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Addis Ababa University
College of Business and Economics
Master of Business Administration

**“Analysis of Startups and the Role of Incubators: the Case of selected firms in
Addis Ababa”**

**A Thesis Submitted to Addis Ababa University in Partial Fulfillment of the
Requirements for the Award of a Master of Business Administration**

By:
Bethelhem Tekalegne

Advisor:
Asres Abitie (Ph.D.)

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DECLARATION

I, Bethelhem Tekalegne, officially declare that this paper entitled “Analysis of Startups and the Role of Incubators: the case of selected firms in Addis Ababa” is entirely original work of mine, except for instances where appropriate attribution has been made within this thesis paper. To the best of my knowledge, none of its content is copied from previously published articles or submitted papers to any higher institute of learning.

Bethelhem Tekalegne

Candidate's Name



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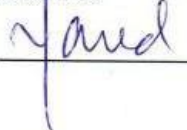
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Approval By Board of Examiners:

Advisor: Asres Abitie (PhD)

Signature  Date 20-2-24

Internal Examiner

Signature  Date 20/02/24

External Examiner

Signature getand Date 19/02/2023

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Abstract

This paper is intended to analyze the startup ecosystem in Addis Ababa and the role incubators play. It started with determining factors that affect the success of startups, measurement of success for the startups, and the moderating role of incubators based on literary articles by different scholars in the field. A model incubating firm, iceaddis is chosen to collect data on incubated startups. 159 responses are collected from 90 incubated startups in different sectors. Explanatory and Descriptive research designs are applied and a Five-point Likert Scale questionnaire is used to record responses. The questionnaire mainly contains questions related to factors affecting the success of startups which is measured by a) access to finance b) business model c) marketing strategy d) quality of product or service provision e) management skills and f) government policy, the next set of questions are related to the measurement of success for the startups, finally the role of incubators is tried to be captured with various questions. The data gathered is then entered into SPSS for analysis. Descriptive and Inferential statistics, classic linear regression model, and moderated regression are used to do further analysis. The final result suggested that all the success factors and moderator has a positive relationship with the success of startups. However, a significant relationship can not be proven between the two variables; quality of product or service provision and government policy with the success of startups. On the other hand, the moderating role of incubator is proved with the significant increment of explanatory power of the factors to the success of startups.

Keywords: startups, incubators, the success of startups,

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Acronyms

| | |
|-----|------------------------------|
| SME | Small and Medium Enterprises |
| SSA | Sub Saharan Africa |
| BI | Business Incubators |
| TBS | Technology Based Startups |

CHAPTER ONE

1. Introduction

The purpose of conducting this research is to analyze the success of startups, study the challenges they face that hinder them from scaling up and the role incubators play to help the startups overcome these challenges.

Under this chapter; the Background of the study, Statement of the problem, Research questions, Research objective, Significance of the study, Scope and Delimitation of the study, Definition of terms, and Organization of the study are included.

1.1 Background of the study

Several studies are being undertaken on putting terminological definitions to startups, the role they play in the economy, and the challenges they encounter with respect to the support of incubators. According to Skawinska and Zalewski (2020), A Startup is a newly formed, small-scale business that is not related to any established business and follows a new way of doing business by implementing innovative and inventive processes through research and development with its goal of outputting skillful workforce, expanding the business and have a successful business model. By doing so, the startup company will address current issues and suggest potential future solutions for societal problems. Being able to generate and apply innovative ideas to specific issues by transforming them into solutions that add value to society is critical for developing a country. Startups are newly formed company ventures with the potential to positively impact society through innovative ideas (Sopjani, 2019). Sopjani also articulates that startup innovation includes the notion of accepting risks and obligations to create workable business models to satisfy market demands. Considering the age since its establishment, a startup may be a high-risk business selling products or providing services but with the potential to scale up and succeed in the foreseeable future. Growth, turnover, profit, return on investment, productivity, staff count, and firm age are some scales of terms that are frequently linked to the success of startups (Brandstatter, 2011).

Successful startups satisfy the needs of customers and organizations they are intended to serve, earn more money than other businesses in the same industry; play their part in growing the economy.

The creation and growth of such successful startups significantly contribute to the economy, help in the better distribution of resources, and create fair jobs and other opportunities within society, it also supports the social and economic development of a region (Zapata-Guerrero et al., 2020). In a healthy startup ecosystem, for a nation to develop, its citizens must be capable of creating and applying new, practical answers to particular problems that benefit society. As per Sopanji (2019), It can be inferred that developing countries will benefit from the advancement of such problem-solving startups to support their economies. Therefore, supporting startups that seek to eradicate inadequacy in every form and create sustainable prosperity is most appropriate for developing nations. By using creative solutions that can address widespread problems in many sectors, startups develop models to improve the performance of the economic aspect, focusing on essential determinants to drive change, and taking into consideration how social, political, commercial, and legal aspects impact a country's economy. A startup culture that is inclusive, effective, and beneficial for everyone will be promoted by building an ecosystem of innovation to provide solutions to fulfill individual needs and expectations (Sopjani, 2019).

As cited by Zapata-Guerrero et al. Authors like Cabello et al. (2007) and Ortega-Cachon (2012) state that startups develop and are sustainable because of business incubators. Business incubators are crucial companions for start-up companies since they offer both material and intangible resources. As new entrepreneurs are now recognized as key economic stimulants, investment in startups has been designated as a national policy in many nations, both developed and developing. Thus, since its inception in 1959, the idea of business incubation has been used to build, develop, and speed up the development of new enterprises. Nowadays, business incubation is regarded as a crucial tool that significantly supports startup companies (Pattanasak et al., 2022).

As the relevance of startups for developing and least developed countries like Ethiopia, is attempted to be addressed above, it is necessary to look more closely at the startup's ecosystem, analyze the factors that affect the success of startups, determine the factors that are associated with the success of startups and relate the role of incubators to the success of startups. Thus this research

paper is intended to fill the knowledge gap regarding this topic, taking a model incubation firm IceAddis, and selecting startups registered in Addis Ababa.

1.2 Statement of the Problem

Startups are considered to be drivers of innovation, especially in developing and less developed nations, however, the less attention given by policymakers within their respective countries and the amount of support the startups get from the government in addition to other disruptive rules and regulations remain to hinder the formation and growth of startups (Doruk O & Söylemezoğlu E, 2014). Startups that manage to succeed and be sustainable in the business contribute the most to the economy in terms of job creation and productivity (Yeh, 2023). Particularly for developing nations in Africa and elsewhere, the government and policymakers tend to use new businesses to support the economy and create employment (Schutte and Chauke, 2021). Unfortunately, only a few companies have a good chance to profit from their ideas, and their success brings about effects like employment, productivity, and economic growth. The majority of startups, meanwhile, don't last longer than five years in operation and many others fail in the process (Yeh, 2023). A low success or survival rate of start-ups is frequently the result of the infancy stage in which businesses launch and adapt their product to the market and obtain consistent income and profits to survive in the industry, which is more unlikely to go smoothly due to several obstacles they face during this infancy stage (Hudson and Khazragui 2013). In contrast to the slower-growing performance that often characterizes the development of SMEs, a startup that survives the difficult infancy stage should experience a rapid rise in its earnings and scale up in terms of the job opportunities it creates, productivity, and problem-solving abilities. Additionally, the success of start-ups is characterized by rapid growth. For startups as opposed to other businesses, growth which the authors measure by profitability and job creation is fast-paced (Aulet and Murray, 2013). This expected rapid growth after the challenging infancy period, can be considered to be a driving factor, to support new startups and level the ground to help them reach the next level and scale up. However, it can be inferred that the need to fill the gap between the promising success of startups at the maturity stage vs. the infancy stage should be catalyzed by an active agent which is the Business Incubator.

Business incubation is described by Bruneel et al. (2012) as a combination of infrastructure, people, and business development procedures that are intended to support the growth of startups by assisting them through the early stages of development and transition. Thus, it is a business guidance procedure that enables a start-up's effective development by offering resources, particular services, and assistance. The development of ideas into actual businesses is one of the goals of business incubation. Successful business creation is a key performance variable that may be observed.

Sharma et al. (2014) and Al-Mubarak et al. (2010), conducted an actual study by picking up start-up incubators to compare the mortality rate of incubated and non-incubated startups; results showed that a majority of the non-incubated startups have a high mortality rate than the incubated startups. Thus, this result suggests more intensive research regarding the case, specifically in less developed countries like Ethiopia.

1.3 Research Questions

This research is initiated to analyze the success of startups together with the factors to success and the moderating role of incubators. In order to analyze this, the following specific questions should be answered.

1. What are the factors that affect the success of startups?
2. How do these factors affect the start-up's success?
3. What is the moderating role of incubators in a startup's success?
4. Which factors indicate the success of startups?

1.4 Research Objective

1.4.1 General Objective

The general objective of this research is to analyze the factors that affect the success of startups and the moderating role incubators have in the success of startups.

1.4.2 Specific Objective

Under the general objective, the following are the specific objectives:

- Determine the factors that affect the success of startups

- Examine how these factors affect the success of startups
- Examine the moderating role of incubators on the success of startups
- Analyze measurements of success

1.5 Significance of the Study

The results of this research will aid stakeholders in the startup ecosystem in acquiring new perspectives, and insight and filling the knowledge gap. The output of this study is concentrated on addressing but not limited to the following stakeholders:

- **Startup founders:** It helps them to be aware of the startup ecosystem and it gives them a better insight into the factors that affect their startup companies.
- **Incubators:** Helps them to identify which challenges to focus on in order to level the ground for the startups and suggest a direction on how they should operate.
- **Government policymakers:** to understand the economic relevance of startups, address the bureaucratic and other issues, and plan accordingly.
- **Scholars** in this area may use this research paper as a reference and carry out more intensive studies.
- In addition, it may encourage students or other firms to conduct in-depth research in this field.

1.6 Scope and Delimitation of the Study

The scope this research intends to cover is bounded based on geography, the conceptual area to be addressed, and the nature and methodology of data collection.

Due to the high concentration of startups being found in Addis Ababa, using selected registered startups within this geographical boundary will be well representative for the case. Conceptually, despite the broad area the issue covers and the very wide range of factors considered to be affecting the performance of startups and the role of incubators, factors listed as the dependent and independent variables in the conceptual framework are used throughout the study.

Quantitative data are collected from startups supported by an incubator; IceAddis. Primary data is collected through questionnaires and secondary data is collected from different scholarly articles.

Enough and well-representing amount of sample size is considered. Moderated regression analysis is used to study the relationship between the variables, how strong the relationship is, and if there are other undetermined factors affecting the performance of the startups.

1.7 Definition of Key Terms

- **Startup:** A startup is a small, evolving, adaptable to problems, and high-risk business that offers innovative goods and/or services and has a scalable and profitable business model (Santisteban and Mauricio, 2021).
- **Successful startups:** Many promising startups fail even after receiving external funds and other support, thus defining their success in fixed terms will be ambiguous (Adorno O, et al. 2020). Hence, Adorno tried to define successful startups by relating them to their sustainability in the market and ability to convince their customers to purchase their products or use the services the startup company provides.
- **Business Incubation:** Business incubation is described by Bruneel et al. (2012) as a very diverse and flexible mix of facilities, personnel, and business development procedures that are intended to support the growth of new and small firms by assisting them through the initial phases of development and transition. Thus, it is a business support procedure that accelerates start-ups' effective development by offering different supplies, specific amenities, assistance, and expertise.
- **Role of Incubators:** The role of business incubators has evolved over time, nowadays, the incubator's role is inclusive of providing overall business assistance including monetary funds and mentorship in order to speed up the company's expansion (Hong and Lu, 2016).

1.8 Organization of the Study

This research paper is organized into five chapters. Chapter one contains the background of the study, a statement of the problem, research objectives, significance of the study, delimitations and scope of the study, the definition of key terms, and the organization of the study. Chapter two provides a literature review in the form of a Theoretical Review, Empirical Literature, and Conceptual Framework. Chapter three discusses the methodology employed in the study, including, research design, sample size and sampling technique, data source and collection

method, procedure of data collection, and method of data analysis. Chapter four is about the presentation, interpretation, and analysis of data. Finally, chapter five contains a summary, conclusions, and recommendations of the research.

CHAPTER TWO

2. Literature Review

A review of the literature on startups and incubators is covered in this chapter. The chapter's first section examines theoretical literature and concentrates on startups and incubators. The empirical literature review of startups and incubators is covered in the second section of this chapter. The chapter's final section explains the conceptual framework relating the dependent and independent variables.

2.1 Theoretical Review

Under the theoretical review section, the definition of terms started in the previous chapter is explored further, and theories and models are discussed. The Theoretical Review section will help to gain detailed background knowledge regarding articles written in the area of startups and incubators.

2.1.1 Definition of Startups and Incubators

A. Startups

Many scholars with many contexts have defined startups. The widely used definitions are used in this section.

A startup is a new but quickly growing company using innovativeness as its asset for the production or provision of its services (Ehsan, 2021). Ehsan adds these startup companies engage IT/ICT to facilitate their services. Moreover, a startup is defined by Skawi'nska and Zalewski (2020) as a young, small, independent company that is imaginative, creative, and actively involved in research and development to address existing problems and provide potential future solutions. For a country to develop, its citizens must be able to create and apply new ideas to particular problems by turning them into solutions that benefit society. Innovative ideas can accomplish this in several ways, including through startups, which are recently established business ventures with the potential to positively impact society (Sopjani, 2019). According to Sopjani, a startup incorporates innovation and the idea of taking on commitments and risks to develop workable

business models that would satisfy market expectations. Furthermore, a startup is defined as a “human institution” aimed to create and provide services and products, facing many challenges through the process (Ries, 2011). Cho and McLean (2009), also mention that it is expected for startups to go through uncertainties while creating goods and services.

Bednar et al. (2018) describe a startup as a business that plans to grow quickly. According to Bednar et al., the startup environment is driven or initiated by the need for rapid expansion. To find a repeatable and scalable business model, a startup must demonstrate unusual thinking, inventiveness, and uniqueness. Bednar et al. quoted authors who widened the phrase by arguing that startups are attempting to meet a customer need, and as a result, they provide better technology solutions than they do now while investing less amount of money.

Ehsan (2021), states that there needs to be a way to distinguish the terms Small and Medium Enterprises (SMEs), from startup companies. According to Ehsan SMEs are distinguished from other companies based on the yearly income, number of employees, and the value they own, however, startups' key distinguishing features are their innovativeness. Krejci et al (2015), also add that startups' potential for rapid growth once they are passed to the infancy stage is the other distinguishing feature. Due to the engagement of innovativeness and technology engagement, compared to other small and medium enterprises startup companies have a better chance of experiencing dynamic growth. Similarly, Aulet and Murray (2013), identify innovation, technology usage, and the unique and new ways they find to access funds as differentiating features from ordinary SMEs.

Robehmed (2013), argues there are no set guidelines to define a startup because businesses and industries vary in range in their revenues, earnings, and staff counts. Nonetheless, the same article by Robehmed includes CEO testimonies to define startups, the CEOs focus more on innovative successes and a particular mindset to define startups than other characteristics like the ones listed before. However, Robehmed considers a startup's capacity for growth as a crucial defining characteristic. One method to distinguish a startup from a small business is through its capability of growth. According to Robehmed, the relationship between startups and technology has also been a fascinating subject of discussion, even though startups are frequently tech-oriented, a company need not be based on technology to be regarded as a startup (Robehmed, 2013). Regarding technology-based startups, Krejci et al. (2015), define them as similar to other startup companies but the key feature is the business model to be based on innovation and technology,

which means their products or services should be based on IT. With the advancement of technology, these companies have a good chance of scaling up and growing so they contribute to the economy by creating job opportunities (Santisteban and Mauricio, 2021). The development of IT benefits IT-based startups by enabling them to scale up more quickly and by assisting them in developing innovative network connections with new or already existing businesses.

2.1.2 Characteristics of Startups

A startup is characterized by its small size, evolving nature, adaptability to problems, and high-risk business that offers innovative goods and/or services and has a scalable and profitable business model (Santisteban and Mauricio, 2021). Ehsan (2021), characterizes startups with four terms; the age of establishment, new way of problem-solving or innovation, expansion capacity or growth, and risk or uncertainty. Ehsan references articles that explain the age of incorporation as; the newness of the firm, if the company begins production or provision of service for the first time and some other authors relate the age of incorporation to the date of the company's legal registration. Ehsan's study identified innovation as a startup's primary distinguishing characteristic and growth and risk as the corresponding result of innovativeness. Similar to Ehsan, Adamczyk (2016), finds innovativeness to be an important character of startups. Research, development, experimentation, and a continuous value creation model based on a series of repetitions involving customer feedback will be used to achieve this innovative nature. The ability to solve specific problems and potentially expand on a global scale are other features related to the startup concept. However, the same article by Adamczyk states that the innovative aspect of startups is not necessarily built by the startups themselves. Innovation can be created or acquired. Any startup must be built based on innovation. The primary goal of a start-up is to commercialize innovation by developing products or services that provide genuine value to customers worldwide (Adamczyk (2016). In a different context under the same article, for a business to be categorized as a startup it should use external funding or investment and market testing to develop a reliable process of turning innovative ideas into a consumable value. The study results in Adamczyk's article analyze that a company needs to have outside funding to be recognized as a startup, which supports the above-mentioned concept of passing through uncertainties which are usually related

to economic factors. The possible source of this outside funding and other support startups require from incubators is discussed in the subsequent parts of this research paper.

B. Incubators

Since the initial meaning of incubators is being modified to meet the needs of the context, it is challenging to define what is meant to be by an incubator in specific terms. However, this section looks into articles published within different time frames whose main context is business incubators (BIs).

Business incubators are organizations that support newly formed businesses for them to meet their goals. The support incubators provide could be in the form of materials like working space, equipment, mentorship, or knowledge transformation. They also provide monetary funds they get from several sponsors (Hausberg and Korreck, 2020). Bruneel et al. (2012), define business incubation as a combination of development processes with the provision of essential facilities and experienced consulting personnel available for startup companies in their early stages. In addition, Al-Mubaraki and Busler (2011), defined Business Incubation as a process that aims to support start-up companies through continuous supporting programs to accelerate their success until the businesses are sustainable. Bayhan (2006), states that incubators are intended to reach entrepreneurs who are starting up and new to the market and have less experience but who strive to improve their skills and make their ideas commercially viable. Bayhan further explains business incubators as a place where expensive resources, new ideas, connections, and other critical tools are supplied and shared from sponsors and experts to the startups.

According to Lewis (2001), the first private incubator was established in New York in 1959, and the first public incubator in Philadelphia in 1964 (Campbell and Allen, 1987). As cited by Galiyeva and Fuschi (2019); Brunner et al. (2012) and Lalkaka (2002) explained the evolution of incubators in terms of the role they had in enabling startups; during the earliest period when the idea of incubators was being introduced, the role of incubators was focused on the provision of infrastructures mainly working spaces. Later on, incubators began to prioritize mentorship programs to speed up the growth rate of startups. Eventually, from the mid-1900s to the 2000s, incubators began to avail networking to startups to facilitate access to external resources and to have a market presence. Nowadays, the previous physical coworking space, mentorship, and other resources are found collectively in a dedicated “virtual business incubator” (Hansen et al., 2000).

Galiyeva and Fuschi argue that among other supports provided by the incubating firms flexibility should be given priority, The authors further explain, that the business development process should not be rigid for all startup types for example providing a working space for technology-oriented startup companies will not be as effective as for startups which are focused on manufacturing. Therefore, besides the support with working space, coaching, mentoring, and training, incubators must know which type of specific support the specific startup company needs.

Due to the lack of a narrow definition of incubators, it is noticed that the concept of accelerators is mixed with incubators. However, Accelerators are usually fixed-term, specific goal-oriented programs that train, supervise, and mentor start-ups as a team while connecting them with experienced business owners, venture capitalists, angel investors, and corporate executives. They also prepare the trained team of startups for public pitch events where successful qualifiers make their pitches to potential investors and get access to funding (Cohen and Hochberg, 2014). With this definition, it can be inferred that except for some minor differences the term accelerator and incubator can be used interchangeably.

This research paper focuses on an incubator that has a considerable record of providing the above-mentioned resources, like access to funds, working space, mentorship, networking programs, and other inputs to the success of the startups.

2.1.3 Theories on Startup Development and Measurement of Success

Life Cycle Theory

The life cycle theory focuses on the organizational development cycle. The theory similarly treats the organizational development cycle to the human life cycle from birth to death (Adizes, 1989). This theory states that all organizations go through the same process of development; face similar challenges and have to pass through the same stages. Therefore, the management can know what to expect and be prepared to walk through the stages. Kaulio(2003) supports the life cycle theory, saying all organizations face the same common key challenges, hence the development and growth process is smooth, predictable, and linear. Many scholars propose a different number of stages that they believe all organizations go through; for instance, Bhave (1994) proposes a three-stage model, which is the opportunity stage, technology setup & organization stage, and exchange stage. Kazanjian's (1989) four-stage model: Conception & development, commercialization, growth, and

stability. Galbraith (1982) proposes a five-stage model; the proof of principle (Prototype stage), model shop, startup, natural growth, and the strategic maneuvering stage. Block and MacMillan's (1985) ten-stage Milestone model is the development of concept & completion of product testing, completion of product prototype, initial financing, completion of initial plant testing, market testing, first batch production, early sales, first competitive activities, first design or adjustment of direction and first significant adjustment of prices. All the scholars agree that organizations go through similar stages despite the number of stages.

This research paper tries to examine the key common factors that affect a startup's success and the moderating role of incubators through different development cycles, it partially adopts the life cycle theory due to the similar treatment it gives for all startup companies.

Complexity Theory

Complexity theory argues that the development of startups is a chaotic process; startups face many unexpected challenges that make their way to growth a nonlinear process (Tsai & Lan, 2006). Tsai and Lan, further explain that due to the nature of the development process of startups, their growth is unpredictable therefore the startup founders need to have flexible, and evolving strategies to deal with the uncertainties. According to Timmons (1999), in addition to dealing with the challenges, the management is responsible for the development and testing of the product or service that the startup is intended to provide. Therefore, business models need to be revised accordingly and be multi-dimensional to include all the possible solutions for the multiple challenges. Timmons(1999), argues that a static model cannot be applied to explain or predict a startup's growth because a single-dimensional model excludes the most common attributes of a startup's success. Furthermore, startups are found in the real world which amplifies the uncertainties and makes the process more challenging to predict.

This research paper takes into consideration the effect startup founders and management staff have on the success of a startup due to its complex nature. Therefore, it can be concluded that the research paper adopts some of the concepts of complexity model.

The Berkus models

Dave Berkus is an American venture capitalist and angel investor who proposed a way to evaluate the success of startups. According to the articles this research previously examined, income and profit projections are used to determine a business's success. Founders usually project these numbers in a business plan for startups. Nevertheless, such projections are typically nonexistent in the early stages of a start-up. Also, founders may not have a business plan; they usually have a business idea. Therefore, the worth of a start-up cannot be quantified using the usual approach, but the Berkus model works around this issue by providing a way to evaluate startups without considering the nonexistent income and profit aspects.

Berkus Model works by first listing down risk factors that are believed to be faced by startups and then crediting a maximum value of \$500,000 to the idea of the startup, prototype, management quality, strategic relationships in the market, and sales. Then these factors will be evaluated out of the proposed \$500,000 to rank the startup company. The Berkus model helps investors to have the right assumption about the company before investing.

The Berkus Method (Berkus, 2006) is a better model in which it considers studying the success of startups before they start production or provision of service. His method helps investors to rank the company before it starts earning money, therefore they will not be misled about the financial status. Berkus studies success factors in entrepreneurial ecosystems.

The Churchill-Lewis Model

The Churchill-Lewis model was proposed by Lewis, V. L., & Churchill, N. C. in 1983, the model has similarities with the life cycle model as it tries to structure the development of small businesses into different stages, expecting similarities among the startups. The authors propose the model based on their experience and literature reviews. The Churchill-Lewis model proposes a five-stage model that is believed to be inclusive for all businesses since their starting up phase; these five models are existence, survival, success, take-off, and resource maturity stage respectively.

According to Lewis and Churchill, in the existence phase, a company's primary goal is to simply exist and remain in business. The frequent questions expected to be answered at this phase are mainly related to having a customer base to just exist in the business and financial issues to cover the daily operations of the business at the startup stage. The survival stage comes after existence, in which the business has already built a customer base, according to the model the issues raised at this model are concerns about having enough cash flow to keep in form or replace beginning

assets and the idea of expanding the business to compete with the market's environment will also be raised. In the second stage, the idea of revenue and expense will come to mind, but still, the company will have a limited number of employees and the owner is the only decision-maker. Third will be the success phase, at this phase the company is already stable and is generating income. However according to the Churchill-Lewis model, the owner of the company will have two options; to keep the company as it was: stable and profitable, or use the advantage of the company's profitability and stability and expand, with the latter option the company's owner will disengage from making all the decisions in the company. Next, at the take-off stage the company will be decentralized, responsibilities will be delegated to subsequent managers and cash-related questions will appear; whether there's enough cash to answer the demand created following the growth of the company. At the final resource maturity stage, the company's concern will shift to having the right cash control system growth and having an adaptable and flexible operations system to keep the advantages of the company.

Since this research paper aims at analyzing the different challenges companies face at the startup stage, for this research purpose the existence and survival phases of the Churchill-Lewis model give a better insight into the case.

2.1.4 Factors Affecting the Success of Startups

Sevilla-Bernardo, Sanchez-Robles & Herrardor-Alcaide (2022), conducted research using a broad sample of 60 latest studies, and they identified seven crucial success variables to measure the performance of startups, followed by other supplementary factors; the idea of the startup, CEO decisions, business model, marketing strategy, team, funding obtained and market timing.

Similarly, as cited by Sevilla-Bernardo et al. (2022), Berkus (2006) also finds "Idea, founding team, having a Functional Prototype, Strategic Relations, and Traction or Invoicing" as indicators for the success of startups. In addition, while measuring the performance of companies Gross (2015), explores "Timing, Team, Idea, Business Model and Funding" to be success indicators. Ronald (2017), studied the case of startups in Kenya, according to his findings, access to finance, finding customers, legal regulations, lack of business space, lack of skilled employees, tax burden and competition are some of the obstacles to business startups in Kenya. Therefore, these factors are discussed below.

- **Access to Finance**

New businesses need financial resources in order to launch their operations and expand their businesses (Olawale F. and Garwe D., 2010). A startup company's ability to raise money is essential to its survival and expansion. The expansion of the company may be impeded by access to finance (Cassar, 2004). Ye Q. (2018), cited references that state, the main cause of startup failure is a lack of resources like finance. According to Schoenecker and Cooper (1998), the quantity and accessibility of financial resources also affect a firm's ability to apply new ways of doing business or exercise innovation.

New SMEs can be financed by the founders' personal incomes and/or by gaining access to outside sources of funding, including formal financial institutions like banks, micro finances, and as well as informal ones like family and friends. Yet finding investors in startups is the most challenging thing for entrepreneurs, most investors are afraid of the high risk involved in investing in startups and companies that have not yet started making money (Okrah J. 2018). These young businesses have the disadvantage of newness, which limits the financial resources that are available to them, as reported in the entrepreneurship literature (Bruton & Rubanik, 2002). However, once a business is operating, earned revenues can be invested back into the company and used to fund future development (Olawale F. and Garwe D., 2010).

H1: Access to Finance has a positive and significant effect on the success of startups

- **Business Model of the Startup**

A business model illustrates how a company presents its products or services to its clients and makes money in return (Cantamessa et al., 2018). Business models are distinguishing characteristics of startups or companies (Teece, 2010). However, Shirky (2008) claims that the business model should not be viewed as a startup's final, unchangeable strategy, instead it needs to be reviewed and changed regularly depending on input from the market and the environment the startup operates. Even though this feature makes it hard or inevitable to have the perfect business model, startups that have adaptable and upgrading business models will most likely accomplish their goals (Teece, 2010) & Shirky, 2008).

H1: The Business Model of the startup has a positive and significant effect on the success of startups

- **Marketing Strategy**

A marketing strategy refers to advertisement or promotion efforts conducted for a specific company or product to a combination of targeted customers (Sevilla-Bernardo et al., 2022). Bad marketing is a reason for startups to fail, therefore, the right marketing campaigns should be executed to grow a business (Cantamessa et al. 2018). Despite the many challenges startups face, good marketing should be a countermeasure to compensate for those obstacles. Research conducted by Sevilla-Bernardo et al., results imply that a good marketing strategy catalyzes the growth of startups by providing quick access to the market. In the current marketing paradigm, it has been proven that using networks that the community engages with can grow a company's income by bringing in new clients (Cosenz and Noto 2018; Mayer-Haug et al. 2013).

H1: Marketing Strategy has a positive and significant effect on the success of startups

- **Quality of product or service provision**

According to CBInsights (2018), a startup fails when it offers a user-unfriendly product and intentionally or unintentionally neglects a user's demands and needs. Therefore, quality product or service provision facilitates the growth of startups.

H1: Quality of product or service provision has a positive and significant effect on the success of startups

- **Entrepreneurial Team Quality and Management Skills**

Due to their significant contributions to companies and effective utilization of essential resources for the creation of successful enterprises, many scholars have studied the impact of entrepreneurial teams (Shrader & Siegel, 2007; Klotz et al., 2014). Startup companies that have team members with entrepreneurial mindsets outperform firms that lack these entrepreneurial teams (Baum R. & Wally, 2003). Earlier studies by Cooper and Bruno (1977), found out strong entrepreneurial teams and startup success are positively related. A greater understanding of entrepreneurial teams would benefit from a better understanding of the environments in which entrepreneurs collaboratively find, discover, develop, and implement possibilities (Ye Q., 2017).

Nevertheless, founders of startups often lack business understanding while having technical talents and experience in their specific fields. As a result, there is a well-developed product or service but no business model or commercial development (Cantamessa, et al., 2018), which hinders the success of startups.

H1: Entrepreneurial Team and Management Skill has a positive and significant effect on the success of startups

- **Government Policy**

Despite supportive government initiatives, the majority of small firms in Sub-Saharan African countries have either left the market, failed to expand, become unprofitable, or are unable to hire more than a few people (Olawale & Garwe, Citation 2010). As a result, government policies in SSA countries on entrepreneurship and small enterprises are being examined. One of the concerns is that entrepreneurship-related policies are either absent or have been adopted from wealthy nations (Herrington & Kelly, 2012).

H1: Government Policy has a positive and significant effect on the success of startups

2.1.5 Measurement of Success of Startups

Successful startups are those that satisfy the needs of customers and organizations they serve, earn more than their competitors, are worth much more money than their initial capital, and have a stock market valuation that is higher than their base value (Santisteban and Mauricio, 2021).

Success factors have been associated with specific turnover amounts, their abilities for business, the company's age, the number of employees, and the startup's capacity to outperform uncertainties (Daz-Santamaria and Bulchand-Gidumal, 2021). From the different articles Santisteban and Mauricio (2021) cited, business success can be measured by a company's profitability, increase in sales and profits, or overall financial performance from the investor's perspective. It can also be measured by the number of jobs created and market participation. Santisteban and Mauricio agree that, for a startup to be said to be successful, it should satisfy customers' demands, be profitable, and have a value higher than its starting capital, which will be an inclusive measurement to all startup companies. Similarly, Authors like Brandsratter (2011), and Steffens et al. (2019), tried to put the success of startups mainly relating to the financial status, job creation, and the company's survival period. The government accepts these factors as the right measurement of success (Amezcuca, 2010).

On the other hand, Kiviluoto (2013), argues that the success of startups is much more complex than these qualitative or financial aspects. In favor of Kiviluoto, authors like Eveleens et al. (2017) and Pena (2004), argue profitability and the number of employees cannot be taken as a

measurement of success for new companies because they lack initial capital and experience in the market, these new companies will less likely to be profitable and create jobs. According to the authors, these factors may even be negatively related to success. For instance, investors focus on cost minimization and making more money, therefore, hiring more employees and spending on their salary will not be taken as a measurement of success from their perspective (Dee et al., 2013). Hence, this research paper examines the measurements for the case of startups in Addis Ababa.

- **Profitability**

Many of the businesses that are profitable today didn't make much money when they were originally founded (Fuertes-Callen et al., 2020). However, the essence of a startup's business model and the secret to its success can be considered to be the generation of revenue, income, and above-average return on investment (Bednar et al., 2018). According to Bednar et al., the amount of money spent for operations in a startup company shouldn't be less than the amount to be earned, i.e.; the startup company should be profitable to succeed and stay in business.

- **Jobs Creation**

A significant amount of emphasis has been given to entrepreneurship and the formation of new firms and their ability to support economic growth and the creation of jobs due to the formal and public sector's failure to employ the expanding number of job seekers in South Africa (Herrington et al., 2009).

- **Survival**

Olawale F and Garwe D (2010), cited articles that explain the creation of small new firms as a 3-42 months process. A firm that has existed on the market for more than 42 months can be considered an established firm and is sustainable. According to articles cited by Groenewegen and Langen (2012), it was discovered that the number of years of working experience is a success element for a new business.

- **Customer Satisfaction**

As cited by Groenewegen and Langen (2012), Sandberg (2008) states that, for innovation in a company to succeed, the demands of the target market must be met, even though it is still not

apparent who these target markets will be at the startup phase. Sandberg explains that because the products or services provided by startup companies are new, customers may focus on irrelevant needs therefore, the product/service provider needs to take the required time and effort to work around interactional issues; the product/services will be more difficult to accept because of the unknown benefits and potential risks of using; and they may lose some of their appeal while still in the testing stage and later on.

2.1.6 Importance of Startups

Zaborwski (2009), articulates the role of startups mainly by relating it to the role they have in creating wealth for the community by attracting investment and other infrastructures to be built by venture capitalists following the existence of the startup companies, these venture capitals then play the main role in supporting the economy and creating job opportunities. According to Zaborwski, even though startups themselves pay higher salaries for their employees, its significance is less than the role they play in attracting investors. Therefore, Zaborwski suggests not to expect quick radiant benefits from the startup companies but through time the startup companies will attract more job creators and stimulate the economy.

The majority of developing nations primarily rely on startups, which have been identified as a gauge of innovation and progress and are associated with higher levels of economic stability. Because of how quickly people are embracing the idea of entrepreneurship and innovation, world economies are currently seeing significant growth. Thus, the government will be under less pressure to stimulate the economy and create jobs (Okrah, 2018). Olawale and Garwe (2010), studied the case of South Africa in which the country suffers from a high unemployment rate, according to the authors new small businesses launch innovative products and create new technologies and put established businesses under competitive pressure as a key source of innovation. New SMEs are regarded by Maas and Herrington (2006) as an important part of the solution to South Africa's development problems. The development and long-term viability of new SMEs are essential to South Africa's economic growth, according to scholars.

As startups develop, they promote the creation of new jobs (Lukes, Longo & Zouhar 2019). Fritsch & Mueller (2004) add that startups directly affect new employment and production as well as higher regional competitiveness. Furthermore, Fritsch & Mueller discover that startups enforce the

already existing big businesses to act more efficiently and enhance market competition and innovation. Because startups directly contribute to economic growth, governments must do everything possible to encourage their development.

Spiegel et al. (2015), mention specifically the contribution of technology-based startups to the economy taking the current leading technology companies like Apple, Cisco, and eBay which were once startups that depended on external funding and now are multimillion companies. In contrast, Ejermo and Xiao (2014), reported that between 1990 and 2000 even in developed and developing nations, the failure rate of TBSs was high, and the period of the TBSs' existence counts from one to five years. Furthermore, TBSs are characterized by their technology usage (Krejci et al., 2015) so it is expected to automate much of their operations, consequently, the number of jobs it creates will fall significantly but it doesn't mean the startup is not successful. In another instance, on the general definition of business success market participation is listed to be one factor, however, a TBS may have one large company to be its only permanent customer, so not being able to reach the bigger market doesn't mean the TBS is not successful.

2.1.7 Role of Incubators for the Success of Startups

According to NBIA, 56% of startups fail in the first four years. A business incubator might, if done well, increase the sustainability of these firms. In comparison to non-incubated businesses, 87% of incubated businesses were still operating after 4 years. Additionally, according to the NBIA, from the moment a company enters an incubator to the time it graduates, its average sales income often increases by 400%. Similarly, according to Hudson and Khazragui (2013), there's a phase of startups called "Death Valley" in which the startups start to launch their services or products but struggle to survive financially and be unsustainable. However, once they pass this phase, faster-paced growth is expected from the startups than the random SMEs (Hyytinen et al.

2015). Al-Mubarak and Busler (2015), state that incubators provide startup companies with a broad range of support in the form of resources like funding, co-working space, connection, and other expertise support. In return, they expect the startup companies to create jobs, transfer and commercialize new technology, and be an input to growing the economy. Al Mubarak and Busler, mention the main objective of incubators is helping startups survive for a more extended period, and enhancing growth. Incubators also enable startups to generate tax revenues, contribute to GDP,

and support the economy (Cabello et al. 2007). Moreover, in underdeveloped nations, incubators' main goal is to help startups sustain themselves in the region in order to encourage the entrepreneurial ecosystem (Dvoulety et al., 2018). Likewise, authors like Jimenez & Roura (2015) and Lukes et al. (2019), indicate incubators support startups financially and with innovation and technological development. Business incubation helps start-up companies expand by making the ideal use of available resources to become sustainable and create competitive businesses. Well-designed incubators offer connections to specific sector stakeholders, support programs to improve and develop businesses, skill and technique upgrades, technological advice and help with protecting intellectual property, funding for research and development, and access to potential outside investors and key collaborators (Bayhan, 2011). The success of SMEs may be ensured with the aid of business incubation and accelerators, particularly during the early phases of the startup process, according to Muathe S. and Otieno V. (2022), who investigated the instance of Kenya. As a result, new jobs will be created, technology will be transferred, and be marketable, and economies will be further developed (Karimi, Ngugi, Odhiambo, 2018). In the same manner, Business incubation results in improved employment rates and the survival of start-up companies. Overall, startups that get an incubator's support are more likely to survive, have reduced failure rates, and learn more before leaving (Pompa, 2013).

H1: Role of incubators have a positive and significant relationship with the success of startups

2.2 Empirical Review

Developing nations are working on establishing more incubators to support new businesses which in return are expected to support the economy by creating job opportunities (Schutte F and Chauke T, 2021). Schutte F and Chauke T, in their study, assess the case of South Africa; in which the country expects the majority percentage of job creation to be through new businesses. South Africa is supporting the establishment of new businesses even by allocating many resources. Yet, the national development plan South Africa proposes still faces challenges due to the high percentage rate of failure of new businesses that haven't undergone incubation programs. However, according to (Dubihlela, et al. 2014) there is also a high percentage rate of failure in firms that went through the support of incubation a few years after the incubation period ends. From the research output, it can be inferred that the incubation firms are not giving the right support to help startups or new businesses run by themselves once the incubation period ends. Business incubators need more

efficiency in their operations, specifically in technology management (Hackett & Dilts, 2004). Hence, this research conducts further analysis to guide incubators and point out which of the challenges to mainly focus on.

According to scholars like Ogutu and Kehonge (2016) and Ruhu (2014) economic status of countries is directly proportional to the failure rate of startup firms; to support this idea, Africa has a double failure rate of startups, compared to developed continents like Australia and America. Specifically, Kenya has less than 40% of the survival rate of startups while in the US, the survival rate is 69%.

In a study, Asaminew E & Brixiova Z. (2010) conducted, they articulated that less developed nations in sub-Saharan Africa are aware of the role SMEs could play in the economy in creating job opportunities, generating tax incomes, and production of innovative ideas, however, these nations are still suffering from less economic development. In the case of Ethiopia, most of the country's big economic players are owned by the government, hence the country couldn't record a remarkable economic performance and is still suffering from unemployment and less productivity. Asaminew E & Brixiova Z. mentioned that the slow-paced development of SMEs challenges the country's development policy. Following this issue, a market reform was held in 1991. As a result of the market reform, a plan to reduce bureaucratic procedures and encourage the private sector into business was proposed. As a result of the reform, currently, most SMEs are held by the private sector even though a small portion of them contribute a noticeable output to the economy. Public-owned industrial output has now shown a decline, but still being the most contributor to the economy. In addition, the study also included other policies and subsidies by the government like tax exemptions and other incentives but for specific types of SMEs. After conducting research Asaminew E & Brixiova Z concluded that the government should be considerate when choosing issues and sectors to subsidize. Magalhaes R. (2019) cited articles highlighting startup company's product will survive the best if it receives a subsidy or credit. As a result, it can be inferred that government policy has an effect in encouraging privately owned SMEs or startups.

Taddele & Kakuze (2020), studied the barriers to digital startup scaling, specifically the case of Northern Ethiopia. The authors interviewed CEOs, financial managers, and other participants in the startup and found out some basic and common barriers to scaling the digital startup. The first

mentioned issue was the lack of financing; the interviewees explained how a company needs money to scale up but getting money from bank loans or investors is very challenging for the digital startup companies. They explained how convincing investors or banks it is hard to invest in just ideas because they expect viable and tangible products on hand and there are also uncertainties regarding the return on investment. Therefore, they concluded that lack of funding negatively affects the scaling-up process. The second raised problem is the regulatory issue, interviewees mentioned a wide range of problems under the regulatory issue, which starts from first getting a license in order to start a business, then problems with taxation; As cited by Magalhães, R. P. C. (2019), Kogan (2011) shared this issue articulating, due to their limited financial resources, startup enterprises, who have traditionally been major drivers of innovation, find the current regulatory climate extremely difficult. The third barrier is market challenges, the digital startups may have similar services to the already established companies which make it harder for them to compete. Digital culture and lack of awareness also impose a barrier to scale-up, this issue is significantly noticed in developing nations where there are insecurities with technology usage and resistance from customers to change the way they were operating before. Another discussed point is, the poor digital infrastructure, the respondents complain about having only one internet provider, which is unreliable and has a bad record of service provision, the digital startup communities boldly emphasize how unaltered internet connection and power supply are vital for digital startups, hence, improvement is expected from these service providers. Lastly, lack of support from incubators is raised as a barrier to scaling up, respondents explain the wide range of support incubators could provide but there is a scarce number of well-operating incubators and there is a gap in connecting these scarce incubators with the startups. The rest of the incubators lack finance and technical knowledge themselves. This research will adopt the majority of the barriers

As the study is conducted in Ethiopia, the mentioned barriers are expected to be shared among most of the startup companies.

The Global Startup Ecosystem Report (2021), articulates the case of Ethiopia as an ecosystem where there are several untapped opportunities for entrepreneurs, especially in Addis Ababa. The report describes the current main strategy of startups to be mainly focusing on solving local problems only, even though the report appreciates the strategy, it may also hinder the city from

being the sole hub of startups. On the other hand, Ethiopian entrepreneurs have few options for getting capital for their startups. Banks fail to meet the needs of startups, and sponsors are scarce. Thus there is a small investment involved to profit from potential business initiatives. However currently, the government is paving the way to support new privately owned firms, to support this initiative in 2020 Ethiopia's Startup Act was formed and a National Startup Council was introduced to support the country's startup ecosystem, which will be monitored by the Ministry of Innovation and Technology. In addition, the Digital Ethiopia 2025 program can be referred to as the country's commitment to digitalization, which encourages the startup ecosystem. This research paper considers these and other situations discussed as a driving factor in conducting the study.

2.3 Conceptual Framework

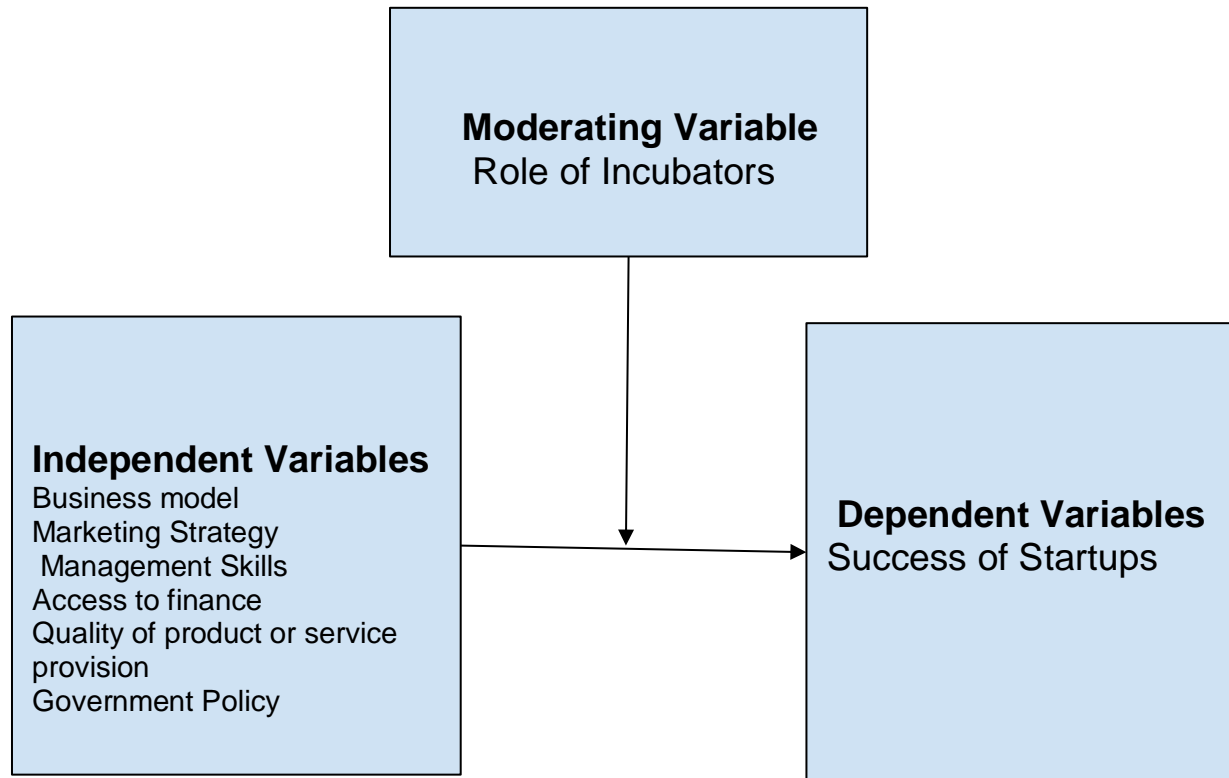


Figure 2.1: Conceptual Framework

Measurement of Variables

- **Independent Variable:** factors affecting the success of startups measured by the idea or business model of the startup, marketing strategy, entrepreneurial team quality and management skills, access to finance, quality of product or service provision, and government policy.
- **Dependent Variable:** the success of startups
- **Moderating Variable:** the role of incubators

2.4 Summary of the Hypothesis

1. **H1:** *The Idea or Business Model of the startup has a positive and significant effect on the success of startups*

2. *H1: Entrepreneurial Team and Management Skill has a positive and significant effect on the success of startups*
3. *H1: Marketing Strategy has a positive and significant effect on the success of startups*
4. *H1: Quality of product or service provision has a positive and significant effect on the success of startups*
5. *H1: Access to Finance has a positive and significant effect on the success of startups*
6. *H1: Government Policy has a positive and significant effect on the success of startups*
7. *H1: The role of Incubators moderates the relationship between the Success Factors and Success of Startups*

CHAPTER THREE

3. Research Methodology

This chapter of the study contains the introduction of the organization, research design, research approach, source and type of data, data collection method, target population, and sampling methods, methods of data analysis, and finally ethical considerations.

3.1 Organizational Study Area

Iceaddis was formed in 2011 as Ethiopia's first innovation hub and digital startup incubator. As the name suggests, Ice stands for Innovation, Collaboration, and Entrepreneurship. Iceaddis is a co-creation space that accelerates high-potential enterprises, facilitates technology advancements, and uses a multi-partnership approach to empower youth economically. Iceaddis intends to encourage startups with problem-solving and innovative ideas by facilitating the way to test their ideas and prototypes and then enable the startup companies to entrepreneurship. The Iceaddis ideology is based on people's potential to transform their local environment and obtain economic empowerment. Iceaddis helps startup owners and organizations grasp the potential of their young technology community and participate actively in fostering innovation and entrepreneurship. All Iceaddis activities are geared at promoting creative potential, testing unusual ideas, and experimenting with prototypes to establish product-market fit, as well as sophisticated problem-solving in a collaborative attitude.

The Iceaddis facilities are mostly used by young startup entrepreneurs to connect with talent, skills, and cash to launch their firms. In addition to communicating with the larger Iceaddis' community. Corporates, educational institutions, government organizations, non-governmental organizations (NGOs), and local businesses join Iceaddis' creative community to discover and implement new ideas for their services or develop and test initiatives. Iceaddis' services include but are not limited to providing co-working space, networking and partnerships, and consultancy services for its incubates.

3.2 Research Design

A research design is a plan intended to answer research questions, analyze data, and measure variables by incorporating all the research elements. It includes the methods and techniques used throughout the study (Kothari 2004 and Thakur 2021).

Therefore, in order to answer the research questions and test the hypothesis, descriptive and explanatory research designs are used. Descriptive research design aids in identifying factors that affect the success of startups and how these factors affect the success, and the role of incubators through the process, by collecting data through questionnaires that are intended to answer the

research questions by studying the case of a selected incubation firm. This research design helps the researcher gain knowledge about the population or the study area. Also, an explanatory research design is used to structure the collected raw data, analyze it, and draw analysis by explaining and linking variables from the data collected and making future suggestions.

3.3 Research Approach

According to Creswell (2009), there are three basic research approaches; quantitative, qualitative, and mixed approach. For this research purpose, a quantitative research approach will be used to study the causal effect of the variables identified as factors affecting the success of startups, to test the formulated hypothesis, and to make future suggestions from the analyzed data. The quantitative research approach helps to gain detailed knowledge of the study area. Through the process of developing questionnaires, a Five-point Likert scale are used to quantify the responses of the respondents. The Likert scale better captures variables from a larger respondent base relatively easily (Nemoto and Beglar, 2014). Outputs of the Likert scale is then computed to further analyze the data and reach a conclusion. The questionnaire used for this research paper is adopted from different sources, and adjusted to suit the case.

3.4 Source and Type of Data

Both primary and secondary data types are used to conduct this research.

Primary Data

Primary data is collected in the form of a questionnaire distributed to startup founders, co-founders, employees of startups, and the intended customers of the startup. Data provided by the incubation firm by presenting different questions will be employed in the data structure.

Secondary Data

Secondary data is collected from Iceaddis' database and website, published literature, and articles.

3.5 Data Collection Method

Data is collected through questionnaires, which consist of demographic and other 5-point Likert scale questions intended to answer research questions. Questionnaires are distributed using Google Docs and other internet platforms and by contacting the target sample in person.

3.6 Target Population and Sampling Design

Target Population

The population can be described as all individuals or items that are being studied, whereas sampling is the process of selecting a subset of the population for research. It is the process of picking a sample of units from a data set in order to assess the study (Rahi,2017). The target population of this research is incubated startup companies found at Iceaddis.

Sampling Design

For this research purpose, samples from incubated startups will be selected, therefore probability sampling techniques will be used. As the population is heterogeneous, the samples are segmented based on the nature of business they're engaged in and a proportionate stratified random sampling technique is the most appropriate technique.

The population is taken from Iceaddis incubation firm, a finite number of startups are registered under the firm therefore, the researcher will use Yamane's (1967) formula to determine the number of startups to take as a sample:

$$n = \frac{N}{1 + N(e)^2} = \frac{117}{1 + 117(0.05)^2} = 90.522 \cong 90$$

Where

N- Population size, the overall number of startups =117

n- required sample size

e-level of precision, at 95% confidence interval e=0.05

Accordingly, out of the 117 total population size 90 startups are considered to undertake this study. Since the startups are involved in different sectors, proportional sampling is used to make the study

more representative. The stratified random sampling technique is applied to draw samples from each sector.

In order to make the data representative 159 responses are considered from 90 different startup companies; more than one respondent is considered for companies which have more than 5 employees.

Table 3.1: Proportional Distribution of Sample

| No. | Sector | Total Number of Startups in the Sector | Proportion Sample Size |
|--------------|-----------------|--|------------------------|
| 1 | Fashion | 43 | 29 |
| 2 | Arts and Crafts | 30 | 29 |
| 3 | Engineering | 25 | 3 |
| 4 | Technology | 39 | 54 |
| 5 | Manufacturing | 42 | 23 |
| 6 | Others | 16 | 21 |
| Total | | 195 | 159 |

3.7 Method of Data Analysis

The data used in this study was analyzed utilizing both descriptive and inferential statistics. Descriptive statistics is used to analyze and understand data in general, tables and graphs are used to present data outputs which will help the researcher do further analysis and emphasize trends among the outputs, as well as to test hypotheses and investigate research objectives. Frequencies, percentages, means and standard deviations will also be used to summarize and present the data's demographic questions and each variable. Inferential statistics like regression analysis is used to test the hypothesis and show the relationship between variables in the collected data with their significance, relevance, and other features.

3.7.1 Multiple Regression

Multiple Regression analysis is used to examine the moderating relationship used as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 RI + \beta_8 (X_1 * RI) + \beta_9 (X_2 * RI) + \beta_{10} (X_3 * RI) + \beta_{11} (X_4 * RI) + \beta_{12} (X_5 * RI) + \beta_{13} (X_6 * RI) + \varepsilon$$

Where:

- Y is the dependent variable: Startup's success
- β_0 is the constant term
- $\beta_1 - \beta_6$ are the coefficients to the independent variables: Access to Finance, Business Model, Marketing Strategy, Quality of Product or Service Provision, Quality of Managerial Skill and Government Policy
- β_7 is the coefficient to the moderator: Role of Incubator
- $\beta_8 - \beta_{13}$ are the regression coefficients associated with the moderator RI
- ε -random disturbance term

Furthermore, the following assumptions under the Classical Linear Regression Model will be tested to show the significance, validity, and other information of variables.

3.8 Reliability and Validity Test

Most of the data for this research purpose will be collected by distributing questionnaires, whose main objective is collecting relevant data which is accurate and consistent. Priority should be given to accuracy and consistency when using questionnaires in a research methodology, these aspects are measured by validity and reliability tests, respectively (Taherdoost, 2016).

3.8.1 Validity Test

Validity test measures how a research method measures what it is intended to measure in an accurate manner. To ensure validity, the questions included in the questionnaires should be

accurate enough to answer the research questions. For this research purpose, the questionnaire is adopted from various works of literature by many scholars in different time frames and is proven to yield accurate results.

3.8.2 Reliability Test

Reliability measures the consistency of the research method or if the selected research method yields the same result if applied to a similar sample under a similar substance. While conducting this research, the appropriateness of questions in the questionnaire is checked. Cronbach's alpha value is calculated and used to do the reliability test.

3.9 Ethical Considerations

The researcher prioritized the individuals' consent. All respondents were informed of the study's purpose and their freedom to agree or decline participation, and the researcher chose not to discomfort the respondents. Their responses to the questions are kept private and are only utilized for academic research purposes.

CHAPTER FOUR

4. Data Analysis, Presentation and Discussion

In this chapter, the researcher transitions from the comprehensive exploration of startups and an incubator in Addis Ababa to a detailed analysis of data collected from 90 companies and 159 respondents through a questionnaire. This pivotal chapter employs a quantitative method of data analysis to further explain patterns within the demographic description, and correlations among variables and has done regressions to implicate the output of the dataset. This analytical journey aims to present meaningful connections, contributing valuable perspectives that enhance academic understanding and offer practical implications for entrepreneurs, incubators, and policymakers. Through a detailed presentation of findings, this chapter seeks to shed light on the significant

interplay between startups and incubators, contributing to the surroundings of the entrepreneurial landscape in Addis Ababa.

4.1 Respondents Demographic Characteristics

The demographic characteristics dataset contains basic information of respondents and startup companies. Specifically, questions raised under this topic tried to capture data on, the role respondents have in their respective companies, years of operation of the company, the sector in which the company actively works, and the number of employees each company has.

Table 4.1: Respondents Demographic Characteristics

| No. | | Item | Frequency | Percent (%) |
|-----|------------------------------------|-----------------|-----------|-------------|
| 1 | Role of Respondents in the company | Founder | 35 | 22.0% |
| | | CEO | 54 | 34.0% |
| | | CFO | 21 | 13.2% |
| | | Other | 49 | 30.8% |
| 2 | Years of operation of the company | 0 - 2 Years | 69 | 43.4% |
| | | 3 - 5 Years | 48 | 30.2% |
| | | 6 - 8 Years | 42 | 26.4% |
| | | >9 Years | 0 | 0.0% |
| | | Fashion | 29 | 18.2% |
| | | Arts and Crafts | 29 | 18.2% |
| | | Engineering | 3 | 1.9% |

| | | | | |
|---|---|---------------|-----|-------|
| 3 | Type of sector the company is active at | Technology | 54 | 34.0% |
| | | Manufacturing | 23 | 14.5% |
| | | Others | 21 | 13.2% |
| 4 | Number of Employees in the company | 0 - 5 | 117 | 73.6% |
| | | 6 - 10 | 27 | 17.0% |
| | | 11 - 15 | 6 | 3.8% |
| | | 16 - 20 | 6 | 3.8% |
| | | 21 - 25 | 3 | 1.9% |
| | | > 25 | 0 | 0.0% |

Source: own survey, 2023

A. Role Distribution

As the above data predicts the top managerial position within the company is tried to be captured under the Founder, CEO and CFO roles which totally constitute 69.2% of the total response, the remaining 30.8% goes to other roles which are mostly likely to be filled by the middle or lower-level employees. It can be inferred that employees in higher-level positions have a substantial representation. Respondents within this level of position are expected to know the company’s journey from the beginning and to have detailed knowledge of operation which makes the responses more reliable and accurate.

B. Years of operation of the company

Another demographic variable captured was the years of operations of the companies, in which 43.4% of the responses fall under the “0 - 2 years” category, this significant amount of proportion implies the newness of the companies. The other 30.2% goes to companies that are in the business for a moderate period of “3 - 5 years”. Cumulatively, 73.6% of the companies included in this

research paper have been in the business for less than five years. On the other hand, a notable amount of established businesses have participated in this research, which accounts for 26.4% of the total sample; these businesses have been operational for “6 - 8 years”. The aggregate percentage of distribution inferred the companies to be operational for less than 8 years.

C. Type of Sector

Technology appears to be the leading sector in which the companies engage, constituting 34.0% of the total responses. With the advancement of technology globally and Ethiopia’s strategy to “Digital Ethiopia 2025”, the dominance of these technology-based startups seems to be aligned with time. Fashion and Arts and Crafts have an equal denomination in the distribution each accounting for 18.2%. The 14.5% contribution of the manufacturing sector represents that a significant number of the surveyed companies are involved in production. The residual 13.2% falls under the “Others” category, implicating the heterogeneity of sectors of the surveyed companies.

D. Number of Employees

As the above table illustrates, 73.6% of the companies have “1 - 5” employees, suggesting the prevalence of small-sized startups. Another notable percentage goes to companies having “6 - 10” employees, which indicates a slightly larger workforce. Companies having “11 - 15” and “16 - 20” employees constitute 3.8% each, signifying a smaller but notable presence of mid-sized companies. Only 3 companies happen to have “21 - 25” employees, reflecting a small minority of companies having a larger staff count.

4.2 Descriptive Statistics of Variables

Descriptive statistics serve as a powerful tool in clearing up the underlying patterns and characteristics within datasets, particularly when dealing with Likert scale responses. Likert scales, widely used in survey research, offer a structured means of measuring opinions, attitudes, or perceptions by presenting respondents with a range of ordered choices. The researcher presents the results of the Likert scale-based questionnaire responses, where respondents give responses for the questions presented with the following abbreviations: SD (Strongly Disagree), D (Disagree), N (Neutral), A (Agree), and SA (Strongly Agree) to indicate their level of agreement or disagreement with various statements. The Likert scale ranged from five to one, reflecting

increasing levels of agreement from SD (1) to SA (5). The central focus is on measures such as mean and standard deviation. The mean provides a central tendency, offering an average or typical response, while the standard deviation illuminates the degree of variability or dispersion in these responses. This detailed exploration aims to capture the richness of opinions and diverse perspectives among the surveyed individuals.

Table 4.2: Responses towards Access to Finance

| Access to Finance | | | |
|--|------------|---------------|-----------------------|
| | N | Mean | Std. Deviation |
| The company has/had no access to loans from formal microfinance, banks, or financial institutes. | 159 | 4.1132 | 1.04325 |
| The company has/had no access to a loan with no collateral prerequisite. | 159 | 4.3019 | .94638 |
| The company has no access to loans with low interest rates. | 159 | 4.3396 | .91285 |
| The company has/had no access to long-term credit (over 5 years). | 159 | 4.4340 | .79180 |
| The company has never won grants. | 159 | 3.9811 | 1.20899 |
| The company never uses uses/used founder's personal savings. | 159 | 2.0566 | 1.32763 |
| The company never uses/used personal/family/friend's financial incomes. | 159 | 2.6415 | 1.49803 |
| Aggregate | 159 | 4.2972 | 0.77038 |

Source: own survey, 2023

The descriptive statistics expose respondents' insights towards finance access for startups, particularly when considering a mean value above 3 as an indication of agreement. In the inaccessibility of loans from formal financial institutions, the mean of 4.1132 implies a leaning toward agreement among respondents, and the standard deviation 1.04325 is relatively higher showing the responses are diversified from the mean value. Similarly, regarding the scarcity of loans with no collateral prerequisite, the mean of 4.3019 suggests agreement. No access to loans with low interest rates, with a mean of 4.3396 is characterized by agreement. Likewise, the inaccessibility of long-term credit has a mean of 4.4340, which tends towards agreement. From the collected responses it can be inferred that the availability of finance for startups is very low. Respondents, on average, agree that the company has never won grants (Mean = 3.9811), though diverse opinions are evident with a higher standard deviation. Disagreement is observed concerning never using the founder's personal savings (Mean = 2.0566), while diverse opinions exist based on the standard deviation. Additionally, disagreement is noted for not using personal, family, or friend's financial incomes (Mean = 2.6415), with diverse opinions reflected by a higher standard deviation. With an aggregate mean value of 4.2972 and a lower standard deviation of 0.77038, these adjusted interpretations provide an understanding of respondents' varying sentiments towards access to finance for startups, offering valuable insights into the difficulty of financial access and the higher utilization of personal or family's and other sources of income to the startups.

Table 4.3: Responses towards Business Model

| Business Model | | | |
|--|-----|--------|----------------|
| | N | Mean | Std. Deviation |
| The idea the company used is new. | 159 | 3.0943 | 1.08961 |
| The company can describe its product or service very well. | 159 | 3.5094 | 1.22664 |

| | | | |
|---|------------|---------------|----------------|
| The startup company is aware of its business model. | 159 | 4.0566 | .96289 |
| The company faced challenges in implementing the business model. | 159 | 4.0566 | .98241 |
| The product or service of the company has been evolving from the beginning. | 159 | 3.7170 | .94220 |
| Aggregate | 159 | 3.7610 | 0.82262 |

Source: own survey,2023

The descriptive statistics in the table about responses to the startup's idea or business model reveal valuable insights. Respondents believe their idea is new, supported by a mean of 3.0943, with a slight variability of responses (std. Deviation = 1.08961). Similarly, most of the respondents can describe their services/products very well, as the mean values are above average (3.5094), with slightly higher variability in opinions recorded at 1.22664. The assertion that the startup is aware of its business model receives stronger agreement on average (Mean = 4.0566), with a lower standard deviation of 0.96289, suggesting more consistent responses. Similarly, respondents strongly agree that the company faced challenges in implementing its business model, as indicated by the mean of 4.0566 and less variation of responses recorded with a standard deviation of 0.98241. On the evolution of the product or service, respondents agree (Mean = 3.7170), with some variability in opinions denoted by the standard deviation of 0.94220. As the aggregate values suggest the majority of respondents show agreement with the questions of newness, product/service knowledge, awareness of the business model, challenges on implementation and evolution of product/services with a mean value of 3.7610, and a variability among responses is recorded to be 0.82262.

Table 4.4: Responses towards Marketing Strategy

Marketing Strategy

| | N | Mean | Std. Deviation |
|---|------------|---------------|----------------|
| The company has a formal marketing strategy. | 159 | 3.6604 | .99257 |
| The company's branding practice influences the business performance. | 159 | 3.3774 | 1.01682 |
| A positioning strategy is defined precisely. | 159 | 3.5283 | 1.06028 |
| The convenience of the place of the business attracts more customers. | 159 | 3.0943 | 1.10690 |
| The pricing strategy gives room for a large customer base. | 159 | 3.3019 | 1.17869 |
| The company uses pricing skills and systems to respond quickly to market changes. | 159 | 3.4340 | 1.04050 |
| Marketing efforts such as advertising, and promotion always promote the sales performance of the company. | 159 | 3.2830 | 1.01963 |
| Targeting enables the company to focus on the precise needs of the targeted segment. | 159 | 3.4340 | 1.19349 |
| The company achieved maximum profitability as a result of the application of marketing strategy. | 159 | 3.6981 | 1.07771 |
| Aggregate | 159 | 3.4214 | 0.88387 |

Source own survey:2023

The above table's descriptive data provide a thorough understanding of respondents' opinions regarding the startup's marketing plan. With a mean score of 3.6604, respondents generally think that having a structured marketing strategy is a good idea. This indicates that respondents' perceptions are consistent (Std. Deviation = 0.99257). The mean of 3.3774, with a standard deviation of 1.01682, suggests a moderate degree of agreement with some degree of diversity in beliefs regarding the impact of branding tactics on corporate performance. The mean of 3.5283 indicates that respondents usually believe that a positioning strategy is precisely defined, with a

significant degree of heterogeneity in perceptions (Std. Deviation = 1.06028). Respondents somewhat agree (Mean = 3.0943) that the company location's convenience draws in more customers and the higher standard deviation (1.10690) suggests diversity in opinions. A wide client base is thought to be accommodated by the price approach, as evidenced by the mean of 3.3019 and the modest degree of response variability (Std. Deviation = 1.17869). The typical response from respondents is that the organization uses price expertise to react fast to changes in the market (Mean = 3.4340), with a modest degree of variability (Std. Deviation = 1.04050). There is some variation in opinions (Std. Deviation = 1.01963) regarding the steady improvement of sales performance through marketing efforts like promotion and advertising, with a mean score of 3.2830. With a mean of 3.4340, targeting as a technique to concentrate on specific segment demands is agreed upon, and the higher standard deviation (1.19349) suggests a notable degree of variability. Lastly, respondents agree that the company achieved maximum profitability through its marketing strategy, as indicated by a mean of 3.6981, with a moderate level of variability (Std. Deviation = 1.07771). As the aggregate values suggest the majority of respondents show agreement with the questions of formal strategy, branding practices, precision, convenience of place, pricing strategy and skills, marketing effort, targeting and profitability as a result of marketing mix with a mean value of 3.4214 and deviation of 0.88387.

Table 4.5: Responses towards the Quality of Product or Service Provision

| <i>Quality of Product or Service Provision</i> | | | |
|---|-----|--------|----------------|
| | N | Mean | Std. Deviation |
| The innovation in the company delivers a unique advantage to its customers. | 159 | 3.2642 | 1.18777 |
| The company uses up to date equipment. | 159 | 3.6981 | .98569 |
| The company provides competitive facilities within the industry. | 159 | 3.4906 | 1.07837 |
| The company reassures its customers when a problem arises. | 159 | 3.6792 | .96993 |

| | | | |
|---|------------|---------------|----------------|
| The company maintains accurate records. | 159 | 3.8491 | .94258 |
| Employees are trained to respond to requests. | 159 | 3.5283 | 1.00512 |
| The company provides individualized attention to its customers. | 159 | 3.6981 | .92610 |
| The company operates at convenient hours. | 159 | 3.7925 | .90060 |
| Aggregate | 159 | 3.6730 | 0.76166 |

Source: own survey 2023

The respondents' opinions regarding the startup's quality of service or product provided are made clear by the descriptive statistics. The average level of agreement with the view of the company's innovation providing a distinct benefit to clients is modest (Mean = 3.2642), but there is a significant degree of variation in opinions (Std. Deviation = 1.18777), indicating that different people have different opinions about how unique the company's innovation is. When it comes to using current equipment, respondents generally agree (Mean = 3.6981), suggesting that respondents' perceptions of the company's use of modern equipment are more consistent (Std. Deviation = 0.98569). There is slight agreement on average (Mean = 3.4906) regarding the company's ability to provide competitive facilities in the industry. Opinions regarding the competitiveness of the company's facilities vary moderately (Std. Deviation = 1.07837). While respondents' perceptions of the company's customer reassurance methods are more consistent (Std. Deviation = 0.96993), they generally agree that the company reassures customers when problems emerge (Mean = 3.6792). Respondents generally agree (Mean = 3.8491) and show a more consistent perspective (Std. Deviation = 0.94258) of the company's record-keeping processes, indicating that maintaining accurate records is viewed favorably. Regarding the success of employee response training, the majority of respondents (Mean = 3.5283) are in agreement, with a substantial degree of variety (Std. Deviation = 1.00512) in their viewpoints. The belief that the company provides individualized attention to customers garners agreement on average (Mean = 3.6981), with a more consistent perception (Std. Deviation = 0.92610) regarding the company's personalized customer service. Lastly, respondents, on average, agree that the company operates at convenient hours (Mean = 3.7925), with a more consistent perception (Std. Deviation = 0.90060)

regarding the company's operating hours. As the aggregate values suggest the majority of respondents show agreement with the questions about innovation, latest equipment, competitiveness, reassurance, records maintenance, attention given to customers, and convenience of working hours, with a mean value of 3.6730 and deviation of 0.76166.

Table 4.6: Responses towards Entrepreneurial Team Quality and Management Skill

| <i>Entrepreneurial Team Quality and Management Skill</i> | | | |
|--|------------|---------------|----------------|
| | N | Mean | Std. Deviation |
| The founder/managerial team has prior years of working experience in the industry that the current business competes in. | 159 | 3.2830 | 1.32709 |
| The founder/managerial team is willing to take risks. | 159 | 3.4151 | 1.34212 |
| The founder/managerial team has attended higher education. | 159 | 4.1321 | .97509 |
| Compared to its start division of responsibilities between members of management is clearer. | 159 | 4.2075 | 1.09125 |
| Aggregate | 159 | 3.8742 | 0.91455 |

Source: own survey, 2023

The respondents' opinions about the managerial abilities and qualities of the entrepreneurial team within the startup were clarified by the descriptive statistics. Regarding the founder/managerial team's industry experience, the mean response from respondents is 3.2830. However, there is a significant variation in opinions (Std. Deviation = 1.32709), suggesting that there are differing viewpoints regarding the team's previous exposure to the sector. Respondents, on the whole, believe that the team is willing to take risks (Mean = 3.4151); nevertheless, a higher standard deviation (1.34212) indicates that opinions regarding the team's risk-taking attitude vary significantly. Significantly, the majority of respondents (Mean = 4.1321) strongly concur that the

founder/managerial team has a higher education background. Additionally, the standard deviation (0.97509) is smaller, indicating that respondents' perceptions of the team's educational background are more consistent. Furthermore, respondents strongly agree that the allocation of duties among management personnel is now clearer than it was at the beginning (Mean = 4.2075). The standard deviation (1.09125) suggests a substantial degree of variation in viewpoints regarding the definition of jobs within the management team, nonetheless. Together, these data provide insights into the many viewpoints that respondents had regarding the sector experience, propensity for taking risks, educational background, and clarity in the delegation of duties within the entrepreneurial team. The aggregate value, represents the overall leaned responses to agreement with a mean value of 3.8742 and a standard deviation of 0.91455.

Table 4.7: Responses towards the Government Policy

| Government Policy | | | |
|--|-----|--------|----------------|
| | N | Mean | Std. Deviation |
| The registration process for starting a new business in Ethiopia is simple. | 159 | 3.4717 | 1.16277 |
| There is a networked database system to facilitate business startup procedure. | 159 | 2.0755 | 1.08235 |
| Government policies to support startups access to finance are clear, transparent and readily understandable. | 159 | 1.9623 | 1.03047 |
| The current ease of business startup practices will attract more investors to join in. | 159 | 1.6038 | .73793 |

| | | | |
|--|------------|---------------|----------------|
| The company has been invited to participate in discussing challenges of the business startup procedures with government officials. | 159 | 2.1887 | 1.32249 |
| The company would like to continue in doing business for the coming future in Ethiopia. | 159 | 2.4906 | 1.44024 |
| Aggregate | 159 | 2.0613 | 0.89289 |

Source: own survey, 2023

Descriptive statistics reveal different viewpoints among respondents about government policies in the context of business startups in Ethiopia (see table 4.7 above). The reliability of the registration process is moderately agreed upon by respondents on average (Mean = 3.4717), but a significant range of opinions regarding its ease is indicated by the higher standard deviation (1.16277). Reliability of the networked database system to facilitate business startup procedures is moderately disagreed upon by respondents on average (Mean = 2.0755), with a notable degree of variability (Std. Deviation = 1.08235) among opinions. Regarding the clarity of government policies supporting startups' access to finance, respondents on average disagree (Mean = 1.9623), and the higher standard deviation (1.03047) suggests a wide spectrum of opinions regarding the transparency and clarity of these policies. Strong disagreement emerges concerning the notion that the current easiness of business startup practices will attract more investors (Mean = 1.6038), and the lower standard deviation (0.73793) indicates a more consistent perception among respondents regarding the impact on investor attraction. The opinions of respondents about invitations to address difficulties with government authorities regarding business beginning procedures are very variable (Std. Deviation = 1.32249), with the majority disagreeing (Mean = 2.1887) that their company has received such an invitation. Finally, a considerable range of viewpoints regarding the company's long-term commitment is shown by the greater standard deviation (1.44024), despite respondents expressing a moderate agreement (Mean = 2.4906) that the company plans to continue doing business in Ethiopia in the future. It can be inferred from the aggregate values that

Government Policy is not in favor of the startups with a mean value of 2.0613 and consistency on the responses with a standard deviation 0.89289.

Table 4.8: Responses towards Role of Incubators

| Role of Incubators | | | |
|---|------------|---------------|----------------|
| | N | Mean | Std. Deviation |
| Incubators provide access to finance. | 159 | 3.9434 | .94296 |
| Incubators maintain connection with investors or financial institutions. | 159 | 4.0377 | 1.11881 |
| Incubators help in providing affordable infrastructure and office facilities. | 159 | 3.4528 | 1.02314 |
| Incubators help in providing market opportunities. | 159 | 3.4528 | .96586 |
| Incubators help in improving the capacity building skills. | 159 | 3.5660 | .81542 |
| Incubators help in improving the product/service development skills. | 159 | 2.3208 | 1.00832 |
| Incubators help in improving the business management skills. | 159 | 3.4528 | .98532 |
| Incubators help in improving the marketing skills. | 159 | 4.0566 | 1.00155 |
| Incubators provide latest information on regulations in specific sectors. | 159 | 3.9434 | .96289 |
| Incubators provide consultancy services. | 159 | 4.3396 | .84816 |
| Aggregate | 159 | 3.6541 | 0.76848 |

As depicted in the table above the descriptive statistics reveal valuable insights into responses regarding the multifaceted role of incubators in the startup ecosystem. Participants

overwhelmingly acknowledge the pivotal role of incubators in providing access to finance, with a strong agreement reflected in the mean value of 3.9434 and a lower standard deviation of 0.94296, indicating a consistent perception among respondents. Similarly, respondents strongly agree that incubators maintain connections with investors or financial institutions, as evidenced by the mean value of 4.0377 and a slightly higher standard deviation of 1.11881, reflecting a notable degree of variability in opinions about the extent of these connections. In terms of infrastructure support, respondents express a moderate agreement (mean = 3.4528), with a notable degree of variability (standard deviation = 1.02314) in opinions regarding the effectiveness of incubators in providing affordable infrastructure and office facilities. A similar pattern emerges in respondents' perceptions about the role of incubators in creating market opportunities, with a mean value of 3.4528 and a moderate standard deviation of 0.96586.

Regarding skill development, respondents moderately agree that incubators contribute to improving capacity-building skills (mean = 3.5660), while opinions vary significantly (standard deviation = 0.81542). In contrast, there is a moderate disagreement concerning the effectiveness of incubators in enhancing product/service development skills (mean = 2.3208), with a higher standard deviation of 1.00832, indicating diverse perspectives among respondents. On the positive side, respondents express a moderate agreement that incubators contribute to improving business management skills (mean = 3.4528), with a moderate standard deviation of 0.98532. Strong agreement is observed in respondents' perceptions about the role of incubators in enhancing marketing skills, as indicated by the mean value of 4.0566 and a slightly higher standard deviation of 1.00155.

Furthermore, respondents strongly agree that incubators provide the latest information on regulations in a specific sector (mean = 3.9434), with a lower standard deviation of 0.96289, suggesting a more consistent perception. Lastly, there is strong agreement among respondents that incubators offer consultancy services, as reflected in the mean value of 4.3396 and a lower standard deviation of 0.84816, indicating a high level of consensus regarding the provision of consultancy services by incubators.

Table 4.9: Responses towards Success of Startups

| Success of Startups | | | |
|--|------------|---------------|----------------|
| | N | Mean | Std. Deviation |
| Number of employees in the company has increased from the beginning. | 159 | 3.7358 | 1.36620 |
| The company has a plan to expand. | 159 | 3.4340 | 1.17747 |
| There is a communication channel between the company and its customers | 159 | 4.1132 | 1.00619 |
| The company has a good record of meeting deadlines. | 159 | 3.5660 | 1.09387 |
| The company has customers that are recommended by previous customers. | 159 | 3.1509 | 1.14288 |
| Compared to a year (months) ago, sales/turnover has increased. | 159 | 3.9811 | .71575 |
| The company has a plan to invest more in the company. | 159 | 3.9434 | 1.00155 |
| Return on assets has increased. | 159 | 3.7925 | 1.00048 |
| The company invests in its employee's capacity building. | 159 | 3.6792 | .98931 |
| The company achieves its long-term goals. | 159 | 4.2642 | .91716 |
| Aggregate | 159 | 3.6572 | 0.93537 |

Source: own survey, 2023

The descriptive statistics shed light on respondents' perceptions of various indicators related to the success of startups. On average, respondents express a moderate agreement (Mean = 3.7358)

that the number of employees in the company has increased from the beginning, with a notable degree of variability (Std. Deviation = 1.36620) in opinions. Similarly, participants moderately agree (Mean = 3.4340) that the company has a plan to expand, reflecting diverse perspectives indicated by a higher standard deviation (1.17747). Strong agreement is observed concerning the existence of a communication channel between the company and its customers (Mean = 4.1132), with a moderate standard deviation (1.00619) suggesting a consistent perception.

Respondents express a moderate agreement (Mean = 3.5660) that the company has a good record of meeting deadlines, with a notable degree of variability (Std. Deviation = 1.09387) in opinions about the company's punctuality. Similarly, participants moderately agree (Mean = 3.1509) that the company has customers recommended by previous customers, with a higher standard deviation (1.14288) indicating diverse perspectives on customer recommendations. Positive consensus emerges regarding the increase in sales/turnover compared to a year (months) ago, with respondents generally agreeing (Mean = 3.9811) and a lower standard deviation (0.71575) suggesting a more consistent perception. The agreement is also observed in respondents' perceptions of the company's plan to invest more in the company (Mean = 3.9434), although opinions vary moderately (Std. Deviation = 1.00155). Participants moderately agree (Mean = 3.7925) that the return on assets has increased, with a notable degree of variability (Std. Deviation = 1.00048) in opinions about this financial aspect.

In terms of employee development, respondents express a moderate agreement (Mean = 3.6792) that the company invests in its employees' capacity building, with a moderate standard deviation (0.98931) indicating diverse perspectives. Lastly, strong agreement is observed regarding the company's ability to achieve its long-term goals (Mean = 4.2642), with a moderate standard deviation (0.91716) suggesting a consistent yet varied perception among respondents about the company's success in achieving long-term objectives.

4.3 Inferential statistics

Methods like moderated multiple regression method and correlation are used to give a better interpretation of collected data. Statistical Package for Social Sciences (SPSS) software is applied to do the analysis.

4.3.1 Reliability Test

The content and conceptual validity of the study were verified to confirm the efficacy of the research design. The questionnaire includes six independent variables to measure the factors affecting the success of startups. The questionnaire used a five-point Likert scale measure.

Cronbach's alpha measure is used to test reliability. Cronbach's Alpha value ranges between 0 - 1. Values closer to one indicate more reliability. A different number of questions are included to measure a single variable.

Table 4.10: Reliability Test

| Variable Name | Cronbach's Alpha | No. of Items |
|--|-------------------------|---------------------|
| INDEPENDENT VARIABLES | | |
| Access to Finance | .850 | 4 |
| Business Model | .682 | 3 |
| Marketing Strategy | .733 | 3 |
| Quality of Product or Service Provision | .852 | 7 |
| Managerial Skills | .722 | 3 |
| Government Policy | .766 | 4 |
| MODERATOR | | |
| Role of Incubators | .887 | 6 |

| DEPENDENT VARIABLE | | |
|---------------------|------|----|
| Success of Startups | .904 | 6 |
| OVERALL | | |
| | .846 | 36 |

Source: own SPSS output, 2023

4.3.2 Correlation analysis

The term correlation (r) refers to the magnitude and direction of a link between two variables. Correlation "r" output always ranges between -1.0 and +1.0, and if "r" is positive, the variables have a favorable correlation. If it is negative, it indicates that the relationship between the variables is negative.

Table 4.11: Correlation Analysis

| | | AF | BM | MS | QPSP | QMS | GP | RI | SS |
|----|---------------------|--------|--------|----|------|-----|----|----|----|
| AF | Pearson Correlation | -- | | | | | | | |
| | N | 159 | | | | | | | |
| BM | Pearson Correlation | .304** | -- | | | | | | |
| | Sig. (2-tailed) | .000 | | | | | | | |
| | N | 159 | 159 | | | | | | |
| MS | Pearson Correlation | .119 | .282** | -- | | | | | |

| | | | | | | | | | |
|------|---------------------|--------|--------|--------|--------|--------|-------|-----|--|
| | Sig. (2-tailed) | .134 | .000 | | | | | | |
| | N | 159 | 159 | 159 | | | | | |
| QPSP | Pearson Correlation | .125 | .024 | .205** | -- | | | | |
| | Sig. (2-tailed) | .118 | .763 | .010 | | | | | |
| | N | 159 | 159 | 159 | 159 | | | | |
| QMS | Pearson Correlation | .139 | .228** | .397** | .218** | -- | | | |
| | Sig. (2-tailed) | .080 | .004 | .000 | .006 | | | | |
| | N | 159 | 159 | 159 | 159 | 159 | | | |
| GP | Pearson Correlation | -.096 | .023 | .148 | .158* | .144 | -- | | |
| | Sig. (2-tailed) | .229 | .771 | .062 | .047 | .071 | | | |
| | N | 159 | 159 | 159 | 159 | 159 | 159 | | |
| RI | Pearson Correlation | .356** | .439** | .495** | .265** | .477** | .170* | -- | |
| | Sig. (2-tailed) | .000 | .000 | .000 | .001 | .000 | .032 | | |
| | N | 159 | 159 | 159 | 159 | 159 | 159 | 159 | |

| | | | | | | | | | |
|----|---------------------|--------|--------|--------|--------|--------|-------|--------|-----|
| SS | Pearson Correlation | .349** | .456** | .491** | .239** | .487** | .164* | .985** | -- |
| | Sig. (2-tailed) | .000 | .000 | .000 | .002 | .000 | .039 | .000 | |
| | N | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: own survey, 2023

The correlation analysis reveals visible relationships between various factors and the success of startups in Addis Ababa. Firstly, Access to Finance displays a positive correlation with the Business Model ($r = 0.304$, $p < 0.001$), indicating that enhanced financial access aligns with a more effective business model. However, AF shows a negative correlation with Government Policy ($r = -0.096$, $p = 0.229$), suggesting a potential association between increased financial access and less favorable favors of government policies. Secondly, the Business Model exhibits positive correlations with Access to Finance, Marketing Strategy, and Quality of Management Skills, emphasizing the importance of a robust business model in alignment with improved financial access, effective marketing, and strong management skills. Marketing Strategy demonstrates positive correlations with Business Model, Quality of Product/Service Provision, and Quality of Management Skill, underlining the significance of an effective marketing strategy in conjunction with a strong business model and high-quality management skills. Quality of Product/Service Provision shows positive correlations with Marketing Strategy and Quality of Management Skills, indicating that a focus on delivering quality aligns with effective marketing and strong management.

Quality of Management Skills positively correlates with Business Model, Marketing Strategy, Quality of Product or Service Provision, and Government Policy, emphasizing the importance of strong management skills in conjunction with a robust business model, effective marketing, and perceived supportive government policies. Government Policy shows positive correlations with Access to Finance and Quality of Management Skills, signifying those favorable perceptions of government policies align with increased financial access and strong management skills. The Role

of Incubators (RI) exhibits positive correlations with various factors, including Business Model, Marketing Strategy, Quality of Product or Service Provision, Quality of Management Skill, Government Policy, and most significantly with the Success of Startups ($r = 0.985$, $p < 0.001$). This highlights the pivotal role of incubators in fostering a strong business model, effective marketing, quality product/service provision, robust management skills, supportive government policies, and ultimately, the success of startups.

Lastly, the Success of Startups (SS) demonstrates positive correlations with Access to Finance, Business Model, Marketing Strategy, Quality of Product or Service Provision, Quality of Management Skills, Government Policy, and Role of Incubators, emphasizing that successful startups are associated with improved financial access, a robust business model, effective marketing, quality product/service provision, strong management skills, supportive government policies, and the perceived role of incubators.

In summary, these correlations provide valuable insights into the many-sided relationships among key variables, offering a comprehensive understanding of the factors influencing startup success in Addis Ababa. The results underscore the importance of an integrated and collaborative approach, incorporating financial support, effective business strategies, robust marketing efforts, quality product/service provision, skilled management, supportive government policies, and the active involvement of incubators in fostering the startup ecosystem.

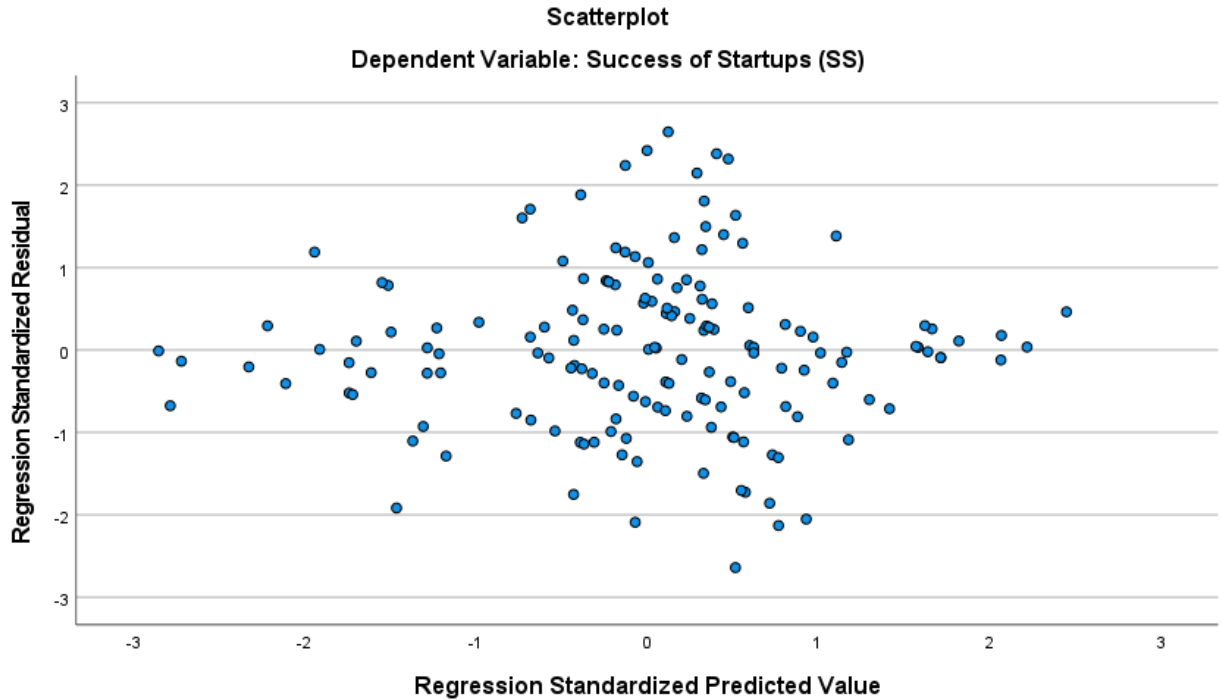
4.3.3 Regression analysis

Regression analysis refers to a statistical technique that examines the relationship between a dependent variable and one or more independent variables. By quantifying this relationship, regression enables researchers to identify and understand the impact of different factors on specific outcomes. Linear regression, the most commonly used form of regression analysis, assumes a linear relationship between variables, for the case of this study the researcher used multiple linear regression.

4.3.3.1 Assumptions of Classical Linear Regression Model (CLRM)

Assumption under CLRM, like Homoscedasticity, Normality, Linearity, Multicollinearity and Autocorrelation are tested under this section.

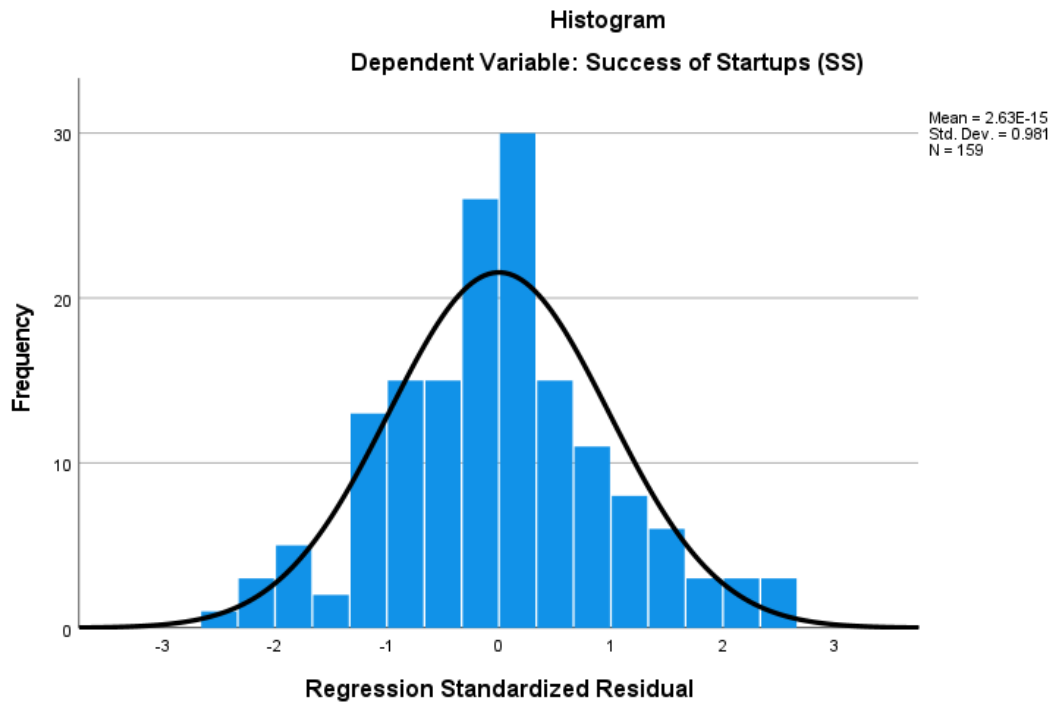
Figure 4.1: Homoscedasticity Test



Source: own survey, 2023

The first assumption of linear regression is homoscedasticity. This means that the variance around the regression line should be constant in all values of the independent variables. This is an assumption that states a variation in the residuals (amount of error in the model) should be the same at every point of the model. The scatterplots shown in Figure 4.1 above, depict the assumption of homoscedasticity, the standardized values in the model would predict, against the standardized residuals found. As the predicted values increased, the variation in the residuals was roughly similar. So, the assumption of homoscedasticity has been met.

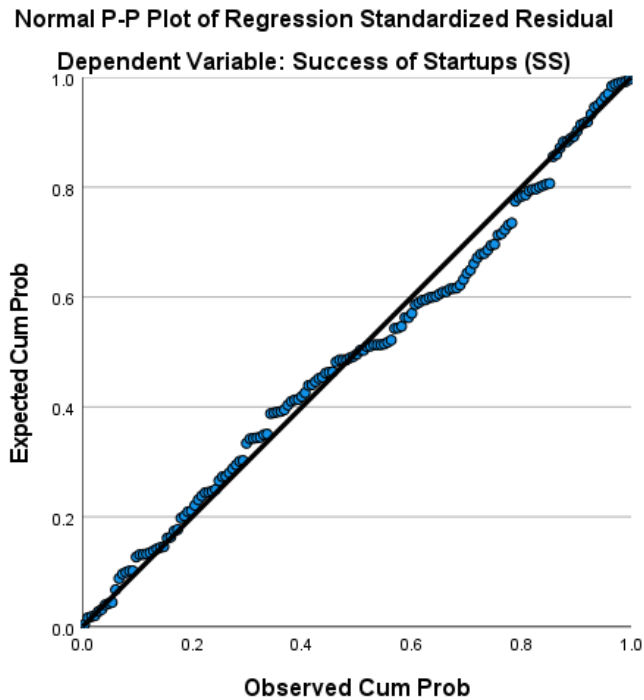
Figure 4.2: Normality Test



Source: own SPSS output, 2023

The basic idea behind this test is that the independent variables should be normally distributed (they should be along the normal curve). As it is shown in the histogram above the independent variables were distributed following the normal curve. This is proof that the data is normally distributed as shown in the histogram above.

Figure 4.3: Linearity Test



Source: own SPSS output, 2023

A linear regression model assumes that the average outcome is linearly related to each term in the model when holding all others fixed. Linearity shows that the relationship between the independent and dependent variables can be characterized by a straight line. As the graph Figure below shows, in this study assumptions of linearity have been met.

Table 4.12: Multicollinearity Test

| | | |
|-------|-------------------------|-----|
| Model | Collinearity Statistics | |
| | Tolerance | VIF |

| | | | |
|--|--------------------------------------|------|-------|
| 1 | Access to finance | .814 | 1.229 |
| | Business Model | .762 | 1.312 |
| | Marketing Strategy | .706 | 1.415 |
| | Quality of Product/Service Provision | .887 | 1.127 |
| | Quality of Management Skills | .730 | 1.370 |
| | Government policy | .923 | 1.083 |
| | Role of incubator | .524 | 1.908 |
| a. Dependent Variable: Success of Startups | | | |

Source: own SPSS output, 2023

The analysis of variance inflation factors (VIFs) indicates that all variables in the regression model have VIF values below 10, meeting the assumption of multicollinearity. This implies that the independent variables in the study exhibit relatively low correlations with each other, affirming their independence and mitigating the risk of multicollinearity. The absence of excessive collinearity enhances the stability and reliability of the regression estimates, allowing for a more

accurate interpretation of the individual impact of each variable on the dependent variable. This finding supports the robustness of the regression analysis, indicating that the selected set of independent variables contributes unique information to the model without introducing significant redundancy or instability.

Table 4.13: Autocorrelation Test

| Model Summary | | | | | |
|--|-------------------|----------|-------------------|----------------------------|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .987 ^a | .975 | .972 | .07524 | 2.104 |
| a. Predictors: (Constant), RI, GP, QPSP, AF, BM, QMS, MS | | | | | |
| b. Dependent Variable: Success of Startups (SS) | | | | | |

Source: own SPSS output, 2023

In testing for autocorrelation, the researcher aims to assess whether there is any systematic pattern of residuals over time, indicating a violation of the assumption of independence. Autocorrelation can be detected through various methods, one of which is the Durbin-Watson test. In the current study, the Durbin-Watson test was employed to examine the presence of autocorrelation in the residuals of the regression model. The test yielded a Durbin-Watson statistic of 2.1, falling within the acceptable range between 1.5 and 2.5. This result suggests that there is no significant autocorrelation in the residuals, supporting the assumption of independence in the regression model. The absence of autocorrelation enhances the reliability of the model's estimates and reinforces the validity of the statistical inferences drawn from the analysis, affirming the robustness of the regression results.

Table 4.14: The regression analysis model summary

| Model Summary | | | | |
|--|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .692 ^a | .478 | .458 | .33258 |
| 2 | .987 ^b | .975 | .972 | .07524 |
| a. Predictors: (Constant), GP, BM, QPSP, QMS, AF, MS | | | | |
| b. Predictors: (Constant), GP, BM, QPSP, QMS, AF, MS, RI, GPMod, BMMMod, QPSPMod, QMSMod, AFMod, MSMod | | | | |
| c. Dependent Variable: SS | | | | |

Source: own SPSS output, 2023

The moderation analysis involves two models assessing the factors influencing the success of startups (SS). In Model 1, comprising predictors GP, BM, QPSP, QMS, AF, and MS, the R Square of 0.478 indicates that approximately 47.8% of the variability in SS is explained. The Adjusted R Square, considering model complexity, is 0.458, and the Std. Error of the Estimate is 0.33258.

In contrast, Model 2 introduces an additional predictor (RI) and the interaction terms of the independent variables and the moderator (RI) to the set of Model 1 predictors. The substantial increase in R Square to 0.975, along with an Adjusted R Square of 0.972, suggests a notable

improvement in the model's explanatory power. The Std. Error of the Estimate remains precise at 0.07524. These findings indicate that the inclusion of the moderating variable (RI) significantly enhances the model's ability to explain the variability in the success of startups. Overall, the moderation model underscores the importance of the moderator variable in elucidating the relationship between the predictors and the dependent variable.

Table 4.15: ANOVA Table

| ANOVA | | | | | | |
|---|------------|----------------|-----|-------------|---------|--------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 15.425 | 6 | 2.571 | 23.243 | <.001 ^b |
| | Residual | 16.812 | 152 | .111 | | |
| | Total | 32.238 | 158 | | | |
| 2 | Regression | 31.417 | 13 | 2.417 | 426.923 | <.001 ^c |
| | Residual | .821 | 145 | .006 | | |
| | Total | 32.238 | 158 | | | |
| a. Dependent Variable: SS | | | | | | |
| b. Predictors: (Constant), GP, BM, QPSP, QMS, AF, MS | | | | | | |
| c. Predictors: (Constant), GP, BM, QPSP, QMS, AF, MS, RI, GPMoD, BMMoD, QPSPMoD, QMSMoD, AFMoD, MSMoD | | | | | | |

Source: own SPSS output, 2023

The ANOVA table assesses the significance of the regression models in explaining the variance in the dependent variable, SS. For Model 1, the regression model comprising predictors of

Government Policy, Business Model, Quality of Product or Service Provision, Quality of Management Skill, Access to Finance, and Marketing Strategy demonstrates high statistical significance ($F = 23.243$, $p < 0.001$), indicating its effectiveness in explaining the variability in SS. The addition of the Role of Incubators in Model 2 further strengthens the regression model, resulting in a highly significant F-statistic ($F = 426.923$, $p < 0.001$). The p-values for both models are less than the conventional significance level of 0.05, suggesting that the models are reliable in predicting the Success of Startups. The inclusion of the Role of Incubators significantly enhances the explanatory power of the model, supporting the hypothesis that the role of incubators moderates the relationship between various factors and the success of startups.

Table 4.16: Coefficients Table

| Coefficients | | | | | | |
|--------------|------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.402 | .436 | | -.922 | .358 |
| | AF | .191 | .060 | .200 | 3.198 | .002 |
| | IBM | .244 | .061 | .257 | 4.005 | .000 |
| | IMS | .240 | .062 | .258 | 3.900 | .000 |
| | QPSP | .083 | .062 | .083 | 1.345 | .181 |
| | QMS | .249 | .061 | .268 | 4.085 | .000 |
| | GP | .087 | .060 | .087 | 1.437 | .153 |
| 2 | (Constant) | .064 | .106 | | .601 | .218 |
| | AF | -.007 | .014 | -.008 | -.488 | .626 |

| | | | | | | |
|---------------------------|------|-------|------|-------|--------|-------|
| | IBM | .017 | .015 | .018 | 1.150 | .252 |
| | IMS | .000 | .015 | .000 | -.019 | .985 |
| | QPSP | -.019 | .014 | -.019 | -1.325 | .187 |
| | QMS | .022 | .015 | .024 | 1.469 | .144 |
| | GP | .007 | .014 | .007 | .488 | .626 |
| | RI | .965 | .019 | .982 | 52.122 | <.001 |
| a. Dependent Variable: SS | | | | | | |

Source: own SPSS output, 2023

The coefficients table reveals insightful information about the impact of various predictors on the Success of Startups in both the absence (Model 1) and presence (Model 2) of the moderator variable, the Role of Incubators. In Model 1, Access to Finance has a positive and statistically significant coefficient of 0.191 ($p = 0.002$), suggesting that for each one-unit increase in Access to Finance, Success of Startups is expected to increase by 0.191 units. Similarly, Business Model and Management Skills show positive and significant coefficients of 0.244 ($p < 0.001$) and 0.240 ($p < 0.001$), respectively. Quality of Management Skills also exhibits a positive and significant coefficient of 0.249 ($p < 0.001$). However, in Model 2, with the inclusion of the Role of Incubators, the coefficients for Access to Finance, Business Model, Marketing Strategy, Quality of Product/Service Provision, Quality of Management Skills, and Government Policy become statistically insignificant. Notably, the Role of Incubators demonstrates a highly significant and positive coefficient of 0.965 ($p < 0.001$), indicating its substantial impact on the Success of Startups.

The introduction of the moderator variable, the Role of Incubators, significantly enhanced the model's explanatory power, especially evidenced by the highly significant positive association between the Role of Incubators and the Success of Startups. This implies that the moderation effect might be substantial, indicating that the role of incubators moderates a considerable portion of the influence that predictors such as Access to Finance, Business Model, Management Skills, and Quality of Management Skills have on the success of startups.

Based on the regression results, it appears that the introduction of the moderator variable, the Role of Incubators, led to the weakening of the significance of other predictors (Access to Finance, Business Model, Marketing Strategy, Quality of Product or Service Provision, Quality of Management Skill, Government Policy) in Model 2. This pattern suggests that the moderation effect of RI is substantial enough to render the direct effects of these predictors on the Success of Startups statistically insignificant. Consequently, it is reasonable to deduct that full moderation has been occurring in the relationship between the identified predictors and the success of startups, with the role of incubators serving as a comprehensive moderator, capturing the entirety of the influence of these predictors on the success of startups.

4.4 Hypothesis testing

Table 4.17: Summary of Hypothesis Testing

| Hypothesis | Statement | Sig. | Status |
|-------------------|--|-------------|---------------|
| H1 | There is a positive and significant relationship between Access to Finance (AF) and the success of startups (SS). | .002 | Accepted |
| H2 | There is a positive and significant relationship between Business Model (BM) and the success of startups (SS). | .000 | Accepted |
| H3 | There is a positive and significant relationship between Management Skills (MS) and the success of startups (SS). | .000 | Accepted |
| H4 | There is a positive and significant relationship between Quality of Product/Service Provision (QPSP) and the success of startups (SS). | .181 | Rejected |
| H5 | There is a positive and significant relationship between Quality of Management Skills (QMS) and the success of startups (SS). | .000 | Accepted |

| | | | |
|-----------|---|-------|----------|
| H6 | There is a positive and significant relationship between Government Policy (GP) and the success of startups (SS). | .153 | Rejected |
| H7 | The role of incubators (RI) moderates the relationship between AF, BM, MS, QPSP, QMS, GP, and SS. | <.001 | Accepted |

Source: own survey, 2023

The analysis of the hypothesis (H1) suggesting a positive and direct relationship between Access to Finance and the Success of Startups is accepted, as the significance level is below 0.05 (Sig. = 0.002). Similarly, H2 and H3, which propose positive and significant relationships between Business Models, Management Skills, and the Success of Startups, are also accepted with significance levels of 0.000. However, H4, indicating a positive relationship between the Quality of Product/Service Provision and the Success of Startups, is rejected since the significance level exceeds 0.05 (Sig. = 0.181). H5, asserting a positive relationship between the Quality of Management Skills and the Success of Startups, is accepted (Sig. < 0.001). H6, positing a positive relationship between Government policy and the Success of Startups, is rejected (Sig. = 0.153). The rejection of the two variables (Quality of Product or Service Provision and Government Policy), indicates that based on the data collected for this research paper, it can not be proved that there is a significant relationship between the rejected variables and the success of startups. Lastly, H7, proposing that the Role of Incubators moderates the relationship between various factors and SS, is accepted with a significance level of <0.001. These findings provide insights into the factors influencing the success of startups in the context of Addis Ababa.

CHAPTER FIVE

5. Summary of Major Findings, Conclusion, and Recommendation

5.1 Summary of Major Findings

The investigation into Addis Ababa's startup ecosystem has revealed a diverse collection of important discoveries, exposing the complexities and processes that define the entrepreneurial ecosystem. Several major insights arise from the examination of the descriptive statistics generated from the Addis Ababa startup survey. The leadership landscape is diverse, with employees in higher positions constituting 69.2% of the respondents. Startups exhibit varying operational durations, with 43.4% operating for 0-2 years, 30.2% for 3-5 years, and 26.4% for 6-8 years, illustrating a mix of emerging and established companies. The industry sectors in which startups are active are diverse, with a significant presence in Technology (34.0%), Fashion (18.2%), and Arts and Crafts (18.2%). Employee count distribution indicates a prevalence of small-scale operations, with 73.6% having 0-5 employees.

The correlation analysis shows positive relationships among the success factors, the role of incubators, and the success of startups except for the relationship between Access to Finance and Government Policy which appears to be negative, ($r = -0.096$ and $p = 0.229$), suggesting an inverse relationship between the variables.

The moderation analysis involves two models evaluating the factors influencing startup success. In the first model, with predictors access to finance, business model, marketing strategy, Quality of Product/Service Provision, quality management skills, and government policy, an R Square of 0.478 indicates that about 47.8% of the variables explained the Success of Startups, with an Adjusted R Square of 0.458 and Std. Error of the Estimate at 0.33258. Conversely, Model 2 introduces the additional predictor role of the incubator, resulting in a substantial increase in R Square to 0.975 and an Adjusted R Square of 0.972, indicating a significant improvement in

explanatory power. The Std. Error of the Estimate remains precise at 0.07524. These results highlight the moderator variable's full moderation role in enhancing the model's ability to elucidate the relationship between predictors and the dependent variable, emphasizing the importance of the moderation effect.

Five of the seven hypotheses are accepted; indicating access to finance, business model, marketing strategy, and quality of management skill to have a positive and significant effect on the success of startups. On the other hand, in this research, it can not be proved quality of product or service provision and government policy have a significant effect on the success of startups. Besides, the role of incubators moderates the success factors and the success of startups significantly.

5.2 Conclusion

In conclusion, the study examined the complex dynamics of variables affecting Addis Ababa startups' success using a comprehensive research methodology. Access to Finance, Business Model, Management Skills, Quality of Product/Service Provision, Government Policy, and the Moderating Role of Incubators were among the many elements of the investigation that were covered. Descriptive statistics, regression analysis, correlation analysis, hypothesis testing, and moderation analysis were all included in the thorough analysis, which offered detailed insights into the complex interactions between various variables.

The respondents' opinions on a range of topics are explained by descriptive statistics, which also throw insight into the norms and procedures that exist within the startup ecosystem. Regression analysis and hypothesis testing looked at the direct and moderated effects of the variables on startup performance, while correlation analysis revealed links and highlighted the value of a comprehensive approach. The moderation study was remarkable as it highlighted the critical function of incubators in strengthening the model's explanatory capacity.

The results of the hypothesis testing showed that different hypotheses had differing levels of support, which suggests that these associations are not all the same. The results confirmed that startup success is positively correlated with access to finance, business models, marketing strategies, and management skills. Government policy and the quality of the products or services provided were found to have non-significant associations with startup success on this research.

The role of incubators' function in moderating these complex relationships was confirmed by the moderation study.

The study's conclusions have important implications for legislators, business owners, and incubator programs in addition to significantly adding to the understanding of Addis Ababa's startup dynamics. The present study offers a strong basis for subsequent research and initiatives that seek to develop an effective startup ecosystem in the area, given the dynamic nature of the startup ecosystem in Addis Ababa.

5.3 Theoretical Contributions and Policy Implications

Based on the comprehensive analysis of factors influencing the success of startups in Addis Ababa, several key recommendations, policy suggestions, and theoretical contributions can be made to enhance the startup ecosystem and contribute to sustainable entrepreneurial development.

- Improve access to financing by encouraging cooperation between financial institutions and legislators to develop customized financial solutions and support financial literacy initiatives for new businesses.
- To improve the development of business models, and support programs run by incubators, business development groups, and academic institutions that offer resources, training, and mentorship to entrepreneurs.
- Support in managerial skills through workshops, mentorship programs, and focused programs that equip entrepreneurs with the know-how to lead and overcome obstacles.
- Strengthen the role of incubators by recognizing their significant impact and investing in their expansion, allowing them to act as catalysts for startup success through resources, mentorship, networking opportunities, and a supportive environment.
- Establish procedures for continuous monitoring and assessment to evaluate the startup ecosystem regularly. This would encourage continued cooperation between government entities, academic institutions, and industry stakeholders to guarantee the feasibility and effectiveness of ideas.
- The identified factors which are adapted from different theoretical findings in several countries, have both similar and varied effects for the case of Addis Ababa.

5.4 Directions for Future Study and Limitations of the Research

In considering directions for future study, it is recommended to dig deeper into specific aspects that emerged during the current research. Exploring the long-term implications of financial support mechanisms on startups could provide a better understanding of sustainable financial strategies. Additionally, a more detailed investigation into industry-specific business models would contribute valuable insights tailored to different sectors. Identifying the key components of effective management skills and evaluating the evolving landscape of marketing strategies could enhance the understanding of critical success factors.

Further research could also focus on unraveling the rejected hypothesis; which is the unexplained relationship between the independent variables; quality of product or service provision and government policy with the success of startups. It is also noted that government policies are unfavorable for startup expansion and success, shedding light to imply the need for improvement of policies. Another suggestion for future study involves a comprehensive assessment of various incubation models, considering their effectiveness in fostering startup growth. Finally, conducting respective studies to track the evolution and outcomes of startups over time would provide valuable data for understanding the dynamic nature of entrepreneurial ventures in Addis Ababa.

This research paper targets startups that are located in Addis Ababa only, to broaden the ecosystem understanding it is suggested to include the practices of other cities as well. Unlike this thesis using secondary and time series data will enable future researchers to make all-rounded conclusions on this field.

References

- Adamczyk, M. (2016). An attempt to define the concept of start-up company based on inductive research. *QUAERE 2016*.
- Adizes, I. (1979). Organizational passages—diagnosing and treating lifecycle problems of organizations. *Organizational dynamics*, 8(1), 3-25.
- Al-Mubarak, H. M., & Busler, M. (2010). Business incubators: Findings from a worldwide survey, and guidance for the GCC states. *Global Business Review*, 11(1), 1-20.
- Al Mubarak, M., & Busler, M. (2011). The development of entrepreneurial companies through business incubator programs. *International Journal of Emerging Sciences*, 1(2), 95.
- Amezcua, A. S. (2010). *Boon or Boondoggle? Business incubation as entrepreneurship policy*. Syracuse University.
- Aulet, W., & Murray, F. (2013). A tale of two entrepreneurs: Understanding differences in the types of entrepreneurship in the economy. Available at SSRN 2259740.
- Bayhan, A. (2006). Business incubator process: A policy tool for entrepreneurship and enterprise development in a knowledge-based economy. *Competitiveness Support Fund*.
- Bednar, R., Tariskova, N., & Zagorsek, B. (2018). Startup revenue model failures. *Montenegrin Journal of Economics*, 14(4), 141-157.
- Bednar, R., Tariskova, N., & Zagorsek, B. (2018). Startup revenue model failures. *Montenegrin Journal of Economics*, 14(4), 141-157.
- Bhave, M. P. (1994). A process model of entrepreneurial venture creation. *Journal of business venturing*, 9(3), 223-242.
- Brixiova, Z., & Asaminew, E. (2010). SME Start Ups in Ethiopia: Which Incentives Matter?. *ADB, Ethiopian Economic Association, Addis Ababa, Ethiopia*.
- Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, 32(2), 110-121.
- Bruton, G. D., & Rubanik, Y. (2002). Resources of the firm, Russian high-technology startups, and firm growth. *Journal of business venturing*, 17(6), 553-576.

- Cabello, A., Conde, R., & Reyes, R. (2007). Consecuencias de la Globalización en las Mipymes. En R. Regalado (Ed.), *Las Mipymes en Lationamérica* (pp. 106–118). Organization Latin-American de Administration.
- Campbell, C., & Allen, D. N. (1987). The small business incubator industry: Micro-level economic development. *Economic Development Quarterly*, 1(2), 178-191.
- Cantamessa, M., Gatteschi, V., Perboli, G., & Rosano, M. (2018). Startups' roads to failure. *Sustainability*, 10(7), 2346.
- Cassar, G. (2004). The financing of business start-ups. *Journal of business venturing*, 19(2), 261-283.
- Cho, Y., & McLean, G. N. (2009). Successful IT start-ups' HRD practices: four cases in South Korea. *Journal of European Industrial Training*, 33(2), 125-141.
- Cohen, S., & Hochberg, Y. V. (2014). Accelerating startups: The seed accelerator phenomenon.
- Cooper, A. C., & Bruno, A. V. (1977). Success among high-technology firms. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.
- Cosenz, F., & Noto, G. (2018). A dynamic business modelling approach to design and experiment new business venture strategies. *Long range planning*, 51(1), 127-140.
- Shrader, R., & Siegel, D. S. (2007). Assessing the relationship between human capital and
- Creswell, J. W. (2011). Controversies in mixed methods research. *The Sage handbook of qualitative research*, 4(1), 269-284.
- Dee, N., Gill, D., Lacher, R., Livesey, T. F., & Minshall, T. H. W. (2013). A review of research on the role and effectiveness of business incubation for technology-based start-ups.
- Díaz-Santamaría, C., & Bulchand-Gidumal, J. (2021). Econometric estimation of the factors that influence startup success. *Sustainability*, 13(4), 2242
- Doruk, Ö. T., & Söylemezoğlu, E. (2014). The constraints of innovation in developing countries: Too many barriers to start-ups? *Procedia-Social and Behavioral Sciences*, 150, 944-949.

- Dubihlela, J., & Van Schaikwyk, P. J. (2014). Small business incubation and the entrepreneurial business environment in South Africa: A theoretical perspective. *Mediterranean Journal of Social Sciences*, 5(23), 264.
- Dvouletý, O. (2018). How to analyse determinants of entrepreneurship and self-employment at the country level? A methodological contribution. *Journal of Business Venturing Insights*, 9, 92-99.
- Ehsan, Z. A. (2021). Defining a startup-a critical analysis. *Available at SSRN 3823361*.
- Ejermo, O., & Xiao, J. (2014). Entrepreneurship and survival over the business cycle: how do new technology-based firms differ?. *Small Business Economics*, 43, 411-426.
- Eveleens, C. P., van Rijnsoever, F. J., & Niesten, E. M. (2017). How network-based incubation helps start-up performance: a systematic review against the background of management theories. *The Journal of Technology Transfer*, 42, 676-713.
- Fernández Fernández, M. T., Blanco Jiménez, F. J., & Cuadrado Roura, J. R. (2015). Business incubation: innovative services in an entrepreneurship ecosystem. *The Service Industries Journal*, 35(14), 783-800.
- Firm performance: Evidence from technology-based new ventures. *Entrepreneurship theory and Practice*, 31(6), 893-908.
- Fritsch, M., & Mueller, P. (2004). *The effect of new firm formation on regional development over time* (No. 2004/01). Freiburger Arbeitspapiere.
- Galbraith, J. R. (1982). Designing the innovating organization. *Organizational dynamics*, 10(3), 5-25.
- Galiyeva, N., Fuschi, D. L., & Nikulshin, B. (2019). Initial results in measuring the effectiveness of the activities of business incubators. *International Journal of Open Information Technologies*, 7(1), 78-89.
- Groenewegen, G., & de Langen, F. (2012). Critical success factors of the survival of start-ups with a radical innovation. *Journal of applied economics and business research*, 2(3), 155-171.
-
- Gross, B. (2015). The single biggest reason why startups succeed. *ted. com: TED*, 173-178.
-

- Hansen, M., H. Chesbrough, N. Nohria and D. Sull, 2000, Networked Incubators: Hothouses of the New Economy, *Harvard Business Review* 78 (5), 74–84
- Hausberg, J. P., & Korreck, S. (2020). Business incubators and accelerators: a co-citation analysis-based, systematic literature review. *The Journal of Technology Transfer*, 45, 151-176.
- Hackett, S. M., & Dilts, D. M. (2004). A systematic review of business incubation research. *The Journal of Technology Transfer*, 29(1), 55-82.
- Herrington, M., Kew, J., Kew, P., & Monitor, G. E. (2010). *Tracking entrepreneurship in South Africa: A GEM perspective* (pp. 1-174). South Africa: Graduate School of Business, University of Cape Town.
- Hong, J., & Lu, J. (2016). Assessing the effectiveness of business incubators in fostering SMEs: evidence from China. *International Journal of Entrepreneurship and Innovation Management*, 20(1-2), 45-60.
- Hudson, J., & Khazragui, H. F. (2013). Into the valley of death: research to innovation. *Drug Discovery Today*, 18(13-14), 610-613.
- Hyytinen, A., Pajarinen, M., & Rouvinen, P. (2015). Does innovativeness reduce startup survival rates?. *Journal of business venturing*, 30(4), 564-581.
- Junior, J. R. S., do Amaral Adorno, O., de Lourdes Marinho, B., & Savoia, J. R. F. (2020). Successful startups: do their entrepreneurs share a common characteristic?. *Revista da Micro e Pequena Empresa*, 14(3), 3-18.
- Kakuze, H., & Taddele Wedajo, B. (2020). Barriers in digital startup scaling: A case study of Northern Ethiopia.
- Karimi, M. Z., & Odhiambo, P. K. N. P. R. (2018). Technology Transfer Services and Performance of Startup Firms Sponsored by University Incubators in Kenya. *Technology*, 8(7).
- Kaulio, M. A. (2003). Initial conditions or process of development? Critical incidents in the early stages of new ventures. *R&D Management*, 33(2), 165-175.
- Kazanjian, R. K., & Drazin, R. (1989). An empirical test of a stage of growth progression model. *Management science*, 35(12), 1489-1503.
- Kiviluoto, N. (2013). Growth as evidence of firm success: myth or reality?. *Entrepreneurship & Regional Development*, 25(7-8), 569-586.

- Klotz, A. C., Hmieleski, K. M., Bradley, B. H., & Busenitz, L. W. (2014). New venture teams: A review of the literature and roadmap for future research. *Journal of management*, 40(1), 226-255.
- Krejci, M., Strielkowski, W. & Cabelkova, I. (2015). Factors that influence the success of small and medium enterprises in ICT: A case study from the Czech Republic. *Business: Theory and Practice*, 16(2), 304-315.
- Kogan, I. (2019, September). Drivers of Success to Effective Entrepreneurship: A Comparison of Immigrant and Native-Born Perceptions. In *Proceedings of the Ninth International Conference on Engaged Management Scholarship (2019)*.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Lalkaka, R. (2002). Technology business incubators to help build an innovation-based economy. *Journal of change management*, 3(2), 167-176.
- Lukeš, M., Longo, M. C., & Zouhar, J. (2019). Do business incubators really enhance entrepreneurial growth? Evidence from a large sample of innovative Italian start-ups. *Technovation*, 82, 25-34.
- MacMillan, I. C., Block, Z., & Narasimha, P. S. (1986). Corporate venturing: Alternatives, obstacles encountered, and experience effects. *Journal of Business Venturing*, 1(2), 177-191.
- Magalhães, R. P. C. (2019). *What is a startup?: a scoping review on how the literature defines startup* (Doctoral dissertation).
- Makai, A. L. (2021). Startup ecosystem rankings. *arXiv preprint arXiv:2112.11931*.
- Mayer-Haug, K., Read, S., Brinckmann, J., Dew, N., & Grichnik, D. (2013). Entrepreneurial talent and venture performance: A meta-analytic investigation of SMEs. *Research Policy*, 42(6-7), 1251-1273.
- Muathe, S., & Otieno, V. (2022). STARTUP INCUBATION AND ACCELERATORS IN AFRICA; ARE START-UPS SCALING UP IN KENYA?. *American International Journal of Social Science Research*, 11(1), 23-28.
- Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. In *JALT 2013 conference proceedings* (pp. 1-8).

- Ogutu, V.O., & Kihonge E. (2016). Impact of Business Incubators on Economic Growth and Entrepreneurship Development. *International Journal of Science and Research*, 5(5), 231-241.
- Okrah, J., Nepp, A., & Agbozo, E. (2018). Exploring the factors of startup success and growth. *The business & management review*, 9(3), 229-237.
- Olawale, F., & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African journal of Business management*, 4(5), 729.
- Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Currency.
- Robehmed, N. (2013). What is a Startup. *Forbes/Bussines*. Pozyskano z: www.forbes.com. *Data dostępu*, 1, 2017.
- Robert Baum, J., & Wally, S. (2003). Strategic decision speed and firm performance. *Strategic management journal*, 24(11), 1107-1129.
- Ronald, M. O. (2017). The Influence of Financial Resources on the Success of Start-up Business in Kenya. *IRA International Journal of Management & Social Sciences*, 8 (2), 206, 212.
- Ruhui, R. W., Ngugi, P. K., & Waititu, G. A. (2014). Effects of managerial skills on the growth of incubated micro and small enterprises in Kenya. *International journal of social sciences and Entrepreneurship*, 1(12), 474-485.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Sandberg, B. (2008). *Managing and marketing radical innovations: marketing new technology*. Routledge.
- Santisteban, J., Mauricio, D., & Cachay, O. (2021). Critical success factors for technology-based startups. *International Journal of Entrepreneurship and Small Business*, 42(4), 397-421
-

- Sentana, E., González, R., Gascó, J., & Llopis, J. (2017). The social profitability of business incubators: a measurement proposal. *Entrepreneurship & Regional Development*, 29(1-2), 116-136.
- Schoenecker, T. S., & Cooper, A. C. (1998). The role of firm resources and organizational attributes in determining entry timing: a cross-industry study. *Strategic Management Journal*, 19(12), 1127-1143.
- Schutte, F., & Chauke, T. (2021). The role and effectiveness of business incubators in growing small businesses: a focus on the manufacturing industry.
- Sevilla-Bernardo, J., Sanchez-Robles, B., & Herrador-Alcaide, T. C. (2022). Success factors of startups in research literature within the entrepreneurial ecosystem. *administrative sciences*, 12(3), 102.
- Sharma, A. R., Joshi, M., & Shukla, B. (2014). Are Accelerators an Option? Impact of Accelerators on the Indian Start-up Ecosystem. *SIU Journal of Management*, 4(2).
- Shirky, C. (2008). *Here comes everybody: The power of organizing without organizations*. New York: Penguin.
- Skawińska, E., & Zalewski, R. I. (2020). Success factors of startups in the EU—A comparative study. *Sustainability*, 12(19), 8200.
- Sopjani, X. (2019). Challenges and opportunities for startup innovation and entrepreneurship as tools towards a knowledge-based economy: The case of Kosovo.
- Spiegel, O., P. Abbassi, P. Zylka Matthäus, D. Schlagwein, K. Fischbach and D. Schoder (2015). “Business model development, founders’ social capital and the success of early stage internet start-ups: a mixed-method study.” *Information Systems Journal* 26 (5), 421–449
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *How to choose a sampling technique for research (April 10, 2016)*.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long range planning*, 43(2-3), 172-194
- Tsai, S. D., & Lan, T. T. (2006). Development of a startup business—A complexity theory perspective. *National Sun Yat-Sen University, Kaohsiung, Taiwan*, 23.

- Pattanasak, P., Anantana, T., Paphawasit, B., & Wudhikarn, R. (2022). Critical factors and performance measurement of business incubators: A systematic literature review: sustainability, *14*(8), 4610.
- Pena, I. (2004). Business incubation centers and new firm growth in the Basque country. *Small Business Economics*, *22*, 223-236.
- Pompa, C. (2013). Literature review on the impact of business incubation, mentoring, investment and training on start-up companies. *EPS PEAKS--Economic and Private Sector Professional Evidence and Applied Knowledge Services*.
- Yeh, C. (2023). Why Are Startups Important for the Economy?. *Richmond Fed Economic Brief*, *23*(06).
- Ye, Q. (2018). New-born startups performance: Influences of resources and entrepreneurial team experiences. *International Business Research*, *11*(2), 1-15.
- Zaborowski, J. (2009). opportunities in a recession. *Economic Development Journal*, *8*(1), 42.
- Zapata-Guerrero, F. T., Ayup, J., Mayer-Granados, E. L., & Charles-Coll, J. (2021). Incubator efficiency vs survival of start-ups. *RAUSP Management Journal*, *55*, 511-530.

Appendix

Analysis of Startups and the Role of Incubators: Case of Addis Ababa

Dear Respondent:

I would like to express my gratitude in advance for your participation in filling out this questionnaire. My name is Bethelhem Tekalegne, I am currently enrolled in the MBA Program at Addis Ababa University. I am conducting research on the "Analysis of Startups and the Role of Incubators: Case of Addis Ababa". The purpose of this research questionnaire is to gather data from startup companies, with a focus on understanding the factors that contribute to their success and the role that incubators play in overcoming challenges. Please be assured that the information you provide will remain confidential and will only be used for the purpose of this specific research.

I kindly request that this questionnaire be completed by a member of the top management of the company or someone who has knowledge of the company's journey since its early stages.

Thank you for your cooperation.

SECTION I: DEMOGRAPHIC INFORMATION

Name of the company: _____

1. What is your role in this company?

- Founder
- CEO
- CFO
- OTHER: _____

2. How long has the company been operating?

- 0 - 2 Years
- 3 - 5 Years
- 6 - 8 Years
- > 10 Years

3. In what sector is your company active?

- Fashion
- Arts and Crafts
- Engineering
- Technology
- Manufacturing
- Others: _____

4. What is the main product or service of your company? _____

5. How many employees are there in your company?

- 0 - 5
- 6 - 10
- 11 - 15
- 15 - 20
- 21 - 25
- > 25

SECTION II: FACTORS THAT AFFECT SUCCESS OF STARTUPS

| No. | Access to Finance | 1 Strongly Disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly Agree |
|-----|---|---------------------------|---------------|--------------|------------|------------------------|
| 1 | The company has/had no acces to loan from formal microfinances, banks or financial institutes | | | | | |
| 2 | The company has/had no access to loan with no collateral prerequisite | | | | | |
| 3 | The company has no an access to loan with low interest rate | | | | | |
| 4 | The company has/had no access to long-term credit (over 5 years) | | | | | |
| 5 | The company has/had never | | | | | |

| | | | | | | |
|---------------------------|--|--|--|--|--|--|
| | won grants | | | | | |
| 6 | The company never uses/used founder's personal savings | | | | | |
| 7 | The company never uses/used personal/family/friends financial incomes | | | | | |
| Business Model | | | | | | |
| 1 | The idea the company used is new | | | | | |
| 2 | The company can describe its product or service very well | | | | | |
| 3 | The startup company is aware of its business model | | | | | |
| 4 | The company faced challenges in implementing the business model | | | | | |
| 5 | The product or service of the company has been evolving from the beginning | | | | | |
| Marketing Strategy | | | | | | |
| 1 | The company has a formal marketing strategy | | | | | |
| 2 | The company's branding practice influences the business performance | | | | | |
| 3 | A positioning strategy is defined precisely | | | | | |
| 4 | The convenience of the place of the business attracts more customers | | | | | |
| 5 | The pricing strategy gives room for a large customer base | | | | | |
| 6 | The company uses pricing | | | | | |

| | | | | | | |
|---|--|--|--|--|--|--|
| | skills and systems to respond quickly to market changes | | | | | |
| 7 | Marketing efforts such as advertising, and promotion always promote the sales performance of the company | | | | | |
| 8 | Targeting enables the company to focus on the precise needs of the targeted segment | | | | | |
| 9 | The company achieved maximum profitability as a result of the application of marketing strategy | | | | | |
| | Quality of Product or Service Provision | | | | | |
| 1 | The innovation in the company delivers a unique advantage to its customers | | | | | |
| 2 | The company uses up to date equipments | | | | | |
| 3 | The company provides competitive facilities within the industry | | | | | |
| 4 | The company reassures its customers when problem arises | | | | | |
| 5 | The company maintains accurate records | | | | | |
| 6 | Employees are trained to respond to requests | | | | | |
| 7 | The company provide individualized attention to its customers | | | | | |
| 8 | The company operates at convenient hours | | | | | |

| Managerial skills | | | | | | |
|--------------------------|---|--|--|--|--|--|
| 1 | The founder/managerial team has prior years of working experience in the industry that the current business competes | | | | | |
| 2 | The founder/managerial team is willing to take risks | | | | | |
| 3 | The founder/managerial team has attended higher education | | | | | |
| 4 | Compared to its start division of responsibilities between members of management is more clear | | | | | |
| Government Policy | | | | | | |
| 1 | The registration process for starting a new business in Ethiopia is simple | | | | | |
| 2 | There is a networked database system to facilitate business startup procedure | | | | | |
| 3 | Government policies to support startups access to finance are clear, transparent and readily understandable | | | | | |
| 4 | The current easiness of business startup practices will attract more investors to join in | | | | | |
| 5 | The company has been invited to participate in discussing challenges of the business startup procedures with government officials | | | | | |
| 6 | The company would like to continue in doing business for the coming future in Ethiopia | | | | | |

SECTION III: MEASUREMENTS OF SUCCESS OF STARTUPS

| No. | Measurements of success | 1 Strongly Disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly Agree |
|-----|--|---------------------|------------|-----------|---------|------------------|
| 1 | Number of employees in the company has increased from the beginning | | | | | |
| 2 | The company has a plan to expand | | | | | |
| 3 | There is a communication channel between the company and its customers | | | | | |
| 4 | The company has a good record of meeting deadlines | | | | | |
| 5 | The company has customers that are recommended by previous customers | | | | | |
| 6 | Compared to a year (months) ago, sales/turnover has increased | | | | | |
| 7 | The company has a plan to invest more in the company | | | | | |
| 8 | Return on asset has increased | | | | | |
| 9 | The company invests on its employees capacity building | | | | | |
| 10 | The company achieves its long term goals | | | | | |

SECTION IV: ROLE OF INCUBATORS

| No. | Role of Incubators | 1 Strongly Disagree | 2 Disagree | 3 Neutral | 4 Agree | 5 Strongly Agree |
|-----|--|---------------------------|---------------|--------------|------------|------------------------|
| 1 | Incubators provide access to finance | | | | | |
| 2 | Incubators maintain connection with investors or financial institutions | | | | | |
| 3 | Incubators help in providing affordable infrastructure and office facilities | | | | | |
| 4 | Incubators help in providing market opportunities | | | | | |
| 5 | Incubators help in improving the capacity building skills | | | | | |
| 6 | Incubators help in improving the product/service development skills | | | | | |
| 7 | Incubators help in improving the business management skills | | | | | |
| 8 | Incubators help in improving the marketing skills | | | | | |
| 9 | Incubators provide latest information on regulations in specific sector | | | | | |
| 10 | Incubators provide consultancy services | | | | | |

