A COMPARATIVE STUDY TO ESTABLISH THE INFLUENCE OF INCUBATION HUBS TO START-UPS SUSTAINABILITY IN KENYA – NAILAB AND I-HUB INCUBATION HUBS

BY

PRISCILLA KIRUMBA

UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

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PRISCILLA KIRUMBA

A Research Project Report Submitted to the School of Business in Partial Fulfillment of the Requirement for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY

SUMMER 2018
DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than United States International University.

Signed: ________________________     Date: ________________________

Priscilla Kirumba (649032)

This research proposal has been presented for examination with our approval as the appointed supervisors.

Signed: ________________________     Date: ________________________

Fred, Newa

Signed: ________________________     Date: ________________________

Dean Chandaria School of Business
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DEDICATION

I dedicate this work to my dear families who have been a great support all through even the tough times. Also to my friends and comrades who have pushed me to finish this thesis so that we graduate and soar together to the next level.

God bless you always.
ACKNOWLEDGEMENTS

I acknowledge the contribution from all those who participated either directly or indirectly towards making this research project a success. My sincere gratitude goes to the Almighty God who gave me the ability, strength and wisdom to undertake this project. I am greatly indebted to my supervisor Dr. Fred Newa for his professional guidance, advice and unlimited patience in reading through my drafts and suggesting workable alternatives, my profound appreciation to you. Finally my gratitude goes to my family and friends for encouragement, belief in me, understanding and moral support.

Thank you all. May the Almighty God bless you abundantly.
ABSTRACT

The purpose of the study was to establish the influence of incubation hubs to start-ups sustainability in Kenya. This study focused on incubation processes used to enhance sustainability; the importance of training and mentorship to start-ups in enhancing their sustainability and the use of investment instruments in the incubation hubs to enhance startups sustainability. Within the literature review, the author has linked the thoughts of established writers with regard to incubation processes, training and mentorship and investment instruments used in incubation hubs in relation to the aspect of sustainability.

The research methodology employed to carry out the research was descriptive research method. The total population was 60 respondents from both the Nailab and I-hub incubation hubs. Target population were start-ups within the Nailab and I-hub which were used in the study to compare various aspects prior mentioned and how the incubation hubs contribute to their sustainability when measured against the various dimensions. From the population a sample size was drawn based on the stratified random sampling method. Data collection was conducted through a set of written questionnaires and interview schedules that were made up of structured questions. The methods used enabled comparative analysis using both the qualitative and quantitative methods. The questionnaires were pilot tested before they were fully disbursed to the respondents. ANOVA was used to test whether results from the incubation hubs used were statistically different.

The study found that incubation process played a critical role in enhancing sustainability of start-ups. Incubation hubs go a long way in aiding the start-ups in terms of gaining a competitive edge in the market. On the relationship between training and mentorship and start-ups sustainability, it was clear that training and mentorship was key in enabling critical thinking and learning from failure. It also enhanced the members’ self-esteem levels. Training and mentorship appeared to be a key driver for start-ups to run effectively.

The study concludes that start-ups undergo the incubation process as a way of creating competitive edge and also be able to survive in turbulent environments. Training and mentorship is vital in opening up the entrepreneur’s mind. Venture capitalists and angel investors also play a critical role when it comes to guiding the start-ups.
The study recommends that incubation hubs embrace the notion of achieving sustainable development goals. Apart from just aiding the start-ups to achieve a competitive edge in the market, they should bear in mind the global goals. It is recommended that training and mentorship be introduced at a more personal level. Lastly, it is recommended that venture capitalists and angel investors fund ideas based on the incubation process that the entrepreneur has undergone.
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LIST OF ABBREVIATIONS

BMI  Business Management Institute
ICT  Information Communication and Technology
NBIA National Business Incubation Association
NEVA New Economic Venture Accelerator
OECD Organization for Economic Co-operation and Development
SME Small and Medium-size Enterprise
SPSS Statistical Package for Social Sciences
UKBI United Kingdom Business Incubation
VC Venture Capitalist
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Problem

According to Blanc (2001), a start-up is a company that is in the first stage of its operations. These companies are often initially bankrolled by their entrepreneurial founders as they attempt to capitalize on developing a product or service for which they believe there is a demand. Due to limited revenue or high costs, most of these small-scale operations are not sustainable in the long term without additional funding from venture capitalists.

Business incubation can be defined as business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services (Kathleen, 2006). It can also be viewed as an entity, mostly incorporating a physical facility (office, industrial or factory space) that assists new business growth by providing incubator tenants (start-up entrepreneurs) with access to internet access, shared equipment, administrative services and sometimes access to financial resources, including venture capital, during their first years of operation (Mian, 1997).

Business incubators also provide a 'nurturing' context (European Commission, 2002; NBIA, 2004; OECD, 1999; UKBI, 2007). They often offer business advice, business monitoring and facilitate strategic networking and business seminars to the new start-ups (Allen and Mc Cluskey, 1990; Barrow, 2001; Bollingtoft and Ulhoi 2005; Smilor and Gill, 1986). The incubator thus functions as a nurturing bridge between the inside, somewhat protected incubation environment, and the outside real-world business environment.

Entrepreneurs develop new technology ventures in uncertain conditions with unproven technologies and limited resources. The majority of such ventures fail. Examining entrepreneurs' attitudes to failure may reveal much about how entrepreneurs learn and how they identify subsequent opportunities. Over the past 25 years, incubation has proved itself as being so successful in the assistance of start-ups that the phenomenon has become a fast growing and popular economic development tool for the development and sustainment of
local and regional economies, specifically in low socio-economic areas (Allen and Rahman 1985; European Commission, 2002; Hackett and Dilts, 2004; Sherman and Chappell, 1998). Business incubation is an emerging field of research that is growing in importance as a competitive and innovative tool of doing high-competitive and innovative business. Business incubation takes place in different and connected environments: the business incubator, the wider environment and the business incubation process itself.

The National Business Incubation Association (NBIA, 2001) states that business incubation is a ‘dynamic process of business enterprise development’ and a ‘business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services’. ‘These services are usually developed or orchestrated, by the business incubator management, and offered both in the business incubator and through its network of contacts’ (Al-Mubaraki and Busler, 2011).

The European Commission, in its Benchmarking of Business Incubators, defines a business incubator as ‘an organization that accelerates and systematizes the process of creating successful enterprises by providing them with a comprehensive and integrated range of support including: incubator space, business support services and clustering and networking opportunities. Business incubators significantly improve the survival and growth prospects of new start-ups’ (Fernandez Fernandez and Blanco Jiménez, 2011). This in turn enhances their sustainability.

Start-ups in the initial stages often go through a so-called “Valley of Death”. At the early stage or incubation phase, start-ups lack the financial means to fully fund product/service development, and to bridge the gap between basic or applied research and product/service introduction on the market. The financial straits during the incubation phase are further acerbated by the fact that some start-ups, especially technical ones, lack the entrepreneurial skills how to shape viable business propositions and to transform a technological innovation into a product or service with an added value for the future user.

At this stage, designers and engineers would greatly benefit from collaborating, since design is “increasingly seen as method of incubating business ideas and creating new, unique and novel approaches to issues of marketing, strategy, and consumption (Kolko, 2002).
Most universities and research centres foster the growth of new technology-based companies by establishing business incubators (BIs). These incubators include resources to augment skills and to support the innovation-to-commercialization process (Soetanto, 2006). In Kenya, the United States International University (USIU) is one of the higher education institutions that has championed the establishment of an incubation hub within its campus. Indeed, it has already incubated a number of interesting start-ups from retail fish businesses to technology businesses. NEVA is an incubation center based in USIU. It provides entrepreneurship training, advisement, mentoring, and work space for student run ventures. Selected business ideas are incubated for a 12 month period to develop the idea and to better position it for a successful launch. NEVA’s mission endeavors to educate students and become an integral part of the entrepreneurship ecosystem by providing students with real-life experiences, mentoring, advising, connection to resources, and funding with the ultimate goal of creating self-sustaining, funding-ready ventures (‘New Economic’, n.d)

As a result, business incubation is more than a tool to consolidate new companies. Business incubators are themselves tools for fostering entrepreneurship, but doing this, they are also able to achieve certain objectives such as the promotion of the knowledge economy, the increase of human capital skills and the increase of employment. Some authors have documented the relationship between business incubation and the achievement of objectives related to human capital, employment and growth. Entrepreneurship itself is a source of development and value added (Audretsch and Thurik, 2004).

Link and Siegel (2007) relate innovation, entrepreneurship and technological change. Nevertheless, growth, employment and human capital cannot straightforwardly be defined as direct causes of entrepreneurship because they are interrelated and have positive feedbacks.

Entrepreneurship can also diminish inequalities and create social cohesion by empowering people in risk of social exclusion and by meeting social problems not covered by the public institutions (Bornstein, 2004; Drayton, 2006; Yunus, 2006). Udell (1990) shows that the impact of business incubators is positive in the long term not only for innovation but also for job creation. In this way, business incubation can be considered a public policy tool (Holtz-Eakin and Rosen, 2004).
Link and Scott (2006) refer to a cluster of technology-based organizations when talking about a university research park. Universities can also generate innovative and technology incubators by merging resources and networks. International trade and soft landing services generate value added because they identify internal and external barriers to trade (for example, the results of a survey of the European Commission (2010) and because they expand the know-how of firms, thus generating market intelligence and competitiveness (Fernandez Fernandez, 2012).

In Kenya there are a number of sprouting incubation hubs as well such as the M-lab, Chandaria Business Innovation and Incubation Centre, I-Lab Africa just but a few to mention. Their operations are customized to an African context however with some similarities to incubation hubs abroad. This study will however be focusing on the Nailab and I-hub incubation. Nailab is a startup accelerator that offers a 3 – 6 month entrepreneurship program with focus on growing innovative technology driven ideas. Some of the startups through this accelerator program include: Card Planet, Eneza Education, Ghafla, Sematime, Duma, Gigwapi and Wezatele, Clad light, Go Kibali, Keja Hunt and Swap Kitabu are among these years’ startups. (Accelerators, 2014).

Since its inception in 2011, Nailab has seen over 35 startups grow into viable businesses. It has over the last 4 years worked with 40 startups across different sectors. It’s keen on delivering world class startups that can compete at a global scale through creating an environment that inspires and stimulates innovation and entrepreneurship (Nailab, 2016). The I-hub is ranked the best innovation hub in the country as well as among the best in Africa. Arguably, it can be said that I-hub is the pioneer of tech hubs in Kenya and in Africa. It brings together technologists, investors, tech companies and hackers in the area with a focus on young entrepreneurs, web and mobile phone programmers, designers and researchers. Statistics show that more than 152 startups companies have been incubated at this tech hub. Some of the initiatives by I Hub include: I-hubConsulting, I Hub Cluster, UXLab and Research (Accelerators, 2014).
1.2 Statement of the Problem

Start-up businesses can be defined as those businesses continually searching for a repeatable and scalable business model (Blanc, 2013). They face numerous challenges, one of the most critical being lack of access to viable markets especially during the starting and scaling points. Additionally, having solid strategic plans in order to scale up also becomes a major issue as these businesses grow, lack of initial capital funding especially those that require high financial input and also lack of proper mentorship for sustainability purposes.

The Nailab incubation hub received a Kenyan government grant of $1.6 in order to be able to structure and help such businesses to start, grow and scale increasing their chances for sustainability in the long run (Anderson, 2015). The I-hub is also a very instrumental incubation hub in Kenya established in the year 2010 as a pioneering tech-hub in Africa. They both take start-ups through an incubation process that largely includes training, mentorships mostly in physical spaces in the scaling stages amongst other processes. This research will be focusing on the effect the incubation hubs have on start-ups sustainability in the long-run with regard to marketing, strategic planning, other processes in the incubation phase and a comparison of the sustainable start-ups in both hubs.

The first gap entails the different incubation processes the hubs take start-ups through. This study seeks to establish the processes step by step and their significance to start-up businesses. The steps are clearly outlined in the Nailab and I-hub websites. According to Forest(2014), some incubators have an application process, but others only work with companies and ideas that they come in contact with through trusted partners. Depending on the sponsoring party, an incubator can be focused on a specific market or vertical. For example, an incubator sponsored by a hospital may only be looking for health technology start-ups.

Secondly, the importance of training and mentorship is very key to start-ups as the enterprises are not experienced in the market. This study seeks to find out how the hubs train and mentor the start-ups till they prosper and graduate from the hub. An important feature of the definition is the provision of physical space and in all probability this was the raison d'être for the first generation “incubators” of the 1980s, which were intended, primarily, to
offer affordable apace and shared facilities to fledgling businesses. However, the modern incubator places more emphasis on the process of incubation, which means that (a) incubators can be virtual, utilizing the benefits of modern communications technology, and (b) equal, if not more, emphasis is placed on training, mentoring and the creation of a learning environment (Kirby, 2004).

We cannot cease to mention investment instruments. (Gartner, 2016) suggests on the side of the incubation equation there should be an investment in resources: the hub provides not only money, but also information and know-how, as well as support by employees and equipment. This can seem like a tall order but there is need to make the investment on the incubation’s side of the equation in order to get the desired outcome. The incubated startup will provide its share in return: the innovation and new business solutions the hub needs for a sustainable development.

1.3 General Objective

To investigate the influence of incubation hubs on the sustainability of start-ups: A comparative of Nailab and I-hub incubation hubs

1.4 Specific Objectives

1.4.1 To establish the different incubation processes Nailab and I-hub incubation hubs use to enhance start-ups sustainability

1.4.2 To investigate the influence of training and mentorship to start-ups in enhancing their sustainability

1.4.3 To investigate the influence investment instruments used in the incubation hubs to enhance start-ups sustainability
1.5 Significance of the Study

1.5.1 Importance to Entrepreneurs

This study will develop additional knowledge in the entrepreneurial field. Open innovation is key to the success of I-Hub and can change the working culture of any community of innovators. I-Hub is a network and meeting place that enables Kenya's innovators to bring their ideas to fruition. Through I-Hub, the technology community, industry, academia, investors and venture capitalists can meet, share ideas and collaborate. The centre is the first of its kind to operate in Kenya. It allows technologies to progress from the ideas stage to becoming real products and the key to its effectiveness is open innovation — the process of combining internal and external ideas, as well as internal and external paths to market, to advance the development of new technologies. I-hub has embraced the principles of open innovation by nurturing an enabling environment and a collaborative space where a community of technology entrepreneurs can grow and share ideas. This process can change the working culture of any technology hub and stimulate its capacity to create innovative products.

1.5.2 Researchers and Academicians

Scholars have studied how entrepreneurs acquire resources but have not examined how resources may be bundled with constraints, which can threaten entrepreneurial autonomy. As the study engages with entrepreneurial start-up firms in the business incubators, there is also intention to find out while benefitting from incubator resources, the challenges the start-ups encounter along the way as there is nothing without challenges. By showing how entrepreneurs unbundled the incubator’s resources from constraints, we explain how entrepreneurs manage the tension between acquiring resources and preserving autonomy. The study assumes the entrepreneurs may experience unexpected constraints, including mentor role conflict, gatekeeper control, and affiliation dissonance.
1.5.3 Government

Many entrepreneurs tend to focus their efforts on the development and growth of their start-ups, they typically overlook the legal risks they start-up may face. With the cost of hiring a lawyer an obstacle to founders seeking legal advice in the critical formative stages of the start-up, resulting in errors, legal advice will help to reduce the legal barriers for start-ups and entrepreneurs in the I-Hub community. Start-ups in the I-hub will receive pro bono legal services providing Kenyan businesses and individuals with access to cost-effective and easy-to-use online legal services. Already a few startups have graduated from the Nailab for example for example, Tusqee a mobile app that allows schools to send children’s grades to their parents by SMS. This will in turn increase the quality of services and national productivity in the country. This will also encourage start-ups which are not in Nailab to be encouraged to sign up for better success rates.

1.6 Scope of the Study

The researcher intends to carry out the study amongst the startups which have been incubated in the Nailab and I-hub incubation hubs, situated in Nairobi area but not limited to the hubs alone as comparison may be done concerning the sustainability of start-ups which do not go through an incubation hub, just to get a clear view. The timeframe of the study is approximated to be within a period of two months between the months of February and March of 2018. Some of the anticipated limitations are that fewer start-ups comprehend the concept and function of start-ups hence it will be tasking when gathering appropriate information for comparison with those start-ups that have gone through the incubation hub. The researcher hence, intends to clock in extra time to explain the concept to respondents and how it can benefit their businesses in the long-run.

The start-up entrepreneurs are usually very busy people and hence the research might face a challenge while collecting data. The researcher however intends to come up with creative or innovative and time-conscious methods of collecting data. For example, the use of survey monkey and survey-gizmo online survey methods while also keeping the questions short and precise. The entrepreneurs might also be skeptical with regard to giving out information concerning their start-ups for security purposes. They might feel as though their ideas might
be stolen or replicated hence might become overprotective over their start-ups or hostile to the researcher. The researcher intends to gain their trust by first sharing her own business encounters or entrepreneurial activities.

1.7 Definition of Terms

1.7.1 Sustainable-enterprise that has minimal negative impact on the global or local environment, community, society, or economy—a business that strives to meet the triple bottom line (Cooney, 2009).

1.7.2 Start-up - an entrepreneurial venture which is typically a newly emerged, fast-growing business that aims to meet a marketplace need by developing a viable business model around an innovative product, service, process or a platform. A startup is usually a company designed to effectively develop and validate a scalable business model (Robehmed, 2013).

1.7.3 Incubation hub- An organization designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services that could include physical space, capital, coaching, common services, and networking connections (Rubin, 2015).

1.7.4 Economies of scale- the relative gain in efficiency or sales which may result from producing, distributing, or marketing a range of products, as opposed to a single product or type of product (OED, 2008).

1.7.5 Critical mass-the minimum size or amount of something required to start or maintain a venture (Bornstein, 2004).

1.7.6 Raison d'être - the most important reason or purpose for someone or something's existence (Bryant, 1999).

1.7.7 Entrepreneur - individual who, rather than working as an employee, founds and runs a small business, assuming all the risks and rewards of the venture (Carlen, 2016).
1.8 Chapter Summary

In a nutshell, this first chapter introduces us to the concept of start-ups, the incubation process and incubation hubs. It also highlights to us the importance of incubation hubs to the sustainability of start-ups in the long run.

In the next chapter, the study shall delve into literature review which are texts and references that have been written before by other scholars, researchers and authors concerning or relating to the topic in question.

Chapter three will discuss the research methodology used in the study. It presents discussions on the research design, research population, sampling, data collection instruments and data presentation.

Chapter four presents the analysis, interpretation and results of the findings on data from the research on the role incubation hubs play in start-ups sustainability at the Nailab and I-hub incubation hubs. The researcher chose to present the data using the objectives as the guideline to structure the format.

Chapter five comprises a summary of discussions and conclusions made on the study of the influence of incubation hubs on start-ups’ sustainability. It will also provide recommendations on why entrepreneurs should take their start-ups through an incubation hub.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Literature review is an account of what has been published on a topic by accredited scholars and researchers. This chapter reviews the existing literature on incubation hubs and their processes, the sustainability aspect of start-ups that have gone through incubation hubs and the some of the most vital processes start-ups undergo during incubation such as training and mentorship and access to finances. This chapter also covers the theoretical framework, which is the structure that can hold or support a theory or research study.

2.2 Incubation Processes Used to Enhance Sustainability

2.2.1 Sustainability of Start-Ups in Incubation Hubs

Sustainability is the ability to continue a defined behavior indefinitely. The behavior one wishes to continue indefinitely must be defined. Environmental sustainability is said to be the ability to maintain rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely. Economic sustainability on the other hand is the ability to support a defined level of economic production indefinitely. Social sustainability ultimately is seen to be the ability of a social system, such as a country, to function at a defined level of social well-being indefinitely. These are said to be the three pillars of sustainability (Thwink, 2014). Sustainable development is defined by Brundtland (1987) as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sheahan (2017) remarks that creating a start-up can be a wild ride, rocketing from the thrill of launch to crash-and-burn in a matter of months. He further says a few decades ago, Fortune 500 companies could count on being around for at least a half-century but most now last about 15 years whereas the average startup has a mere lifespan of just about three years. Today’s business environment demands speed and transparency, and the key to longevity is building a company that matters. Marketplace survivors have become the obvious choice — to customers, investors, teams, employees and even competitors. Successful companies lead
the pack without leaving it behind. They anticipate and embrace disruption in ways that enable their markets to grow. Additionally Sheahan further recommends that building a dream team, employing a telescopic lens and partnering strategically are some of the key factors that help leaders successfully launch a business and position it for long-term success.

For enterprises of all sizes, sustainability is becoming increasingly important, Halberstadt & Johnson (2014) imply. Accordingly, a noticeable increase in academic literature has emerged regarding effective management approaches and tools for business sustainability, also known as sustainability management. While much of the focus of sustainability management research is placed on large enterprises, a shift has occurred to include small and medium-sized enterprises (SMEs) as well as social and sustainability entrepreneurs.

In order to examine why some African tech hubs fail while others flourish, and to explore ways to distribute digital dividends equitably rather than entrenching them amongst an elite few, it may be useful to consider the following three issues: First, the link between the goals of innovation entities and their organizational and governance structure, which often betrays a disconnect. Second, the degree of public sector involvement, which may be an asset for sustainability, but not necessarily for organic growth. Third, the value-added provided by different stakeholders (Kelly & Firestone, 2016).

2.2.2 Incubation Processes Used to Enhance Start-Ups

Manzanera (2010) and Lucas et al. (2003) argue that the process of business incubation is carried out in three phases which gather a wide range of customized business services. The pre-incubation materializes a business idea into a legally constituted enterprise with a marketable product/service. A key matter in this phase is the development of a business plan which analyzes the business feasibility for the future enterprise. The incubation phase provides a variety of simple services (e.g. essential facilities like shared space) and of knowledge-intensive business services (KIBS) whose concentration generates certain synergies and economies of scale. In the post-incubation phase, the relationship with the incubator continues by granting extensions of services for the graduated firm or by keeping it within the network. The generation of value added through the concentration of these
services is analyzed and monitored. Financial services generate value added through strategic alliances (seed capital, venture capital, business angels, etc)

Lalkaka (1996) states the origins of the term can be traced back to the Batavia Industrial Centre, commonly known as the first U.S business incubator, opened in Batavia, N.Y, in 1959. However, the concept of providing business assistance to early-stage companies in shared facilities did not catch on with many communities until at least the 1970’s. At that time and especially in the beginning of the next decade, western industrialized countries, faced with a rapid rise in unemployment resulting from the collapse of traditional industries, recognized the need for fresh strategies that would help regenerate crisis sectors, regions and communities.

Figure 2.1 Historical evolution of business incubation (Cardoni, 2015)

Strategies pursued in the 1980’s were broadly characterized by a switch in emphasis from “top-down” approach relying on exogenous factors and involving public intervention to transfer surplus mobile capital and jobs from developed to underdeveloped or declining regions, to a “bottom-up” approach focusing on maximizing the indigenous potential for economic development. At the same time, business incubators began to be used as instruments to support innovation and technology transfer. Lalkaka (1996) sums up the
evolution of the incubation concept as follows: He states the ‘first generation’ incubators in the 1980’s were essentially offering affordable space and shared facilities to carefully selected entrepreneurial groups. In the 1990’s the need was recognized for supplementing the workspace with counseling, skills enhancement and networking services to access professional support and seed capital, for tenants within the facility and affiliates outside. This led to the ‘second generation’ incubator. Starting in 1998, a new incubation model emerged in parallel which intended to mobilize ICT and provide a convergence of support, towards creating growth-potential, tech-based ventures. There are now thought to be 3000 business incubators of various types worldwide.

2.2.3 Incubation Process in Relation to Sustainability

Mounting evidence suggests that start-ups and micro-enterprises should be considered in light of sustainable development for several reasons (Halberstadt & Johnson, 2014). First, sustainability is relevant for all companies in every industry of every economy. Secondly, it will never be achieved if the smallest companies do not get involved. Not only do micro-enterprises constitute a majority of all registered businesses, e.g. 2.8 million enterprises in Germany fall into the micro-enterprise range. Thirdly, while it could be argued that individual micro-enterprises transmit a puny, insignificant burden on the environment, it is their collective impact and spill-over into larger enterprises that raises major concerns.

Christiane (2017) states that although a variety of definitions of sustainability and sustainable entrepreneurship can be found in literature, the concept of the pursuit of both social, environmental and economic goals while creating value is a widely accepted perspective on sustainability entrepreneurship. However she contradicts by saying, the implementation of this holistic approach turns out to be very complex and hard to realize for sustainable ventures.

While literature only gives general and little concrete recommendations on how to implement the integration of sustainability goals in a business, a tendency can be observed that sustainable entrepreneurship is often considered synonym with more environmentally focused concepts like green or eco-preneurship. There is much to be researched on how entrepreneurs can foster and forward a transformation towards sustainable development. It is
also commonly seen that the integration of diverse sustainability dimensions is very complex, and most easily solved with a step-wise integrational approach, as entrepreneurs are still facing many challenges mostly due to the current, not sustainably-focused market conditions. Some “green” tendencies can be observed among the startups and institutions observed, but this can rather be traced back to practical reasons. It was further seen, that entrepreneurs can be essential drivers for the sustainability transformation, which can also be fostered and accelerated through political action, education, information and transparency, technology, simplicity and access, psychology and cooperation and networks.

2.2.3.1 Empirical Studies Showing How Incubation Processes Contribute To Start-Ups Sustainability

Richard Johnson speaks excitedly about the successes of the start-up small businesses at the Maggie Walker Business and Technology Center (also known as AdvanTech). Peter Aiken of Data Blueprint, who wanted to focus on utilizing his resources efficiently rather than on high overhead, chose to start his business at AdvanTech to use its affordable leasing space, downtown location on East Franklin Street and support services. He began with three of his partners working full time but left AdvanTech with 15 full-time staff, and he now has 23 full-time staff. His business grew from a fledging enterprise to an award-winning company that has examined the data management practices of more than 500 organizations. Aiken is now one of the top 10 data management authorities in the world and travels internationally for his business. Advantech’s financial and legal seminars, and networking opportunities, helped Aiken to direct more of his resources to business-related ventures. Today, Aiken works with the Virginia Commonwealth University School of Business to help AdvanTech develop more ways to assist small businesses in the current challenging business climate (Fazaldin, 2012).

Fazaldin (2012) also narrates the story of yet another start-up, Sharon Dabney-Wooldridge operated out of her home on a shoestring budget. She began her home-cleaning business employing two to three people. As her business gradually grew and required more employees, she conducted interviews in the public library or at coffee shops. Tired of meeting potential employees at public places, Sharon decided to move to an office space where she could improve the professional image of her brand. AdvanTech became not only her operating base but a place where sharing business ideas and learning from other
businesses made her feel part of a family. At AdvanTech, support services, classrooms and conference rooms elevated her company to the professionalism she so desired. Now based in South Richmond, The KleaneKare Team Inc. left AdvanTech as a company with almost 60 employees. Now, it is a multi-million-dollar-a-year commercial cleaning company employing about 100 people. Dabney-Wooldridge's company has received several honours and awards, including the Metropolitan Business League's 2006 Entrepreneur of the Year and the city of Richmond's 2012 Minority Business of the Year.

Tengeh & Lose (2015) argue that business incubators in developing countries face a number of challenges concerning innovation and creativity. Notable among these challenges are: lack of entrepreneurial skills, lack of venture capital, poor growth rate, productivity falling behind population, downsizing, and the lack of true entrepreneurship. Owing to the foregoing challenges, business incubators find it difficult to uphold their mandates as development agents and in, some cases, their long-term survival becomes threatened. Of course, this may negatively affect SMEs who depend on them for survival.

2.3 Importance of Training and Mentorship to Start-Ups in Enhancing Their Sustainability

2.3.1 Training and Mentorship in Incubation Hubs

Mentoring can be defined as the educational or professional development support provided by experienced colleagues (Bornstein, 2016). According to Harrington (1999), entrepreneurial mentoring is defined as the relationship that involves one entrepreneur acting as a ‘critical friend’ or ‘guide’ helping to oversee the career and development of a less experienced entrepreneur. Training on the other hand is teaching, or developing in oneself or others, any skills and knowledge that relate to specific useful competencies (Jacoby, 2004). Sullivan (2000) argues that the developmental functions provided by mentoring fall into two categories: career functions that enhance learning of skills and knowledge including the political and social skills required to succeed and psychological functions. Psychological functions are those aspects of the relationship that enhance a sense of competence, clarity of identity and effectiveness in the professional role.
Mentors are defined as influential, highly placed individuals with a high level of knowledge and experience, who undertake to provide upward mobility and career support for their protégés (Scandura & Ragins, 1993). In this context, the role of the mentor is to enable the entrepreneurs to think and learn from their own actions in critical situations, so that they can change their behavior in the future, or at least draw some lessons from it (Bisk 2002; Sullivan 2000). Mentoring is “about the facilitation that enables the entrepreneurs to dissect, reflect and learn from what could be termed as “critical incidents” (Sullivan, 2000; pg 132). This approach is supported by Cope and Watts (2000) who mentioned the importance of mentor support in helping entrepreneurs to commit to reflexive learning following significant events in the enterprise, in order to help them avoid or mitigate such critical periods in the future. They pointed that mentoring allows entrepreneurs to examine their enterprises from a more objective standpoint, while continuing to play their role as its leaders and think about its development.

The personalized services provided by the incubator managements help to induct new start-up owners into the business world, raise their confidence and reduce their isolation, particularly for those who have previously enjoyed the relative security of working in large organizations (Lalkaka & Bishop, 1996). Kruger Wilson (1998) argues that entrepreneurs need mentors due to the complexity and range of tasks they are required to perform. Mentoring is also highly relevant to the personal development of entrepreneurs states Hudson-Davies et al. (2002) since mentors can become positive role models, inspiring their mentees to emulate them.

2.3.2 Training and Mentorship Impacting Sustainability of Start-Ups in Incubation Hubs

In 2005, the accelerator emerged as new incarnation of entrepreneurial support format when the former entrepreneur Paul Graham invited the first batch of eight startups to go through a three month entrepreneurial training program in Silicon Valley, called the Y-Combinator. As the finale of this program participants pitched in front of a crowd of investors to receive venture capital (Jackson, 2012). Some of the most successful alumni today are Drop box (Summer 2007) and Airbnb (Winter 2009) being worth billions according to the venture capitalists that are funding their growth (Mc Dermont, 2012). Y-Combinator was followed by
the Tech Stars accelerator in 2007, which defined itself a mentorship-driven seed stage investment program (Techstars, 2014).

These two programs became the role model for many that followed, trying to replicate their structure and success. What started as an initiative of experienced entrepreneurs innovating in the field of early-stage investing and entrepreneurial support, has transformed into a global trend.

Companies as diverse as The Coca-Cola Company (Coca-Cola Accelerator Sydney) and Nike (Nike+ Accelerator) as well as local governments (Chile Accelerator) are poised to support under the umbrella of this new movement (Meyer, 2013; Pullen, 2013; Heim, 2013). On June 17th 2013, the publishing giant Axel Springer AG announced the first class of startups that would spend the following three months fine-tuning their ideas and investor pitches in its newly minted Axel Springer Plug & Play accelerator in Berlin, Germany (Springer, 2013).Interestingly, the majority of startup accelerator programs in Germany today are hosted by incumbent corporations including Deutsche Telekom AG and Telefonica A.S.

Knight and Meyer (2013) argue that the one thing these incumbents have in common is that their industries have been heavily influenced by the internet and risk to be disrupted by startups they are now looking to support. This has resulted in skepticism regarding their ability and motives to help entrepreneurs. Once entrepreneurs are accepted into the business incubator, the business incubator analyzes their needs and designs a program to strengthen and accelerate the business. The business incubator is pro-active in assisting the clients, and will offer assistance in areas that the entrepreneurs may not be prepared to deal with on their own. The business incubators may also require the incubates to take training courses to ensure a certain level of management knowledge. While the exact mix of services depends on what is needed in the local market, business incubators usually provide the following four types of services: Shared infrastructure (thus reducing start-up costs), such as office space, meeting rooms, telecommunications, reliable electricity and in some environments security services;

Business advisory services to assist the entrepreneurs with management issues such as business planning, financial management, marketing and regulatory compliance on formal
matters such as applications for registration and licensing; Financial services ranging from brokering services to seed loans, or taking equity in the enterprise; “People connectivity,” including mentoring by experienced business professionals, knowledge-sharing with like-minded entrepreneurs, and links to business relationships and opportunities. The value of a psychologically supportive environment cannot be overemphasized. Most information development business incubators identified the contrast between entrepreneurship and local values as a key challenge for their clients, and many cited culture as their clients’ most significant barrier. Therefore, it is not surprising that entrepreneurs cite the psychological support provided by incubation staff and fellow entrepreneurs in the incubator who, ‘believe in you and your ideas’ as having especially high value. One grateful entrepreneur referred to his incubator as an “oasis of cultural safety” (Olafsen & Mohsen, 2008).

Cos and Jennings (1995) suggest that what distinguishes bad from good entrepreneurs is their ability to learn from mistakes. Mentoring relations can play an important role in facilitating feedback loops – helping the entrepreneurs reflect on their learning and mistakes and to develop forward strategies that are informed by these experiences.

Mentoring is an appropriate form of support, which provides mentees with the possibility to improve their management skills and learn through action with the support of a person with extensive business experience (St-Jean & Audet, 2009). Gravells (2006), in his research found that mentoring was considered not only important but the most effective source of help for entrepreneurs in topics considered most crucial such as financial planning, marketing and pricing, regulation and access to information. Enterprise mentoring was seen as effective in long-run sustainability relative to other forms of support. Training and mentorship are therefore very vital in promoting start-ups sustainability in the incubator as the essential guidance, networking principles and opportunities are set for the smart entrepreneur leverages on them for the long-run of his/her business.

2.3.2.1 The Bottom Line

Cassin (2017) still emphasizes that the bottom-line in incubators and accelerators can help start-ups avoid common entrepreneurial pitfalls and speed up the process of raising capital and growing a business. Despite these benefits, start-ups should note that the mentorship
programs are not right for every business, and it is important for them to do their research before signing on the dotted line. Upon making the decision to begin the application process, working with experienced counsel could boost the odds of selection and help ensure their legal rights are protected.

Prashar (2013) remarks that one of the pros of joining a start-up incubator is acquiring quality Advice: Seasoned entrepreneurs and experienced professionals available through the infrastructure accessible through an incubator can be an asset. An advisor who has skin in the game, and has industry focus and niche area specialization, goes a long way in a start-up's performance and actual fate. Simply joining an incubator isn't a guarantee one’s startup will succeed. Capria and Unitus seed fund attempted to discover why some incubators have more successful graduates than others, and found a connection to the "depth" of the mentor network offered. Entrepreneurs also need to make sure the mentoring community at a prospective incubator can offer specific, not general, value. Well-regarded incubators are notoriously selective, and only accept members who are in the earliest stages of their startup. One is required to disclose your business plan during the application and interview process. Finally, one’s operating under the idea that you will thrive while being closely monitored and directed by experienced founders.

One of the key missing areas is the lack of expertise in small businesses, e.g. our sample indicates that small businesses use the primitive single-entry system for accounting, argues Witt (2007), while very few businesses adopt business plans. Entrepreneurs need training and education; however, limited resources prohibit the government from providing the education and training for them to succeed and grow the economy. It is suggested that the government can coordinate with the local Chambers of Commerce and industry and traders associations in their effort to enhance business-specific education among SME owners.

A venture capitalist company, Amber Wave has raised $60 million across its several rounds of venture financing. Here is what most founders should expect: Unless they have incredible luck in a variety of ways, they are not going to own 50% of the company or 40%—not even close. I think a lot of scientists, when they start off, are thinking that way, but a lot of resources have to be applied to get that idea out there, and they have to share it. First of all, in your own company, tens to hundreds of people work with you to achieve this goal, and then
they have to be indirectly getting the effort of thousands of people in the marketplace. So the venture game is one in which the idea has to be big enough for the venture capitalists but also for the founder, where the percentages need to be applied to a large number of people who each want to get significant gain (Witt, 2007).

2.4 Investment Instruments Used in the Incubation Hubs to Enhance Start-Ups Sustainability

2.4.1 Investment Instruments Used in Incubation Hubs

An investment instrument is any type of financial arrangement that provides the holder or recipient with the promise of earning some sort of return from that investment (Wisegeek, 2013). There are many different types of instruments an emerging business may issue to finance its growth. In general, financing instruments fall into one of two categories — debt or equity. Although there are certain exceptions, debt instruments generally represent fixed obligations to repay a specific amount at a specified date in the future, together with interest. In contrast, equity instruments generally represent ownership interests entitled to dividend payments, when declared, but with no specific right to a return on capital. Common stock is the most basic form of equity instrument. It represents an ownership interest in a corporation, including an interest in earnings, that translate into declared dividends, as well as an interest in assets distributed upon dissolution (Antiventure capital, 2001).

It is suggested that local governments rationalize the zoning policy, and these authorities could be involved in framing the entrepreneurial policy. For example, the government could create incubators and malls with low rent for start-ups. Over the larger scale, historically, the government remained focused on the development of larger businesses and industries, while the small businesses were traditionally given low priority. Because of its significant role in the economy, the government needs to improve its macroeconomic SME policies (BMI Research, 2015).

Seed money, sometimes known as seed funding or seed capital, is a form of securities offering in which an investor invests capital in exchange for an equity stake in the company. The term seed suggests that this is a very early investment, meant to support the business
until it can generate cash of its own. Seed money options include friends and family funding, angel funding, and crowd funding (Grant, 2015).

If a start-up is growing, at some point it will likely be seeking venture capital. Unlike angel investors, who typically write checks between $10,000 to $100,000, VCs can write multi-million dollar checks. This means that VCs support start-up growth from seed to much later stages (Iskold, 2015). Most founders feel like their ideas are amazing and worthy of an investment. The reality is that most ideas are worthy of some kind of investment, but not necessarily worthy of a venture investment. Simply put, different businesses have different potential and because of that the amount of capital that makes sense to invest in them varies. A small business, such as a restaurant, can get a bank loan, but it is not a great venture investment because the upside is typically small. Venture capitalists are looking to deploy millions of dollars, and they are looking for multiple times return on that capital. That is why, in addition to founders, VCs focus heavily on the size of the market. If they don't believe the market is large enough, they won't invest. Some venture capitalist firms are public and are included in some exchanges providing an avenue for regular investors to also invest in ideas from entrepreneurs (Siegel, 2013).

The governments of some countries sometimes come in to fund incubation hubs as they believe they have a successful structure to improve the performance of the start-ups. The Kenyan government partnered with Nailab, a Kenyan incubator, to launch a $1.6 million technology incubation program in an effort to support’s growing information and communications technology (ICT) startup community. The Kenyan government aims to become one the top 10 ICT hubs in the world (Nsehe, 2013).

Both industrialized and industrializing countries have formulated strategies and policies for supporting entrepreneurship development and assisting small and medium enterprises in acquiring modern technological resources and management practices (Htun, 1997). These policies have been implemented in a variety of financial and non-financial incentive and support systems, offered by central and local governments, foundations, business organizations, universities and international organizations, such as OECD, the European
Union and several agencies of the United Nations. Among this myriad of initiatives, new business incubators and enterprise.

2.4.2.1 Institutional Theory and Entrepreneurship

Governments around the world support entrepreneurship through policies that are conducive to the creation of an overall environment for new venture creation (Lerner, 2009) since innovation by new ventures has been linked to economic growth and job creation (Audretsch, 1988; Thurik & Wennekers, 2004). Many new ventures fail due to paucity of risk capital, the life blood of high potential new ventures that start with voracious capital requirements particularly in their early stages when mortality rates are the highest; hence capital markets are an integral part of creating an entrepreneurship ecosystem (Isenberg, 2010). Gaps in the market for risk capital to fuel this growth is all too common in developed and developing countries, hence this gap in the financing chain for new ventures and its impact on firm survival is well documented (Audretsch, 2006).

Governments play a key role in shaping the institutional ecosystem for capital markets with institutional theory arguing for the importance of strong market institutions to support the growth of capital markets (Lerner, 2009). Weak, fragmented or constraining institutional environments in incipient markets may lead to market failure (Easterly, 2006) and consequent loss of positive spillovers or contagion effects from innovative young firms. Governments with deeper and more powerful resources can address market failure caused by institutional voids in risk capital markets (Mair & Marti, 2009) through public policies designed to provide early stage financing to fill the funding gap, in spite of arguments against government intervention or government failure leading to inefficient use of funds from the public purse (Storey, 2005; De Meza, 2002).

2.4.2.2 Network Theory and Business Incubators

Business incubators focus on internal and external networking, assisting incubates with finding funding, and connecting them to a range of actors to facilitate resource and knowledge flows. Fluid, dynamic and multiplex networks between the incubator and its partners allow random and multiple points of contact creating both strong and weak ties (Granovetter, 1973) that enable access to novel ideas, knowledge transfer and learning across
the network (Rangan, 2000), in addition to facilitating resource acquisition and opportunity exploitation by entrepreneurial actors by connecting them with resource providers (Aldrich & Wiedenmayer, 1993).

Public-private partnerships forged by the business incubator create a web of relationships with the capacity for influencing the broader business environment. For instance, partners from the financial community may enhance client access to various types of early stage financing (Ayers & Harman, 2009). Networking benefits include knowledge spillovers as well as access to business angels, who not only provide capital, but also experience and contacts to firms crossing dangerous “death valleys” (Bygrave & Quill, 2007). In addition, a strong angel network that brings funding at the pre-venture capital stage is complementary to the more formal funding that a firm is expected to need as it matures (Harrison & Mason, 2000).

2.4.2.3 Choice of Securities and the Type of Entrepreneurial Company

The choice of financial instruments gives rise to adverse selection problems in terms of attracting different types of entrepreneurs. The extent of adverse selection problems, i.e., the degree of information asymmetry and agency costs faced by the VC firm, are not uniform across different types of entrepreneurial firms. Work on this problem follows three streams: First, the seminal (and Nobel Prize winning) work that explains why different offers of securities attract different types of firm (or entrepreneur types) (Jensen & Meckling, 1976; Stiglitz & Weiss, 1981; De Meza & Webb; 1992); Second, the Theoretical work that suggests how security design can be adjusted to appropriately mitigate agency problems; and third empirical studies of how contract design is applied in practice. We will first focus on the seminal and theoretical literature on securities choice and the choice of entrepreneurial firm types, followed by a review of the relevant empirical work.

2.5 Chapter Summary

This chapter has given us an account on various literature from different scholars, researchers and authors with regard to incubation hubs, the sustainability of the start-ups that go through them, the processes involved and the different investment instruments employed.
We learn of the origin of the incubation hubs and the purpose as to why there was a need for their emergence and many similarities rather than differences of most of them.

Despite their many benefits, we look are some precautions start-ups should look into before they join any incubator hub and their related counterparts, accelerators of which we have also seen the difference.

The next Chapter three will discuss the research methodology used in the study. It presents discussions on the research design, research population, sampling, data collection instruments and data presentation.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology used in the study. It presents discussions on the research design, research population, sampling, data collection instruments and data presentation, analysis and interpretation.

3.2 Research Design

Kothari (2010) defines research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance of the research purpose with economy in procedure. Therefore research design is the conceptual structure within which research is conducted; it constitutes the blue print for collection, measurement and analysis of data.

The study will be carried out using both a qualitative and quantitative approach as it aims to gather an in-depth understanding of human behaviour and the reasons that govern such behaviour and also to accrue some numerical deductions. The qualitative method investigates the why and how of decision making, not just what, where, when. Hence, smaller but focused samples are more often used than large samples. Quantitative analysis is a mathematical and statistical method of studying behavior and predicting outcomes that investors and management use in their decision-making process. Through the use of financial research and analysis, this form of analysis seeks to assess an investment opportunity or estimate a change in a macroeconomic value (Conrad, 2012).

This is a case study because it’s a detailed account of the organization over a period of time. Descriptive research design was used, which entails the process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects in the study. According to Mugenda & Mugenda (1999) descriptive research design is used to obtain information concerning the current status of the phenomena to describe what exists, with respect to variables or conditions in a situation. The aim of descriptive research is to
gather data without any manipulation of the research context. It is non-intrusive and deals with naturally occurring phenomena, where the researcher has got no control over the variables.

List sampling is one of the basic ways that survey samples can be created. The basic concept of list sampling is deceptively simple. The process is to choose a subset of the elements (the sample) from a listing of all elements (the sampling frame) using a specific selection process. The selection process may have several features, for example, sampling with replacement or sampling without replacement (Lavrakas, 2008).

The study will use 2 different lists: One from I hub and the other from Nailab. The two lists contain three categories of the names of the incubation hub; first the founders or their representatives, second the employee in the hubs and third the start-ups going through the hubs processes. The study will use the sampling without replacement selection process per category.

3.3 Population and Sampling Design

3.3.1 Population

A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait (Explorable, 2015). Pilot and Hungler (1997) define population as aggregate or totality of all objects, subjects or members that conform to a set of set specifications. Kasomo (2010) defines population as any group of institutions, people or objectives that have at least one characteristic in common. He describes it as the aggregate of all cases that conform to some designated set of specification. Mc Burney and White (2007) define population as the entire collection of individuals being considered.

Our population will include start-up founders, employee and the varying start-ups in the incubation hubs. We shall pick similar numbers from each incubation hub for effective comparison purposes. The study was based at the Nailab and I-hub incubation hubs, Nairobi (Kenya) . Members from various departments were selected as follows:
Quantitative Analysis for I-hub and Nailab

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Total Population (Nailab)</th>
<th>Total Population (I-hub)</th>
<th>Percentage (%) for each</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nailab</td>
</tr>
<tr>
<td>Incubation founders</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Employee</td>
<td>9</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Start-ups</td>
<td>70</td>
<td>100</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td><strong>80</strong></td>
<td><strong>116</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Table 3.1 Diagrammatic representation of the target population*

Quantitative analysis will entail an interview guide and a small population as we had earlier mentioned; One founder, 3 start-ups and one of the employee in the incubation hub. This will be done in both Nailab and I-hub.

The selection of the target population was based on the fact that the start-ups and employee are the main characters required in the study. The employee and start-ups will give first-hand information on how they receive the services, their experiences and challenges they face. The start-up founders will help us in understanding the basis of the foundations of forming the incubation hubs, the processes in the hubs including merging with financial investors and other external partners.

3.3.2 Sampling Design

LoBiondo- Wood and Haber (1999) define sampling as the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected. The researcher must decide the way of selecting a sample or what is popularly known as the sample design. In other words, a sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population.

3.3.2.1 Sampling Frame

A sampling frame is a list of all the items in the population. It’s a complete list of everyone or everything intended to be studied. The difference between a population and a sampling
frame is that the population is general and the frame is specific (Sandal et al, 2003). Our sampling frame consists of 4 start-up founders, 16 employee and 50 start-ups. These are the numbers in both incubation hubs.

3.3.2.2 Sampling Technique

For the sampling technique, stratified random sampling was used. Stratified random sampling is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, or stratification, the strata are formed based on members' shared attributes or characteristics. A simple random sample is then selected from each stratum and the results from the strata are aggregated to make inferences about the population (Coopers and Schindler (2012). Defining a simple random sample (Press et al, 2007) describe it as a subset of a statistical population in which each member of the subset has an equal probability of being chosen.

Papers with numbers written on them in accordance to the (population N) will be placed in bowls and selected randomly. Different colours will be used for the population type, which was divided into three categories: A-Founders, B-Employees and C-Start-ups, or rather, the varying strata. A specific number will be selected from the bowl without looking, in accordance to population segments and this shall be the samples (sample n1, n2, n3) respectively. This will be done in both incubation hubs, Nailab and I-hub, separately.

3.3.2.3 Sample Size

A sample size is a part of the population chosen for a survey or experiment. In practice, the sample size used in a study is determined based on the expense of data collection, and the need to have sufficient statistical power. In complicated studies there may be several different sample sizes involved in the study: for example, in a stratified survey there would be different sample sizes for each stratum.

According to Mugenda and Mugenda (2003) a sample of 30% is adequate for a study.

Therefore, the latter statement presented in formula form is as follows:
Sample size formula is $= 30\% \times \text{Target population}$

Hence;

Incubation founders $= 30\% \times x$

Employee $= 30\% \times y$

Start-ups $= 30\% \times z$

For this study, the sample size was selected from the target population which was earlier selected using the stratified random sampling technique.

See Table 3.2 below.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Sample size (Nailab)</th>
<th>Sample size (I-hub)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incubation founders</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Employee</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Start-ups</td>
<td>21</td>
<td>30</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.2 Diagrammatic representation of Sample size

3.4 Data Collection Methods

This is all about the procedures, techniques and tools used when collecting data from the sampled participants.

3.4.1 Face to Face Interviews

The qualitative research interview seeks to describe and the meanings of central themes in the life world of the subjects. The main task in interviewing is to understand theme of what the interview essay. A qualitative research interview seeks to cover both a factual and a meaning level, though it is usually more difficult to interview on a meaning level (Kvale, 1996).
Interviews are particularly useful for getting the story behind a participant’s experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaires e.g., to further investigate their responses. (McNamara, 1999).

Interviews were conducted by the researcher to 30 representative members; that is the founder, employee and start-ups in each incubation hub. The researcher used semi-structured approach to ensure collection of relevant information in tandem with the research objectives and research questions and at the same time create room for probing more information that may have been useful to the research objectives.

The researcher chose the use of interviews because of the following advantages: First, they are motivational as most people would rather talk than write and the interviewer can give incentives or tell the interviewee the benefits of the interview to their organization or society. Second, flexible because they allow greater flexibility in wording, sequence and direction and it is also easier to explore highly complex or abstract topics. Third, additional information can be given to allow the monitoring/evaluation of interpersonal skills, nonverbal and paralinguistic behaviour, emotional tone and behaviour under stress.

3.4.2 Questionnaires

A questionnaire is a set of systematically structured questions used by a researcher to get needed information from respondents. Brown (2001) opines that questionnaires have been termed differently, including surveys, schedules, indexes/indicators, profiles, studies, opinions, batteries, tests, checklists, scales, inventories and forms. They are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers.

Self-administered closed-ended questionnaires were presented to the respondents. A Likert scale of 5 choices was used. The sections in the questionnaire were 5 with part A tackling the demographics, part B dealing with joining process information, part C entailed how incubation processes enhance start-up sustainability, part D was about the importance of training and mentorship to start-ups in enhancing their sustainability and finally part E
tackled investment instruments used in the incubation hubs to enhance start-ups sustainability. The researcher was fully available to make little clarifications during the entire exercise but did not, however, interpret the questions for the respondents as this may have increased interviewer bias. These closed-ended questionnaires were given to 20 respondents per hub comprising employee and start-up representatives. The respondents fully filled and returned them. This tool helped to gather qualitative data.

The researcher used this tool because advantages questionnaires pose are:

They allowed the researcher to contact a large number of people at a relatively low cost. The researcher found that they were easy to use to reach people who were spread across a wide geographical area. Additionally, the researcher regarded them to be free from bias from the interviewer. It was also a practical and simple means to gather information for the researcher.

3.5 Research Procedures

Interviews were done through physical visits to the work premises and talking to the founders of each hub or their representatives. The interviews entailed having a sit down with the respondent on a face to face basis and the interviewer asking the interviewee questions from the interview guide. Questionnaires were distributed to selected staff: 4 employee and 15 start-ups, in each hub during a specified selected day and they filled and returned them after a few minutes. Beforehand, the questionnaires were pre-tested on 4 people and corrections made. The interviewer would then record or jot down the responses.

3.6 Data Analysis Methods

Data analysis is the process of looking at data and summarizing it with intent to extracting useful information. The data was analyzed using qualitative techniques which included content analysis and evaluation of text material. An interview guide was used in this case to inquire from respondents. For the quantitative approach, questionnaires were used. The quantitative data collected was analyzed by use of descriptive statistics using the statistical analysis tool SPSS (Version 23). The data was then presented through percentages, means, standard deviations and frequencies. The information was further translated into pie charts and graphs helping the researcher to bring out the comparative nature of the two incubation
hubs. The process entailed tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions via use of SPSS. Data for the study was categorized into themes and presentations based on the study objectives.

3.7 Chapter Summary

In this chapter we got an in depth look into the research design used in this project. The study used qualitative research methodology to get a much more in depth understanding of human behaviour and quantitative as well, to accrue some numerical deductions. The sampling technique explains the creative process used to select the ultimate sample size. The population number was not so large hence easy to manage. We have also looked into some of the advantages of using the specific selected sampling methods.

Chapter four (4) presents the analysis, interpretation and results of the findings on data from the research on the role incubation hubs play in start-ups sustainability at the Nailab and I-hub incubation hubs. The researcher chose to present the data using the objectives as the guideline to structure the format.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

The purpose of the study was to investigate the influence of incubation hubs on the sustainability of start-ups using a comparative study of Nailab and I-hub incubation hubs. This chapter presents the results of data analysis as well as data interpretation and presentation.

4.1.1 Response Rate

Table 4.1 indicates that a total of 60 questionnaires were administered to respondents in the two incubation hubs out of which 56 were fully filled and returned. The overall response rate of the study was found to be 93 percent.

<table>
<thead>
<tr>
<th>Response Rate</th>
<th>DISTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>Questionnaires Issued</td>
<td>60</td>
</tr>
<tr>
<td>Questionnaires Returned</td>
<td>56</td>
</tr>
</tbody>
</table>

4.2 Demographic Characteristics

This section discusses the results of the general information about the respondents including age of the respondents, level of education, number of years in business and their average level of annual sales in the business.

4.2.1 Age of Respondents

The respondents were asked to indicate their age bracket. The findings are shown in Figure 4.1. The findings indicate that a majority of the respondents at 64% were between of 21-30 years. 18% of the respondents were in age bracket of 31-40 years and another 18% of the respondents were in the age bracket of under 30 years.
Figure 4.1 Age of Respondents

4.2.2 Level of Education

The respondents were asked to indicate their level of education, the findings are as indicated in Figure 4.2. Majority of the respondents (55%) were at first-degree level, 36% of the respondents were at the master’s level, 38% at tertiary level and 36% secondary level. This shows that in the incubation hubs sampled, the members are mostly graduates with first degrees.

Figure 4.2 Level of Education
4.2.3 Length of Time in Business

The study also sought to find out the number of years in business occupation of the respondents. The results are as indicated in figure 4.3. Majority of the respondents at 61% had 1-5 years of experience in business. 36% of the respondents had 6-10 years of experience while another 36% had stayed in business for less than a year. This shows that some had more experience in business than others.

![Length of Time in Business](image)

Figure 4.3 Length of Time in Business

4.2.4 Annual Sales

The respondents were asked to indicate level of annual sales for the period between 2014 and 2017. The finding are as indicated in Figure 4.2. Majority of the respondents at 90% made sales worth Ksh 300,000 to Ksh 400,000 in the year 2016.
4.3 Joining Process Analysis

The respondents were asked to indicate their opinion as to whether there exists certain criteria to be met before joining the incubation hub. The results have been segregated into the respective incubation hubs to enable comparative analysis. The questions were drafted on a 5-point likert scale. The value 1 represents strongly agree, 2 represents agree, 3 neutral, 4 disagree and 5 represents strongly disagree. Frequencies were used to indicate the extent of consensus of the respondents on a particular variable.

Figure 4.5 Joining Process
The study sought to find out the existence of certain criteria before joining which makes the joining process to be tasking. The results are shown in figure 4.2. From the results, the respondents from the incubation hubs seem to agree at 25% that the joining process is tasking due to certain criteria that need to be met. 21% of the respondents strongly agreed while some of the respondents were neutral at 23%. 14% disagreed while 16% strongly disagreed. This shows that respondents had divergent views about the joining process where some may have joined following a smooth process while others could have struggled to meet the requirements.

4.3.1 Lack of Joining Fee

The study also sought to find out specific problems that the members of the incubation hubs encountered during the joining process. The study found out that the lack of joining fee was not a major challenge with majority of the respondents strongly disagreeing at 46% followed by 20% who disagreed, 16% strongly agreed, 11% agreed while 7% were neutral as indicated in figure 4.6.

![Figure 4.6 Lack of joining fee](image)

4.3.2 Poor Customer Correspondence

Customer correspondence is an important aspect for any business to thrive. The study found that majority of the respondents at 41% strongly disagreed that this was a challenge in the joining process. 29% disagreed, 13% strongly agreed, 11% agreed while 7% remained neutral as indicated in figure 4.7.
4.3.3 Lack of Proper Adequate Information

From the results in figure 4.8, it shows that majority of the respondents have access to adequate information. 27% of the respondents disagreed to this question, 25% were neutral, 23% agreed, 20% disagreed while only 5% strongly agreed.

4.3.4 Failure in Meeting Requirements of the Application

A failure to meet the requirements of application for joining the incubation hub would lead to a disqualification. However, this did not seem a major challenge to the respondents as shown in figure 4.9. 36% of the respondents were neutral, followed by 23% who agreed, 20% strongly disagreed, 13% disagreed while only 9% strongly agreed.
4.3.5 Reach of Minimum Threshold during Opening Season

The study also sought to find out whether there was a challenge in achieving the minimum threshold in terms of members of the incubation hubs. The respondents had divergent views about this question with majority remaining neutral at 32%, 25% disagreed, 18% strongly disagreed, 16% agreed while only 9% strongly agreed as shown in figure 4.10.

Figure 4.10 Minimum threshold during opening season

4.3.6 Amount Paid Before Hand

The respondents were asked to indicate the amount in Kenya shillings that they were required to pay before joining the incubation hubs. Majority of the respondents at 57% were required to pay no amount before joining, 38% paid an amount of not more than 25,000 Kenya
shillings while only 5% had to pay an amount between 25,001 to 50,000 Kenya shillings as shown in figure 4.11.

Figure 4.11 Amount paid before hand

4.4 Incubation Processes Used to Enhance Start-ups’ Sustainability

This section presents the results on how the incubation process enhances start-ups sustainability by looking at the two different incubation hubs. The results have been segregated into the respective incubation hubs to enable comparative analysis. The questions were drafted on a 5-point likert scale. The value 1 represents strongly agree, 2 represents agree, 3 neutral, 4 disagree and 5 represents strongly disagree. Mean and standard deviation were used to indicate the extent of consensus of the respondents on a particular variable.
Table 4.2 Descriptives for incubation process

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Nailab</th>
<th></th>
<th>I-hub</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic incubation processes in most hubs are very vital in enhancing start-up sustainability</td>
<td>4.5</td>
<td>0.6</td>
<td>4.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Start-ups within the incubation hubs undergoing the incubation processes always perform better in the long-run</td>
<td>4.4</td>
<td>0.7</td>
<td>4.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Start-ups outside the incubation hubs often benchmark their processes with those that have successfully gone through incubation hubs</td>
<td>3.6</td>
<td>1.1</td>
<td>4.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Incubation processes enable start-ups to compete healthily with other companies in the market</td>
<td>4.3</td>
<td>0.8</td>
<td>4.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Incubation processes prepare the start-ups to deal with global concerns such as environmental concerns</td>
<td>4.0</td>
<td>0.8</td>
<td>4.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Incubation processes prepare the companies to be flexible enough to deal with the turbulence in the ever-changing business environment for the sustainable long run</td>
<td>4.2</td>
<td>1.1</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Incubation hubs adequately prepare start-ups to address their succession procedures</td>
<td>2.2</td>
<td>0.7</td>
<td>3.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Incubation hubs aim to fulfill most of the SDG(Sustainable Development Goals) when taking start-ups through their processes</td>
<td>3.4</td>
<td>0.8</td>
<td>3.6</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Table 4.2 shows the effects of incubation processes on start-ups sustainability. The findings are provided in terms of mean and standard deviation. From the results of both incubation hubs, it was evident that basic incubation process is vital in enhancing start-up sustainability. The importance of enrolling in incubation hubs seemed to be embraced more at I-hub than Nailab. This shows that incubation hubs play a major role for any business to thrive and become sustainable in the end.

The idea as to whether start-ups within the incubation hubs undergoing the incubation process do perform better in the long run was also highly supported by respondents from both incubation hubs. From the results, the members at Nailab formed the highest opinion followed by I-hub. This shows that it is vital for start-ups to undergo the incubation process if they are expected to be competitive and have commendable performance in the market.

Respondents from I-hub strongly supported the fact that start-ups outside the incubation hubs often benchmark their processes with those that have successfully gone through incubation...
hubs with a mean of 4.4 while at Nailab the concept did not come out so strongly with a mean of 3.6.

All the respondents from both incubation hubs agreed that incubation processes enables start-ups to compete healthily with other companies in the market with means of above 4.0. This shows that the training received at the incubation hubs is impactful and its impact can be felt in the market.

Incubation processes prepare the start-ups to deal with global concerns such as environmental concerns. This was strongly depicted from both incubation hubs with means of above 4.0. This shows that respondents felt that it was important to have a global and environmental perspective while doing business and which could only be obtained from an incubation hub.

From the results, respondents from Nailab felt that Incubation processes prepare the companies to be flexible enough to deal with the turbulence in the ever-changing business environment for the sustainable long run with a mean of 4.2 while respondents from i-hub agreed to the same fact but with a much lower mean of 3.5. At both Nailab and I-hub, the value of standard deviation was above 1.0 showing that there existed much variability in the responses given. This implies that there was no consensus of the responses. Thus, the respondents agreed the issues of incubation hubs preparing businesses to become flexible enough to deal with turbulence unevenly.

The respondents also seemed not to agree with the statement that Incubation hubs adequately prepare start-ups to address their succession procedures. In this area, the lowest mean was recorded with Nailab recording a mean of 2.2 and I-hub a mean of 3.4. This shows that the respondents felt that the incubation hubs needed to go an extra mile to prepare them for business succession.

The question in incubation hubs aiming to fulfill most of the SDG (Sustainable Development Goals) when taking start-ups through their processes did not receive strong back up from the respondents with Nailab recording a mean of 3.4 and I-hub a mean of 3.6. This shows that the start-ups fail to align their objectives to the larger economic vision.
Table 4.3 ANOVA-Incubation process and start-ups sustainability

<table>
<thead>
<tr>
<th>Incubation Process</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.442</td>
<td>3</td>
<td>.145</td>
<td>1.065</td>
<td>.353</td>
</tr>
<tr>
<td>Within Groups</td>
<td>15.193</td>
<td>52</td>
<td>.105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.635</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results shown in table 4.3 shows a F distribution given by F (3, 52)=1.065, p>0.05. This is an indication that there were no significant statistical differences on the impact of incubation processes in enhancing start-ups sustainability at the incubation hubs. This reveals that the incubation process is ideal for any start-up to achieve success and compete effectively with equal importance across the incubation hubs.

4.5 Importance of Training and Mentorship to Start-ups in Enhancing their Sustainability

This section presents the results importance of training and mentorship to start-ups in enhancing their sustainability. The data was collected using the likert scale of 1-5 points. The results are shown in table 4.4.
Table 4.4 Descriptives for mentorship and training

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Nailab</th>
<th>I-hub</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training and Mentorship is one of the key processes in enhancing Start-ups sustainability in incubation hubs</strong></td>
<td>4.2</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Mentorship enables the entrepreneurs to think and learn from their own actions in critical situations, so that they can draw some lessons from it</strong></td>
<td>4.1</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Entrepreneurs need mentors due to the complexity and range of tasks they are required to perform</strong></td>
<td>4.5</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Training sessions help like-minded entrepreneurs share ideas for sustainability growth purposes</strong></td>
<td>4.0</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Training and mentorship helps entrepreneurs increase their self-esteem levels</strong></td>
<td>4.3</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Regular training ensures the start-ups continue running effectively</strong></td>
<td>4.2</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Mentorship encourages entrepreneurs not to give up when the journey gets tough</strong></td>
<td>3.7</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Training provides information for new comers</strong></td>
<td>3.9</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table 4.4 shows the importance of training and mentorship to start-ups in enhancing their sustainability. The findings are provided in terms of mean and standard deviation. From the results of both incubation hubs, it was evident that training and mentorship is one of the key processes in enhancing Start-ups sustainability in incubation hubs. This concept came out more strongly at Nailab as compared to I-hub incubation. This indicates that training and development plays a vital role in giving the start-ups the confidence, skills and competencies needed in the market for them to thrive.

The question on whether mentorship enables the entrepreneurs to think and learn from their own actions in critical situations was strongly agreed by the respondents from both incubation hubs with means of above 4.0. This shows the extent to which incubation hubs go to make sure that start-ups are able to run on their own by equipping the owners with the knowledge and support that they may require.

Respondents from both incubation hubs strongly supported the fact that entrepreneurs need mentors due to the complexity and range of tasks they are required to perform with means of
above 4.5. This shows how much value that mentors do add to start-ups in helping them achieve their dreams. However, results from I-hub show a standard deviation of 1.1 indicating that the respondents from I-hub had no consensus on this question. At Nailab, the respondents indicated that training sessions help like-minded entrepreneurs to share ideas for sustainability growth purposes with a mean close to 4.0 while at I-hub this fact did not come out strongly with a much lower mean of 3.5. The idea on whether training and mentorship helps entrepreneurs increase their self-esteem levels also came out more strongly at Nailab as compared to I-hub. However, results show that there was no consensus on this question with Nailab recording a STDV of 0.1 and i-hub STDV of 0.7.

The opinion as to whether regular training ensures the start-ups continue running effectively was highly embraced at both incubation hubs with means of above 4.0. This implies that training plays a vital role in ensuring that start-ups do not bow to the pressure in the market. However, the results show a STDV of 1.1 at both incubation hubs revealing that there existed much variability in the responses given. This implies that there was no consensus of the responses. Thus, the question on regular training was answered unevenly in the incubation hubs. Respondents were also asked to evaluate whether mentorship encourages entrepreneurs not to give up when the journey gets tough. A majority of respondents at I-hub seemed to agree to this statement with a mean of 4.4 while those at Nailab seemed to be neutral on this, recording a mean of 3.7.

Finally, the respondents agreed that training provides information for new comers. Respondents from I-hub took the lead on this question with a mean of 4.4 followed by respondents from Nailab who recorded a mean of 3.9. This clearly shows that start-ups that go through incubation hubs are exposed to a great deal of information that is meant to help them in achieving their goals.
Table 4.5 ANOVA–Training and mentorship and sustainability

<table>
<thead>
<tr>
<th>Training and mentorship</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.223</td>
<td>3</td>
<td>.417</td>
<td>1.145</td>
<td>.303</td>
</tr>
<tr>
<td>Within Groups</td>
<td>50,164</td>
<td>52</td>
<td>.343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51.387</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results shown in table 4.5 shows an F distribution given by F (3, 52)=1.145, p>0.05. This is an indication that there were no significant statistical differences on the importance of training and mentorship in enhancing start-ups sustainability at the incubation hubs. This reveals that training and mentorship is key in the success of start-ups with equal importance across the incubation hubs.

4.6 Investment Instruments Used in the Incubation Hubs to Enhance Start-ups Sustainability

This section discusses the investment instruments used by incubation hubs to enhance start-ups sustainability. The data was collected using the likert scale of 1-5 points. The results are shown in table 4.6.
Table 4.6 Descriptives for investment instruments

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Nailab</th>
<th>Std. Deviation</th>
<th>I-hub</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.2</td>
<td>0.6</td>
<td>4.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Descriptions for investment instruments are one of the most valuable resources of boosting start-ups in an incubation hub</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investors always challenge entrepreneurs to perform better as the entrepreneurs feel the pressure of the financial help and guidance given</td>
<td>3.9</td>
<td>0.8</td>
<td>3.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Incubation hubs that attach start-ups to venture capitalists often create stronger long-run sustainable networks for them</td>
<td>4.1</td>
<td>1.1</td>
<td>4.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Most start-ups in incubation hubs funded by angel investors or venture capitalists often always are able to repay back the valued investment</td>
<td>4.2</td>
<td>0.8</td>
<td>4.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Investment instruments shed light on the businesses that tend to be profitable in the sustainable long-run</td>
<td>4.1</td>
<td>0.9</td>
<td>4.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Angel investors encourage start-ups to become more innovative in the long-run for sustainability purposes</td>
<td>4.0</td>
<td>0.5</td>
<td>4.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Investors also play the role of mentoring the entrepreneurs</td>
<td>4.6</td>
<td>0.8</td>
<td>4.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Investment instruments cannot be overlooked by start-ups in an incubation hub</td>
<td>3.8</td>
<td>1.1</td>
<td>3.9</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Table 4.6 evaluates the impact of investment instruments used in the incubation hubs to enhance start-ups sustainability. The findings are provided in terms of mean and standard deviation. From the results, the respondents agreed that investment instruments are one of the most valuable resources of boosting start-ups incubation hubs. The means recorded at both incubation hubs were above 4.0. This reveals that start-ups rely much on the investment instruments provided at the hubs for them to be able to kick start their businesses.

Having investors as part of the stakeholders at incubation hubs is a great step towards motivating the start-ups. The respondents agreed that investors always challenge entrepreneurs to perform better as the entrepreneurs feel the pressure of the financial help and guidance given with the results showing means of close to 4.0 at both incubation hubs. The results also depicted that incubation hubs that attach start-ups to venture capitalists often create stronger long-run sustainable networks for themselves with means of 4.0 and above. This shows the value of networks between venture capitalists and start-ups. However, results show that respondents from Nailab had no consensus on this question recording a STDV of 1.1. The question on whether most start-ups in incubation hubs funded by angel investors or venture capitalists often always are able to repay back the valued investment was also
strongly supported by respondents from both incubation hubs with means of above 4.0. This revealed that a majority of the start-ups under incubation are able to recoup their initial investment at a certain period in time.

The respondents also supported the fact that investment instruments shed light on the businesses that tend to be profitable in the sustainable long run with the incubation hubs recording means of above 4.0. The results also show that a majority of the respondents were of the opinion that angel investors encourage start-ups to become more innovative in the end for sustainability purposes. This went hand in hand with fact that investors also play the role of mentoring the entrepreneurs all recording means of above 4.0.

Finally, respondents from both incubation hubs concluded that the investment instruments cannot be overlooked by start-ups in an incubation hub with means of close to 4.0. However, results show that respondents from Nailab had no consensus on this question recording a STDV of 1.1 indicating the extent of variability in responses.

Table 4.7 ANOVA – Investment instruments used in incubation hubs

<table>
<thead>
<tr>
<th>Investment Instruments</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.688</td>
<td>3</td>
<td>.764</td>
<td>1.593</td>
<td>.105</td>
</tr>
<tr>
<td>Within Groups</td>
<td>23.833</td>
<td>52</td>
<td>.156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26.521</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA test found an F distribution (F (3,52) =1.593, p>0.05) showed that there was no significant statistical differences on investment instruments used in the incubation hubs sampled.

4.7 Results from Interview with the Respondents

The researcher conducted in-depth interviews on both i-hub and Nailab as per the interview schedule. The founders were subjected to a face to face interview with the following similarities and differences emerging from the results.
4.7.1 Similarities Between I-hub and Nailab

The respondents, who are the founders, cited that developments of the incubation hubs was inspired by the rise in number of technical innovators. This led them to forming a place where such innovators could meet to exchange ideas and knowledge.

I-hub and Nailab both serve as hubs and incubators. Hubs contribute to the sustainability of the hub in the long run whereas incubators make startup creation and development their immediate goal.

The respondents cited that most funding for start-ups support stems from external investors. Partners such as banks normally chip in and can agree to fund like up to five start-ups. Angel funders also come in handy ready to give money to fund great ideas. Some startups however are able to grow exponentially during the beginner stages hence funding themselves.

For start-ups, which do not make it to be successful, the respondents noted that the issue lies with the backside platform, knowledge expertise. However, it was noted by the interviewers that a majority of the start-ups turn up to be successful. For a start-up that does not become successful, the entrepreneur picks up another idea and works on it instead of going back to employment.

The respondents added that there is a competitive market within Africa. The start-ups that undergo incubation are at the front line of innovation. The interviewers noted that start-ups do not compete among themselves since they lead the market.

The respondents noted that the bottom line of the incubation hubs lies on co-working, innovation journey and entrepreneurship journey with the aim of want Africa to be the leading innovation hub.

4.7.2 Differences Between I-hub and Nailab

I-hub was the founding hub. Nailab was founded on the I-hub foundation. The hub is said to be both the main catalyst for regional tech acceleration and a role model for tech hubs across emerging markets.
I-hub got most of its funding from international investors while Nailab got heavy initial funding from the government of $1.6 billion but also helps some of the startups under its wings secure some international funding. Again, for I-hub - there are some monthly subscriptions while for Nailab there are no monthly subscriptions.

I-hub has more subscribers (100 members as of the time of data collection) who come in during any time of the year as long as they subscribe and not with very strict criteria. Nailab picks the startup per Cohort and they have to go through stringent vetting processes and hence lower numbers (70 members as at the time of data collection).

4.8 Chapter Summary

This chapter analyzed the data collected by the 56 respondents using statistical tool SPSS and the findings presented using graphs and tables that gave details on how the questions were answered. Chapter five looks at the summary of the findings, gives recommendations and conclusion of the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The aim of this chapter is to present the discussion, conclusion and recommendations from the findings based on the research questions in the study. The researcher was able investigate the influence of incubation hubs on the sustainability of start-ups using a comparative study between Nailab and I-hub incubation hubs.

The chapter will also draw conclusions from the findings and make appropriate recommendations.

5.2 Summary of the Study

The purpose of this study was to examine the influence of incubation hubs on the sustainability of start-ups between Nailab and I-hub incubation hubs. In order to achieve the purpose, the study sought to fulfill the following specific objectives: To establish the different incubation processes Nailab and I-hub incubation hubs use to enhance start-ups sustainability; To investigate the influence of training and mentorship to start-ups in enhancing their sustainability; To investigate the influence investment instruments used in the incubation hubs to enhance start-ups sustainability.

The study employed a descriptive survey design. This design was relevant to the research since this study was concerned with getting answers by examining the influence of incubation hubs on the sustainability of start-ups between Nailab and I-hub incubation hubs. A sample size of 60 respondents was selected using stratified sampling technique. Descriptive analysis was carried out on the data collected for each of the research objectives based on the data collection tool questions and then inferential statistical analysis was done. This included finding the mean and standard deviation among the variables and ANOVA test within the groups.

The study found out that a majority of the respondents encountered no significant challenges when joining the incubation hubs. The lack of joining fee, poor customer correspondence and
lack of proper and adequate information were dismissed by the respondents as barriers in accessing the incubation hubs. This implied that there exists a close relationship between the confidences in the incubation hub founders that reflects that the members are confident in their ability to start businesses.

The first specific objective of the study intended to establish the different incubation processes Nailab and I-hub incubation hubs use to enhance start-ups sustainability. Based on the feedback from both Nailab and I-hub, the respondents had great confidence in the incubation process terming it as vital in enhancing start-ups sustainability. The fact that start-ups which undergo the incubation process in the incubation hubs, always perform better came out strong with means of above 4.0. The idea on incubation process enabling start-ups to compete healthier with other companies in the market was also strongly upheld. The ANOVA results shows that effect of incubation process in the different incubation hubs was similar with no significance difference noted between the incubation hubs.

The second specific objective was to determine the importance of training and mentorship to start-ups in enhancing their sustainability. Based on feedback from both incubation hubs, training and mentorship was found to be key for most start-ups. The respondents agreed that mentorship enables them to think and learn from their own actions as well as it helps them increase their self-esteem levels with means of above 4.0. It also noted that there is complexity in the range of tasks that entrepreneurs are required to perform and thus the need for training and mentorship with a mean of above 4.5 in both incubation hubs. ANOVA results, the importance of training and mentorship was almost similar in all the incubation hubs sampled and no significant difference was noted between the two hubs.

Lastly, investment instruments used in incubation hubs were found to be critical in enhancing sustainability. The study found out that investment instruments are a valuable resource in boosting start-ups and that most of the start-ups with a mean of 4.4 are able to repay back their initial investment. Investment instruments are also used to shed light on the business and boost profitability with a mean of 4.2. Angel investors were also seen to play a vital role of encouraging the start-ups to become more innovative as well as mentoring the entrepreneurs. However, respondents from Nailab and I-hub incubation hubs seemed to least agree with the idea that investors always challenge entrepreneurs to perform better as the
entrepreneurs feel the pressure of the financial help and guidance given with a mean of 3.7 and 3.8 respectively. According to the ANOVA results, the role of investment instruments was almost similar between the two incubation hubs sampled and no significant difference was noted.

5.3 Discussion

5.3.1 Incubation Processes Used to Enhance Start-ups’ Sustainability

The first specific objective of the study was to establish how the different incubation processes Nailab and I-hub incubation hubs use to enhance start-ups sustainability. The study found out that the incubation process was a critical aspect in enhancing start-ups sustainability. Start-ups, which undergo the incubation process, always perform better in the long run. This concurs with the findings of Sheahan (2017) who found that by undergoing the incubation process, members are able to building a dream team, employ a telescopic lens and partner strategically as a way of successfully launching a business and position it for long-term success. This process enable firms the enterprises to tap into new markets and compete with other firms into strategic alliances have a competitive advantage over other firms. This also was in agreement with the research done by Kelly and Firestone (2016) who said that strategic alliances with different stakeholders aid start-ups to diversify into new markets and acquire economies of scale.

The incubation hubs also were of the idea that the incubation processes prepare the companies to be flexible to deal with the turbulence in the ever-changing business environment. The technological world keeps on changing which in turn affects businesses. For businesses to remain sustainable then they need to cope with these changes. This idea was also echoed by Manzanera (2010) who argued that the process of business incubation enables start-ups to gather a wide range of customized business services with innovation being at the backbone of it all. This has also led to incubation hubs enabling start-ups to compete healthily with other firms in the market.

The study further established that incubation processes prepare the start-ups to deal with global concerns such as environmental concerns and this finding is consistent with Christiane (2017) who noted that concept of the pursuit of both social, environmental and economic goals while creating value is a widely accepted perspective on sustainability.
entrepreneurship. Sustainable entrepreneurship is often considered synonym with more environmentally focused concepts like green or eco-preneurship. This is pursued to ensure that entrepreneurs become essential drivers for the sustainability transformation and this can be fostered and accelerated through political action, education, information and transparency and technology. The incubation hubs remain compliant to the government authorities and other regulatory bodies and thus increases their legitimacy and builds confidence in the start-ups. This builds up loyalty and guarantees start-ups on the quality of services.

The study found that the incubation hubs have not been able to adequately prepare start-ups to address their succession procedures. This is probably due to the fact that business ideas stem from the entrepreneurs and it is at times difficult to find the right partner or vision carrier for purposes of succession. In addition, it was observed that fulfillment of the sustainable development goals by the incubation hubs was not among the key pillars. Although most startups mention that the business environment is refining, there has been little to no research conducted on how startups contribute to the economic development in Kenya. According to Fazaldin (2012), startups contribute to economic development in a couple of ways such as through innovation, gross domestic product and employment.

5.3.2 Importance of Training and Mentorship to Start-Ups in Enhancing Their Sustainability

The second specific objective of the study was to establish the importance of training and mentorship to start-ups in enhancing their sustainability. This sought to determine whether training and mentorship is a key process among the incubation hubs and its impact across both hubs. From the results, training and mentorship appeared to be vital for the start-ups in enhancing their sustainability. According to Jacoby (2004), the relationship between training and mentorship and sustainability is a direct one. Thus the training and mentorship done by the incubation hubs is key in coming up with start-ups that can beat the completion in the market.

The study found out that mentorship enables the entrepreneurs to think and learn from their own actions in critical situations so that they can draw some lessons from it. This is in line with the findings by Jacoby(2004) who depicts mentorship aids in developing oneself and helps start-
ups to develop skills and knowledge that relate to specific useful competencies. Mentoring relations can play an important role in facilitating feedback loops, helping the entrepreneurs reflect on their learning and mistakes and to develop forward strategies that are informed by these experiences.

The study also established that the respondents had great confidence in mentors and agreed that entrepreneurs need mentors due to the complexity and range of tasks associated with start-ups. This is consistent with the findings by Cope and Watts (2000) who mentioned the importance of mentor support in helping entrepreneurs to commit to reflexive learning following significant events in the enterprise, in order to help them avoid or mitigate such critical periods in the future. They pointed that mentoring allows entrepreneurs to examine their enterprises from a more objective standpoint, while continuing to play their role as its leaders and think about its development.

The study also revealed that training sessions help like-minded people to share ideas for sustainability growth purposes. This is in line with the findings by Olafsen and Mohsen (2008) who insists that people connectivity, including mentoring by experienced business professionals, knowledge sharing with like-minded entrepreneurs and links to business relationships and opportunities form a great resource for start-ups. A psychologically supportive environment provided by incubation staff and fellow entrepreneurs in the incubator who, believe in you and your ideas adds great value for the start-ups.

The study also found out that training and mentorship help entrepreneurs increase their self-esteem levels. This is in line with the findings by Scandura and Ragins (1993) who mention that mentors are meant to provide upward mobility and career support for these entrepreneurs. Therefore, training and mentorship plays a role in enabling the entrepreneurs to think and learn from their own actions in critical situations, so that they can change their behavior in the future, or at least draw some lessons from it.

The study found out that training provides information for new comers and also ensures that start-ups continue to run effectively which concurs with the findings by Prashar (2013) who puts forth the point that a major advantage of joining a start-up incubator is acquiring quality advice mostly from seasoned entrepreneurs and experienced professionals who are normally
available at the incubation hubs and are accessible through an incubator. An advisor who has kin in the game, and has industry focus and niche area specialization, goes a long way in a start-up's performance and actual fate. Business advisory services at the incubation hubs assist the entrepreneurs with management issues such as business planning, financial management, marketing and regulatory compliance on formal matters such as applications for registration and licensing.

5.3.3 Investment Instruments Used in the Incubation Hubs to Enhance Start-Ups Sustainability

The third specific objective for the study was to determine the influence of investment instruments used in the incubation hubs to enhance start-ups sustainability. Investment instruments are a valuable resource for the kick starting of start-ups at the incubation hubs. Thus, the kind of investment instruments that incubation hubs put in place determines a lot in terms financing the start-ups.

From the findings of the study, most of the members sampled from Nailab and I-hub agreed that the investors always challenge entrepreneurs to perform better as the entrepreneurs feel the pressure of the financial help and guidance given. In addition, it was identified that incubation hubs that attach start-ups to venture capitalists often create stronger long-run sustainable networks for them. This agrees with study done by Iskold (2015) who adds that venture capitalists support start-ups growth from seed to much later stages.

The study found out that Incubation hubs that attach start-ups to venture capitalist often create stronger long-run sustainable networks for them. A similar scenario is seen whereby the governments of some countries sometimes come in to fund incubation hubs as they believe they have a successful structure to improve the performance of the start-ups. This is consistent with the findings by Nsehe (2013) who confirms that there exists a partnership between the Kenyan government and Nailab, one of the incubation hubs. The partnership is aimed at launching a $1.6 million technology incubation program in an effort to support growing information and communications technology (ICT) startup community.
The study also revealed that most start-ups in incubation hubs funded by angel investors or venture capitalists often always are able to repay back the valued investment and that the investment instruments shed light on the businesses that tend to be profitable in the sustainable long-run. This is in line with the findings by Aldrich and Wiedenmayer (1993) who state that the networks between incubators and partners come with a number of pros such as they aid start-ups in facilitating resource acquisition. The networks also enable access to novel ideas, knowledge transfer and learning.

The study further found out that angel investors encourage start-ups to become more innovative in the long run for sustainability purposes. It was also agreed by the incubation hubs that investors play the role of mentoring the entrepreneurs and opportunity exploitation by connecting them with resource providers. This is in line with the findings Siegel (2013) who notes that investors are looking to deploy millions of dollars and they are looking for multiple times return on that capital. Some venture capitalist firms are public and are included in some exchanges providing an avenue for regular investors to invest in ideas from entrepreneurs. The public-private partnerships forged by the business incubator also create a web of relationships with the capacity mentoring the start-ups.

5.4 Conclusion

5.4.1 Incubation Processes Used to Enhance Start-ups’ Sustainability

The study concludes that start-ups, which enroll at incubation hubs, obtain much more benefits ranging from better performance, gaining a competitive edge in the market, getting prepared for turbulent business environments, dealing with global concerns and environmental issue among others. Notably, the incubation process was similar between the two incubation hubs with no significant differences.

5.4.2 Importance of Training and Mentorship to Start-Ups in Enhancing Their Sustainability

In regards to training and mentorship, the study concludes this plays a major role in enhancing start-ups sustainability. Training and mentorship determines the effective running of start-ups. Entrepreneurs need mentors due to the complexity of tasks. The training and
mentorship opens up the entrepreneurs’ mind and they are able to learn from their own actions. It also aids in the sharing of ideas for sustainability growth purposes.

5.4.3 Investment Instruments Used in the Incubation Hubs to Enhance Start-Ups Sustainability

On investment instruments, the study concludes that these are one of the most valuable resources that start-ups need to tap into. The investments shed light on the businesses and enhances profitability in the end. It can also be concluded that venture capitalists and angel investors play a major role in financing the start-ups at the incubation hubs. Apart from this, the networks created are ideal for mentoring the start-ups and gives them guidance and support.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Incubation Processes Used to Enhance Start-ups’ Sustainability

The study found out that the two incubation hubs had no much focus on aligning the start-ups’ missions with the sustainable development goals. Thus, they appeared to be focusing more on innovation and becoming competitive whereas the world is headed at achieving the sustainable development goals. It is recommended that incubation hubs work on embracing these global goals and align their culture to these goals especially when it comes to solving African development challenges.

5.5.1.2 Importance of Training and Mentorship to Start-Ups in Enhancing Their Sustainability

The study recommends that through training and mentorship, the incubation hubs will continually be able to produce more entrepreneurs coming up with stable start-ups that can be able to thrive in the market. Training needs to take an all-round approach, not only focus on the business aspect of it but also on the personal development side.
5.5.1.3 Investment Instruments Used in the Incubation Hubs to Enhance Start-Ups Sustainability

The study found out that most venture capitalists carry out screening processes on start-ups before they embark on funding. This funding which is based on ideas that may only look worth it means that many businesses opportunities are left out due to the lack of funding. It is recommended that venture capitalists and angel investors fund ideas based on the incubation process that the entrepreneur has undergone. This would reduce the chances of great opportunities not being left out.

5.5.2 Recommendations for Further Studies

The study was confined to Nailab and I-hub incubation hubs in Nairobi and the findings may not apply in other sectors or even firms. Therefore, it is recommended that the study be replicated in other sectors to examine start-ups sustainability. The study also focused on three aspects of start-ups sustainability; incubation process, training and mentorship and investment instruments. The study recommends that further studies should emphasize on other components of start-ups sustainability.
REFERENCES


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Nailab’s Season 6 applications now open available at https://www.afrilabs.com/nailabs-season-6-applications-now-open/on 5/2/2018


Appendix I: Letter of consent

Kirumba Menya Priscilla
United States International University
P.O BOX 14634
Nairobi, Kenya
Email: pkirumba@usiu.ac.ke
24th March, 2018

Dear Sir/Madam,

RE: REQUEST TO PARTICIPATE IN A RESEARCH STUDY

I am a graduate student at the United States International University, Chandaria School of Business. In partial fulfillment of the requirement for my graduate degree, I am carrying out a comparative study by means of a research project to establish the influence of incubation hubs to start-ups sustainability in Kenya. The two incubation hubs in question are Nailab and I-hub.

I would like to request access to your organization and participation of your members to collect the necessary data to complete the project by use of questionnaires and an interview guide schedule.

Please note that all information given will be treated with utmost confidentiality and shall not be used for any other purpose other than for this particular project. All information shall be analyzed in an aggregate manner and no individual identification of responses shall be reported.

Your assistance shall be highly appreciated. Thank you in advance.

Priscilla Kirumba.

MBA Reg.No - 649032.

United States International University.
Appendix II: Questionnaire

QUESTIONNAIRE

This study is a requirement for the partial fulfillment of the degree of Masters in Business Administration (MBA). The purpose of the study is to research on the influence of incubation hubs on start-ups sustainability. All the information collected will be treated as private and confidential and will only be used for this research. Your assistance in completion of this questionnaire is highly appreciated.

PART A: DEMOGRAPHIC INFORMATION

Please indicate the correct response to the following question by ticking the most appropriate choice.

1. What is the name of your enterprise (optional)……………………

2. What is your age bracket? (Age in years)
   Under 20 [ ] Between 21-30 [ ] Between 31-40 [ ] Between 41-50 [ ] Between 51-60 [ ] Over 60 [ ]

3. What is the level of your formal education?
   Primary level [ ] secondary level [ ] Tertiary Level [ ] Degree Level [ ] Masters Level [ ]

4. How long have you been engaged in active business?
   Less than 1 year [ ] 1-5 years [ ] 6-10 years [ ] 11-15 years [ ] Over 15 years [ ]
5. Please indicate your annual sales for each of the years below:

(1) 100,000-200,000; (2) 200,000-300,000; (3) 300,000-400,000; (4) 400,000-500,000; (5) 500,000 and above

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**PART B: JOINING PROCESS INFORMATION**

Indicate information concerning joining the incubation hubs below by use of scale of 1-5 where (1) Strongly Agree (2) Agree (3) Neutral (4) Disagree (5) Strongly disagree

7. Certain criteria to be met before joining the incubation hub made the process tasking:

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

8. If strongly agree or Agree, what were the problems with criteria? Please indicate where:

(1) Strongly Agree (2) Agree (3) Neutral (4) Disagree (5) Strongly disagree

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<tr>
<td>LC1</td>
<td>Lack of joining fee</td>
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<td>LC2</td>
<td>Poor customer care correspondence</td>
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<td>LC3</td>
<td>Lack of proper or adequate information</td>
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<td>LC4</td>
<td>Failing to meet the requirements of the application</td>
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<td>LC5</td>
<td>The incubation hub reaching the minimum threshold required during the significant opening season</td>
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Any other problem?

9. Was there an amount to be paid beforehand? And if so, state the amount:

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PART C: HOW DO INCUBATION PROCESSES ENHANCE START-UP SUSTAINABILITY?

6. Indicate the effects of incubation processes on start-ups sustainability by use of scale of 1-5 where (1) Strongly Agree (2) Agree (3) Neutral (4) Disagree (5) Strongly disagree

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<td>IP1</td>
<td>Basic incubation processes in most hubs are very vital in enhancing start-up sustainability</td>
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<td>IP2</td>
<td>Start-ups within the incubation hubs undergoing the incubation processes always perform better in the long-run</td>
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<td>IP3</td>
<td>Start-ups outside the incubation hubs often benchmark their processes with those that have successfully gone through incubation hubs</td>
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<td>IP4</td>
<td>Incubation processes enable start-ups to compete healthily with other companies in the market</td>
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<td>IP5</td>
<td>Incubation processes prepare the start-ups to deal with global concerns such as environmental concerns</td>
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<td>IP6</td>
<td>Incubation processes prepare the companies to be flexible enough to deal with the turbulence in the ever-changing business environment for the sustainable long run</td>
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<td>IP7</td>
<td>Incubation hubs adequately prepare start-ups to address their succession procedures</td>
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<td>IP8</td>
<td>Incubation hubs aim to fulfill most of the SDG(Sustainable Development Goals) when taking start-ups through their processes</td>
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PART D: IMPORTANCE OF TRAINING AND MENTORSHIP TO START-UPS IN ENHANCING THEIR SUSTAINABILITY

11. Indicate the importance of Training and Mentorship to Start-Ups by use of scale of 1-5 where (1) strongly agree (2) agree (3) neutral (4) disagree (5) strongly disagree.

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<td>TM1 Training and Mentorship is one of the key processes in enhancing</td>
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<td>Start-ups sustainability in incubation hubs</td>
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<td>TM2 Mentorship enables the entrepreneurs to think and learn from their</td>
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<td>own actions in critical situations, so that they can draw some lessons</td>
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<td>from it</td>
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<td>TM3 Entrepreneurs need mentors due to the complexity and range of</td>
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<td>tasks they are required to perform</td>
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<td>TM4 Training sessions help like-minded entrepreneurs share ideas for</td>
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<td>sustainability growth purposes</td>
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<td>TM5 Training and mentorship helps entrepreneurs increase their self-</td>
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<td>esteem levels</td>
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<td>TM6 Regular training ensures the start-ups continue running effectively</td>
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<td>TM7 Mentorship encourages entrepreneurs not to give up when the journey</td>
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<td>gets tough</td>
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<td>TM8 Training provides information for new comers</td>
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PART E: INVESTMENT INSTRUMENTS USED IN THE INCUBATION HUBS TO ENHANCE START-UPS SUSTAINABILITY

12. Indicate the effects of investment instruments on start-ups in incubation hubs to enhance their sustainability by use of scale of 1-5 where (1) strongly agree (2) agree (3) neutral (4) disagree (5) strongly disagree.

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<td>IN1 Investment instruments are one of the most valuable resources of</td>
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<td>boosting start-ups in an incubation hub</td>
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<td>IN2 Investors always challenge entrepreneurs to perform better as the</td>
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<td>entrepreneurs feel the pressure of the financial help and guidance</td>
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<td>IN3 Incubation hubs that attach start-ups to venture capitalist often</td>
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<td>create stronger long-run sustainable networks for them</td>
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<td>IN4 Most start-ups in incubation hubs funded by angel investors or</td>
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<td>venture capitalists often always are able to repay back the valued</td>
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<td>investment</td>
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<td>IN5 Investment instruments shed light on the businesses that tend to</td>
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<td>be profitable in the sustainable long-run</td>
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<td>IN6 Angel investors encourage start-ups to become more innovative in the</td>
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<td>long-run for sustainability purposes</td>
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<td>IN7 Investors also play the role of mentoring the entrepreneurs</td>
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<td>IN8 Investment instruments cannot be overlooked by start-ups in an</td>
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<td>incubation hub</td>
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Thank you for your responses.
Appendix III: Interview schedule

INFLUENCE OF INCUBATION HUBS ON START-UPS SUSTAINABILITY (NAILAB AND I-HUB) INCUBATION HUBS

Name of the interviewer: PRISCILLA KIRUMBA

Name of the interviewee:

Date of the interview:

INTERVIEW GUIDE SCHEDULE

1. What inspired you to come up with this incubation hub?
2. How were you able to source the funders in the incubation hub and would you say they are effective?
3. For the start-ups which go through the hub and end up not being successful, how do you often address this situation? Do you further help them out later to enable them to remain sustainable?
4. Do incubation hubs compete for the market or even strive to have a competitive edge?
5. What marks the bottom-line of the incubation hub?