquire a lasting management interest (normally 10% of voting stock) in a business enterprise in a country other than that of the investor defined according to residency (World Bank, 1996). Ownership of less than 10% is regarded as portfolio investment.

32Innovators in these industries present a draft of their business which could be in idea stage or already running and the accelerator owners select the businesses that they feel have the most potential to scale and will appeal to their pool of investors. The accelerator programs are mainly operated by foreign firms like Sinapis capital, Growth Hub, 88mph and the accelerators are also present in countries like Nigeria and Ghana.

5.2.2 Impact of Angel Investment

Angel investment has had a great impact on the startups that received investment and also directly on the economy. The impact is in the form of increased chance of startup survival where most startups are able to remain afloat three years after inception and also scale and become profitable. This leads to a direct increase in the quantity and quality of new jobs that are created by the enterprises. If the enterprises grow and are acquired by bigger entities there is a great financial reward to the founders of the startup and the investors.

When a startup has received one round of financing from angel investors and they need more financing it is easier for the startup to raise additional capital since they already have experience in how to raise additional financing and also they have the necessary structures in place. The startups are able to an average increase in revenues each year and this in turn enables the startup to be cash flow positive and become profitable. The startups are able to rapidly create new products, make modifications to existing products and do so with little use of the limited capital that they have in their disposal.

Angel investment is also changing the perception that African countries can only survive with aid. It puts the startup owners on a level playing ground and this is changing the narrative for Kenya.

5.3 Conclusion

Startups require financing, skills and infrastructure in order to survive. Majority of technology startups have struggled to raise necessary financing required to run their enterprises, Most of these enterprises have relied on family funding or their own savings which usually run out before the startup is cash flow positive. This has led to the premature end for most startups causing emotional stress and economic challenges.

From the study it is clear that there is an emergence of new sources of financing from angel investors. This investment is meeting the challenges that startup founders face mainly in form of financing and improving the skills of the entrepreneurs and their teams. The motivation for the angel investors is mainly social impact and high returns if the business thrives.

Investors and financiers provide entrepreneurs within the technology ecosystem with the required capital to start grow or expand their businesses. Financiers provide funding either as equity, debt, or as a hybrid of both (IBM 2013). From the study angel investors also promote the interaction of different startups through organizing events where startup owners are able to network and also compete for additional funding and available grants. These events enable the startup owners to improve on their skillset and thrive.

From the study it is clear that tech startup with angel investment will continue to lead in the technology field by having higher chances of survival, growth rate, job creation and higher revenues compared to startups that do not have angel investment. As more young and innovative individuals begin their entrepreneurial journeys there will be stiffer competition for the limited opportunities to get funding, This will influence the quality of innovations, the number of filed patents and the overall impact of ICT to the economy of Kenya.

5.4 Limitations of the study

A limitation for the purpose of this research was regarded as a factor that was present and contributed to the researcher getting either inadequate information or responses or if otherwise, the response given would have been totally different from what the researcher expected.

The main limitation of this study was, some respondents were bound by confidentiality agreements regarding the nature of the investment that they have received from angel investors. This reduced the probability of reaching a more conclusive study. However, conclusions were made with this response rate.

5.5 Recommendations

From the discussions and conclusions in this chapter, the study recommends that although angel investors have greatly impacted technology startups the number of startups that receive funding is very little. There needs to be more efforts by local investors on terms of funding local technology enterprises and also a more deliberate push by the government to attract angel investors to invest in technology startups in Kenya.

For there to be more angel investors targeting Kenyan startups there needs to be a one stop shop where foreign investors can liaise with potential beneficiaries and have access to standardized information regarding each of the startups. The standardized profiling will create a level competing ground for hundreds of startup owners with great ideas. This one stop shop will also serve to demystify angel investment for local investors and encourage additional locally sourced capital flow into various startups and partnerships between renowned investors and upcoming startup owners and existing startup owners.

Provision of legal assistance for startup owners will also be required in order to ensure that the investments are fair and that the agreements are valid. Legal assistance will also aid in the protection of innovative ideas and processes and therefore lead to increased numbers of patent and copyright applications by inventors. These copyrights and patents will aid in protecting inventions from imitations and also make it easier to scale the sales of innovative products to other countries as well as increase the chances of licensing those technologies.

5.6 Suggestion for further Research

The study was only conducted on technology startups to support the results from this research, the same study should be done either other startups or a survey on the entire industry to verify the results found and check if there are new insights into angel investment on startups.

The researcher further recommends that a replicate study be done on other startups so as to find out how startups get investment and the nature and impact of those investments.

The researcher also recommends a study done on small and medium enterprises to find out additional ways of raising investment as the enterprises grow and the nature and value of these investments.

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APPENDIX

INTERVIEW GUIDE

SECT	ION A: GENERAL INFORMATION
1.	When was your startup founded?
2.	What is your role in the startup?
3.	What is the management structure of the startup?
4.	What industry is your startup in?
5.	What is your understanding about startup investors?
6.	Do you know of any startup investors? Yes No
	ION B: FOREIGN INVESTMENT BY ANGEL INVESTORS
1.	Who has invested in your business? Bank Angel Investor Self Other
2.	Are your Investors local or foreign?
	If Other Explain

3.	What are the terms of the investment?
	Convertible Debt Equity Debt and Equity Other
	If Other Explain
4.	What was the process of securing investment from angel investors?
	Competition Application Other
	If Other Explain
5.	What are the performance measuring approaches that angel investors use to
	measure the progress of the startup?
	Product to market
	☐ Prototype development
	Market Share
	Revenue target
	Other
	If Other Explain
6.	What other ways of support apart from monetary input do the angel investors
	bring on board?
	Advisory
	Consultant(s)
	New market opportunities
	Management Management
	Other
	In your opinion what else would you need apart from the above?

7. In your opinion how effective is the input of the angel investors in you
business?
☐ Very Effective ☐ Effective ☐ Neutral ☐ Not Effective
☐ Very Ineffective
8. Under the headings below elaborate on the impact of angel investment on you
business
I. Increased chance of startup survivalII. New jobs created
III. Higher chances of getting secondary financingIV. Average compound annual growth rate
V. Access to secondary markets
VI. Rapid prototyping and go to market strategiesVII. Better structures within the business
VIII. Other
9. Do you interact with other businesses that have received angel investment? Yes No
10. What impact has the investment had on their businesses?
11. Would you consider more rounds of financing from the same/other ange investors?
Yes No